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Original Communications

ADDRESS BY RETIRING PRESIDENT.*

DR. R. E. SPARKS, KINGSTON.

To the Members of the Eastern Ontario Dental Association ;

GENTLEMEN,—It is with much pleasure that I welcome you to the twenty-first annual meeting of our association. Contributing in no small degree to that pleasure is the fact that we meet in the interesting, hospitable and beautiful city of Ottawa. Particularly interesting is Ottawa to us, as it furnished a number of charter members of our association, some of whom are with us to-night. And owing to the fact that Ottawa is provided with so large a number of aggressive, up-to-date members of our profession, we owe to it, more than to any other city or town, the continued existence and success of the Eastern Ontario Dental Association.

In the midst of our rejoicing comes a shadow of sadness. We miss to-night the familiar face of one of our charter members. Since our last meeting he has passed over to the great majority. I refer to our late secretary-treasurer, Dr. George Weagant, of Cornwall. He was always present at our meetings and always interested in the welfare of our association. Being two years president and many years secretary-treasurer, perhaps to him, more than to any other member, was due the success of our association. Well skilled in his profession, conscientious in his practice, kind and considerate in his friendships, he has left us an example worthy of being followed.

While nothing very startling or unusual has developed in the dental profession during the past year, especially in Canadian dentistry, yet we are moving forward. Interest and confidence in

* Read at meeting of Eastern Ontario Dental Association, June, 1900.

dentistry is increasing with the general public; for, while the increase in the numbers entering the ranks of our profession is vastly in excess of the increase of population, the demand for dentistry seems to keep pace with the supply of dentists. The more the public can be educated to the importance of preserving the teeth or their replacement by artificial ones when lost, the greater will be the demand for skilful dentists. The influence of teeth on the general health is being more and more recognized. The teeth come in for close scrutiny by examining officers selecting recruits for the army and navy. Many of the volunteers for service in South Africa were bowled out on account of the condition of their teeth. An effort is being made in the United States to have a law passed providing for the appointment of dental surgeons for the army and navy.

Our Board of Directors is managing the affairs of the Royal College of Dental Surgeons in a very satisfactory manner. It is gratifying to know that the profession in Ontario owns such a fine college property with a school so well equipped for teaching dentistry in all its higher branches. It is also gratifying to know that it is one of the few public institutions which are out of debt. Our representative, Dr. Hanna, will favor us with a statement of the affairs of the college during the last year. One feature of last year's management, which, I think, was highly commendable, was the providing of a free post-graduate course in crown and bridge-work and orthodontia. This was particularly advantageous and profitable to those of us who took advantage of it, and who had graduated before the subjects were taught in the college as thoroughly as they are to-day.

I would suggest that the members of the association use their best efforts to make the DOMINION DENTAL JOURNAL one of the best of its kind published.

It is with the utmost satisfaction I have to report the increasing interest taken in the Ontario Dental Society. The removal of the date of annual meeting to February affords students attending college the opportunity of attending the convention. For their benefit the Board of Directors have made an annual grant the last three years to the society on condition that a specialist on some subject connected with dentistry be engaged to give lectures or demonstrations, or both, at the convention. This enables the society to present a programme of more than ordinary merit and gives the students an advantage which they would not otherwise enjoy. Besides this, it is likely to create in them a taste for, and an appreciation of, the Dental Society. I have great hope for the professional success of a young man who is interested in his dental journal and dental society. I would strongly recommend the members of the Eastern Ontario Dental Association to join the Ontario

Dental Society and attend as regularly as possible. Our association meeting in the summer and the Ontario Dental Society in the winter afford us the opportunity of attending a dental society meeting semi-annually, which is none too often. The president of the Vermont State Dental Society said, when addressing the annual meeting: "We all know the healthful influence the Dental Society exerts over its members; how it cultivates and develops brotherly love, removes suspicion, and is a source of inspiration to both young and old." He further says: "There is no man endowed with so much natural ability, skill and tact, with a head so full of brains, loaded with knowledge, but that he can make just a little more of himself by mingling with others in the same pursuit."

It is regrettable that a few have gained access to our ranks who have little regard for their profession or professional brethren. Hence the increasing number of dental shops in the larger cities which are supported by a certain class of the public who are attracted by advertisements of low fees. The more we can educate the public the less there will be for those shops to do, for the intelligent and informed will respect us as we respect our profession. They will realize, as the proprietor of one of those shops recently told me, that they pay for all they get.

We have a programme to present to you worthy of your closest consideration, and I hope every member will feel free to discuss fully the papers as they may be read. The greatest object of a paper read at a convention is to provoke discussion, which will frequently bring out points the essayist never thought of.

Hoping the meeting will prove highly successful, we will pass on to the next order of business.

CARE OF CHILDREN'S TEETH.*

BY DR. W. B. CAVANAGH, CORNWALL.

This subject presents itself in two phases for our consideration: The care of the temporary set, and the care of the permanent teeth which may be said to appear in childhood. The cases are not precisely the same and must be studied from a somewhat different basis. The object in the care of the temporary set is merely to do palliative work with the idea of keeping the little one comfortable for a few years, rather than to undertake permanent operations. The avoidance of pain at this age is very important and this often involves the performance of temporary work. While

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the dentist should keep this end in view in regard to the permanent teeth which appear early, especially, he should endeavor to attain the greatest possible permanence in his work, with the idea ever in his mind that his object is the saving of these teeth for a lifetime.

THE TEMPORARY TEETH.

The impression so prevalent among parents that the temporary teeth may be neglected on the basis that they are eventually lost through natural processes should be corrected at every opportunity—beyond the fact of much suffering and the injury to the health of the patient, the habit of improper mastication and the bolting of the food, which may, and often does, cling to the patient through life.

The child should be brought to the dentist at stated times for examination, from the third and not later than the fourth year of age. The first operations should be performed without any pain to the patient and by this means the dread of the dental chair will be largely overcome and future operations will have a better prospect of success.

The materials used for filling deciduous teeth are generally limited to gutta-percha, cement and amalgam. For anterior teeth cement must be considered favorable on account of the cavities being mostly shallow and not well defined in outline, nor is it possible in many instances to establish a perfect outline or trim to a well-formed margin. After the removal more or less thoroughly of the decay, the filling must be plastered against the decayed surface and remain of its own adhesive properties. The care of the temporary molars is more trying to the patient and the operator, as they are retained four or five years longer than the incisors. The occlusal cavities are easily managed with either cement or amalgam. If the cavity can be well prepared and the pulp is not too nearly involved, amalgam may be used; but if the cavity is so sensitive that only the thin enamel walls can be broken down, remove the softer portions of the decay and force cement into the cavity with considerable pressure. It should also be used in such excess that the entire occlusal surface of the tooth is covered beyond the borders of the cavity. To do this the operator may bring down his index finger upon the cement as it lies on the tooth and the whole surface subject to pressure so that the cement will be forced into every groove and the excess squeezed out over the marginal ridges of the enamel. If the finger be held upon the cement a few minutes the result is a filling that not only includes the cavity itself but also protects the grooves and other vulnerable points radiating from it.

The occluso-approximal cavities in these teeth are more difficult

to control on account of their universal sensitiveness, preventing the proper preparation of the cavity to retain a filling and the gradual separation of the teeth, caused by the natural expansion of the jaw, so as to lead to the complaint on the part of the patient of food wedging between the filling and the approximating tooth and lodging in the interproximal space.

In extreme cases, to prevent the wedging of food in the interproximal space where both teeth are decayed, it may be advisable to bridge across the interproximal space and join the fillings together. This will often prove a relief to the patient where separate fillings have been a failure. Amalgam or gutta-percha are probably the most serviceable materials for these cavities.

A great aid in securing firmness of these fillings, if amalgam be used, is to place a metal bar across the interproximal space with one end resting on the cervical wall of one cavity and the other on the cervical wall of the other, building the filling around and over it. This locks the teeth together more securely and affords perfect protection to the gum.

An exposed pulp may be treated by flowing over it a paste made of oil of cassia with zinc oxide and fill cavity with cement. This paste is an anodyne, and a pulp will usually remain comfortably under it. Should the pulp be very much exposed or begin to suppurate it is best to devitalize, remove pulp and fill.

In the treatment of abscessed temporary teeth the canals should be as carefully cleansed as possible by mechanical means and then packed with cotton saturated with oil of cassia. When there is a fistulous opening, the cassia should be forced through the opening on the gum. When this has been done, if the canals have been thoroughly cleansed and the contents were not too offensive, the tooth may be filled at the same sitting. If the dentine seem saturated with foul matter, the canals should be filled with cotton and cassia and sealed with temporary stopping for a week. If the fistula still remain it should be again injected and the tooth filled in the following manner: The pulp-chamber and canals should be flooded with a solution of gutta-percha in eucalyptol and some warmed temporary stopping forced down into each canal till the solution shows at the opening of the fistula. The temporary stopping should be left in the canals as a root filling and the cavity may then be filled with whatever filling is indicated.

The care of the permanent teeth in childhood is one of the most important problems in the practice of dentistry. The teeth that suffer most from the ravages of decay are the first permanent molars, and they should be the object of special attention on the part of the dentist. Besides the fact that they are called upon to do longer service in the mouth than any of the other teeth, they are also the standard-bearers of the jaws during that period that inter-

venes between the loss of the temporary molars and the growth to full length of the bicuspid and second permanent molars. Without the first permanent molars in their proper position at this time the jaws are allowed to drop too close together, so that the upper incisors overlap the lower incisors more than is normal and the bicuspid and second molars are never allowed to assume their true length and position. If the jaws be not maintained in their proper relation it affects the symmetry of the face and perfect mastication. These teeth should be watched from the time of their eruption and filled at the first approach of caries. Should they be badly broken down when first brought to the dentist's notice and not capable of maintaining the jaws in their correct position, every effort should be made to build them up with fillings so that this function may not be lost, and failing in this they should be crowned rather than yield them up to the forceps.

The choice of material must be governed largely by the ability and disposition of the patient to withstand dental operations. Should decay occur on the occlusal surface during the tooth's eruption, use cement, as it may be employed with less thorough preparation of the cavity than metal fillings. It will often so protect the occlusal surface during the period of eruption that decay will be avoided until the teeth of the two jaws so approach each other that they are subjected to the friction of mastication, thereby materially lessening the tendency to decay.

In cases where occlusal cavities have been filled in this way the teeth should be watched very carefully and metal fillings inserted as soon as the cement wears away and the conditions in the mouth make it possible to do more permanent work. The conditions relate to the expediency of operation and the increasing fortitude on the part of the patient to withstand the tedium and pain necessary rather than any pronounced change in the structure of the teeth.

The mesial surface of the first permanent molar should receive our careful attention as it is in contact with the distal surface of the second temporary molar for several years before the loss of that tooth, and if it is affected upon its distal surface or the tendency to decay is great in the mouth the first permanent molar is sure to suffer. The grinding away of the distal surface of the temporary molar will often protect the permanent tooth from decay.

Should decay occur upon this surface, the cavity may be temporarily filled with gutta-percha or cement, but immediately upon the loss of the deciduous molar the temporary filling should be replaced by metal filling. At this time every particle of affected enamel should be included in the cavity and the metallic surface made sufficiently broad to render the operation as permanent as possible.

If decay occur in the incisors in the mouths of children it is best to use cement or gutta-percha, according to the nature of the cavity, instead of attempting permanent work at first. The filling should be replaced by gold as soon as the patient can submit to the operation. The date at which gold may be substituted for other materials must depend upon the sensitiveness of the teeth and the ability of the patient to submit to thorough work without too much nervous tax. It is folly to attempt to insert gold while the patient is so poorly under control that perfect work is impossible. On the other hand it is wrong to delay longer than necessary the insertion of a permanent filling and leave the teeth to the mercy of materials long since proved to lack permanence.

REMOVAL OF TARTAR.*

BY A. H. MAHEE, GANANOQUE.

The subject of this, my first paper, was suggested to me not long ago, by the question of a middle-aged lady patient, for whom I had just extracted a very loose molar. "My lower front teeth get loose for a time and then tighten up. What makes them do that?"

This led me to the thought that perhaps we do not sufficiently emphasize to our patients the great importance of having the accumulations that form on the teeth regularly removed. Sometimes a patient comes in with a rough tooth and wishes to know "if it had better be taken out now or not until it aches," thinking it broken beyond repair, never detecting any accumulation on the teeth. Others will accuse you of destroying their teeth if you remove a large scale, and will declare it to be a part of the tooth that has always been there. Patients have often remarked when their attention was called to the tartar, "I never knew that should be taken off," or "I never knew it did any harm," or "No one ever mentioned it to me before." We have all seen mouths containing teeth with good durable fillings, nicely polished, around the necks of which there was a large amount of tartar. The irritation, on account of its presence, causes a hypertrophied condition of the gums and the patient complains of pain and bleeding of the gums on using the tooth brush. This is given as a reason for the use of the brush only occasionally, or for the substitution of a soft cloth, with the attendant result—more accumulation. Why is it that we do not oftener advise its removal? One of the chief reasons seems to

* Read at meeting of Eastern Ontario Dental Association, June, 1900.

be that patients are not willing to pay for the time spent as for other operations. This, it seems to me, has in part, been brought about by the practice of brushing up the front teeth a little on the labial surfaces, in many cases without charge, and not removing the deeper deposits at all. "Dr. so-and-so filled my sister's or my husband's teeth and didn't charge anything for cleaning." What you get for nothing is not considered of much importance and applies to dentistry as to other things.

The habit of procrastinating on the part of many of our patients often renders it necessary to first relieve their suffering by either extraction or treatment. This affords a favorable opportunity to impress upon them the importance of the removal of tartar, and the examination of the teeth at stated intervals. By scaling off a large piece of tartar you can probably show them the natural color and size of the tooth and the distance the gum has receded. In most cases there soon follows a desire on the part of the patient to have the rest "cleaned," as the operation is commonly misnamed, providing you promise not to charge too much.

It might be well to note some of the reasons for removal of these deposits from the teeth: 1. To secure an aseptic condition of the mouth for the benefit of both patient and the operator. 2. To facilitate subsequent operations, fillings, crowns, bridges, plate dentures and regulating appliances. 3. To cure neuralgia abscess in some cases. 4. To relieve discomfort of patient and render mastication possible in some cases. 5. To prevent pyorrhea, and, if possible, ultimate loss of the teeth. 6. To prevent bleeding and consequent neglect. 7. To allow proper examination of the teeth. 8. For appearance sake, and selection of proper shades in making crowns and dentures. 9. To afford an opportunity, if necessary, to give patient instruction on how to properly use brush, floss silk, and mouth wash and to point out just where accumulations form.

The instruments and appliances necessary to perform this operation will depend on the character and location of these deposits. An endless variety of chisels, scalers and scrapers, etc., may be procured from the dealers, some well suited for the purpose, while many are too large and ill-shaped. Generally the thin-bladed ones (which cut on the bevel) are preferable. They should conform to the surface of the tooth operated upon, and not unduly injure the festoon of the gum. Approximal trimmers or sickle scalers are very useful and can be used with a push or pull cut. For use far under the free margin of the gums very delicate instruments are required to avoid undue injury to the pericementum, especially in cases of pyorrhea, where infection is possible. In such cases they may be passed around the calculi, thus facilitating removal of loosened pieces from pocket at the same time. The mechanical part of the work should be thorough, all calculus, salivary and seru-

mal, being removed from the neck and roots of the teeth. To accomplish this the instruments should be frequently sharpened. Only a few teeth should be operated upon at once, and if there be much tartar it is better not to attempt to remove it from all the teeth at one sitting. Loosened particles should be carefully washed out of crevices and pockets with lukewarm water to which a pleasant antiseptic has been added, followed by hydrogen dioxide or pyrozone. This should be brought to the temperature of the body in an open vessel and a small tablet of soda mint added just before using. The rise in temperature prevents part of the pain and the soda mint neutralizes the acid by liberating the oxygen faster, causing greater effervescence and better cleansing of the pocket. In cases of pyorrhea it acts as a pus destroyer as well. It may be readily applied by the use of an abscess syringe with curved point or medicine droppers with points bent at convenient angles. (The black bulbs last longer than the white ones.)

There is one deposit—green stain—found on the teeth which seems to penetrate the enamel cuticle. Miller states that on careful examination it will be found on 50 per cent. of the teeth of those who give average attention to the care of the mouth. Pyrozone solutions seem to act best on this deposit, but tinc. iodine will in many cases remove it if applied to the dry tooth before using pumice. Several sittings may be necessary to effect a thorough cleansing of the root. In most cases reliance must be placed on the sense of touch as to the thoroughness of removal, but after leaving a couple of days the condition of the gum, if still inflamed, will indicate the presence of any remaining particles. These places may be enlarged by pressure of a pledget of cotton dipped in a solution of pyrozone and cocaine and left in place a few minutes. This allows better access and vision as the gums become blanched and the pain reduced. It is important to get all particles removed as any left become a starting point for future deposits. After thorough scaling of the teeth with instruments, the teeth should be carefully polished with flour pumice carried on rubber and wood points and brushes. By drawing a piece of floss silk between the interstices they may be freed of loose particles and at the same time an illustration given of the proper manner of holding and working the thread between the teeth with least injury to the gums. Where a stimulant to the inflamed parts is indicated trichloroacetic acid applied in small quantities on broach to the affected parts will be found very beneficial.

In cases where the teeth are very sore and loose, a holder may be made by taking an impression with compound of the ends of the teeth to be operated upon. This can be held in place by the occluding teeth, keeping the teeth firm and materially lessening pain. Not long ago a lady came to me for the first time to have

some work done, having delayed for some time on account of pain experienced the last time the tartar was removed. By using a holder on the loose teeth she declared that it hardly hurt her at all and had never been done so easily before. To end up with a mouth wash should be recommended and a sample given to rinse the mouth out with before leaving. Until the gums are healed recommend the holding of the mouth wash in the mouth a few minutes by the watch once or twice a day. During the progress of the work in some cases it is expedient to exhibit a tooth brush kept hanging near by and to draw attention to its salient points and if you should happen to be called away from chair to allow the patient to read the printed directions for use that accompany it. Instruct patient that bleeding of the gums generally indicates tartar and recommend its removal at least twice a year. As a rule most patients are willing to pay a suitable fee when impressed with the thoroughness of your work.

RANDOM NOTES.*

BY M. G. MCELHINNEY, OTTAWA.

MR. PRESIDENT AND GENTLEMEN,—The selection of the general term which heads this paper is a sort of evasion, in order that the writer shall not be bound down to a set task. It also avoids the general detection of a culpable ignorance of detail, which is sure to crop out in sticking too closely to one subject.

It is a favorite method to choose a subject, then to search the journals and text-books, and construct a patchwork out of other men's work, without the saving grace of one original comment. This laborious search among books is distasteful to the writer, whose industry must more or less follow a line that is more interesting. In these random notes shall be included a number of matters of varying interest to us as dentists.

Most of you are aware that the medical men are agitating for a Dominion Medical Act which shall destroy the present interprovincial regulations. We should not permit our medical brethren to get far ahead of us in the march of progress, but should start an immediate agitation for a general Dental Act for the Dominion of Canada.

The present system of interprovincial laws concerning our profession is one that cannot be too strongly condemned. I have

* Read at meeting of Eastern Ontario Dental Association, June, 1900.

for some years agitated in this direction with reference to the game laws. Whether the association of the ideas of duck shooting and quackery linked the things together in my mind or not, I know not; but one thing I do know, and that is this: It is the veriest nonsense to wax eloquent over binding the provinces of the Dominion together into one glorious whole until these interprovincial laws—these musty relics of the Middle Ages, these disgraces to modern civilization—are swept away. Of course, there will be objections in some quarters to flooding Ontario with Quebec graduates, and *vice versa*, but the rule works both ways. Both provinces have black sheep enough. Does it not seem reasonable to you all, that what is under one flag should be, as far as is expedient, under one law?

Most dentists have one bad habit, that of criticizing unfavorably the work of others. It is a natural trait of human character, and superhuman also. In the Old Testament, you will notice that the Jewish deity never lost a chance wherein to cast opprobrium on the gods of the neighboring tribes; so the fashion was come honestly by, at any rate.

We are all tempted to make the best of the failings of our competitors, and that is in fact legitimate; but we should talk less about it. Each man has his limit. Nature also has a limit, so that no man can invariably turn out his best work. The man who claims to have had no failures is either a liar or a fool, or both. The filling that Dr. A. inserts to-day may come out to-morrow. It may be replaced by Dr. B., and stay indefinitely. Dr. A. may fail to cure an abscess, and Dr. B. succeed. Dr. C. may make successfully a plate that Drs. A. and B. both tried and could not accomplish. Thus there is a continual circulation of patients amongst the various practitioners in one locality. The patients themselves love to carry tales, and the worse the tale the more they usually owe the previous dentist. I do not mean that all dentists have equal skill, for they have not; but most have average skill, and most of the criticised work comes under such a head. A few men have exceptional skill, and a few are grievously lacking. There are times when there is conflict between one's duty to the patient and one's duty to his confreres. What shall be done? Your confrere is your competitor; your patient is your hope, a contributor to your support. Choose accordingly, and no man can honestly blame you. We cannot get over the natural law of competition; it is a law of all life—the survival of the fittest. If some succeed and some suffer, blame not the successful; blame the laws of existence.

Why does nature send people into this world who are hopelessly handicapped in the struggle for existence? The wind is not tempered to the shorn lamb. It is for man alone, the sole

occupant of the universe, in whom has dawned the light of divine pity, to endeavor in the small way in his power to mitigate, to some extent, the heartlessness of nature. Therefore, judge leniently of your brother, and instead of carefully explaining all the mistakes he made, show how the nature of the case made his treatment admissible, yea, even desirable at the time.

When I left college it was my intention to return at the proper time for the degree of M.D.S. It seemed to me that a man should endeavor to reach the highest possible attainment in his profession, and that the degree of M.D.S. signified to some extent that he was growing in skill and knowledge. While the ambition to excel in my profession is as strong as ever, the desire for the M.D.S. degree has evaporated, for I believe that it is quite possible for an inferior man to write a thesis and obtain the degree. Honorary degrees should be made difficult to obtain—so difficult, in fact, that only a few could succeed in attaining them. The degree of M.D.S. is not a necessity, and should not be the occasion of leniency, rather the reverse, and the college makes a great mistake when it grants the degree too easily.

These are days of innovation and improvement. We are continually being presented with new drugs and new systems of treatment. This condition is not an unmixed good. We are tempted to try more drugs and methods than we can properly become acquainted with. Experience shows that the best results are accomplished by sticking to one method and set of medicines and becoming minutely familiar with their indications. The difference between success and failure in treatment often depends upon the perception of the most minute details, those details that are only perceived by experience, and cannot be put down in books. It is, therefore, wise to persist in the use of one method until the most minute variations are familiar, and then, and only then, can the best results be attained.

The chief element that makes one man more successful than another lies in the care with which he performs the seemingly less important duties of his profession. For example, a dentist, and a fairly good one at that, may be careless regarding the gum margins of approximate amalgam fillings. The fillings may not be flush with the tooth. There is no pronounced pain, only an indefinite discomfort caused by slight pressure on the gum. In a shorter or longer time the patient may apply for relief, and the dentist who can perceive the cause and remove it will make more reputation on a smaller matter than most people would imagine.

Nearly all of the abscesses on roots in which the nerve was destroyed are due to too much haste in filling and consequent carelessness in the removal or disinfecting of the smaller canals. These are but a few of the small points that make great differences.

One of the commonest sights is a dirty laboratory and its invariable accompaniment—dirty tools. Now, there may be room for difference of opinion on this subject, but I believe that no man can do good work with dull, dirty tools and surroundings. It stands to reason that the quality of the work will partake of the nature of its source.

The excuse of pressure of business will not suffice, for it is a fact that the men with the largest practices have invariably the cleanest laboratories and the best-kept tools. There is no reason why files and scrapers should be all over plaster, or plaster all over the benches, if a man possesses the proper appliances and knows the proper uses of the same.

I visited a dental office once where there was no stone for sharpening instruments, and the presiding genius admitted that he never sharpened excavators at all. Another office did not contain one decent nerve broach, which was a bad reflection on the owner's root-treatment. In another the scrapers were never sharpened, and it was no wonder that the long-suffering student turned out plates more like old boots than artificial teeth. All of these men were reputable dentists, who had simply allowed themselves to contract careless habits.

SKETCH OF DENTISTRY IN CANADA.*

BY W. GEORGE BEERS, L.D.S., D.D.S.

Her Majesty Queen Victoria, speaking to her dentist, once made the remark: "Yours is an important profession, for, while some need the skill of the oculist and aurist, almost all need that of the dentist." It is an interesting fact that the first movement which had any practical result towards the organization of dentistry as a profession was coincident with the Queen's accession to the throne. No previous sovereign so fully recognized its importance. The honor of knighthood conferred by her upon the late Mr. John Tomes and upon her present dentist, Mr. Edwin Saunders, gave the profession in England a social status second only to the older professions of law and medicine. Sixty years ago its literature was meagre; its science elementary; its art primitive. Eminent surgeons and physicians, such as Hunter, Sydenham, Sir Astley Cooper, Sir Charles Bell and Robert Blake, contributed works of some merit upon the natural history and diseases of the

* Read at meeting of Eastern Ontario Dental Association, June, 1900.

teeth. Mr. Fox, surgeon-dentist to the Duke of Kent, Mr. Thomas Bell and a few others had published excellent works on the structure and diseases of the teeth. In France there were more numerous pioneers of dental science and art, and we are indebted for porcelain teeth to a French apothecary.

The pigmy efforts of Europe in practical development were, however, overshadowed by the giant strides made in the United States. To Europe, largely, we owe the birth and much of the progress of the science; to the United States most of its marvellous practical development. One hundred and thirty-two years ago dentistry was introduced into the United States from England by John Woofendale, a former student of the dentist to King George III.; but the first journal, society and college in the United States, which were the first in the world, are about sixty years old. Medicine can trace its history back to the schools of Cos, Rhodes and Cyrene; law, to the schools of jurists in the reign of Tarquin; but dentistry as an organized profession, was born in Baltimore, United States, within the memory of practitioners still living. In Canada, during the French régime, the surgeons attached to the army extracted teeth with the key of Garengot, a French invention, contemporaneous with that of the guillotine. After the conquest, several of these surgeons remained in the country, and one whose lineal descendant is now a practicing dentist in Quebec Province was publicly known in Quebec City, as late as 1761, as a specialist under the title of "Blood-Letter and Tooth-Drawer."

Quebec, as the earliest of our provinces, had in 1837 dentists in Montreal and Quebec cities, some of whom made periodical visits not only throughout what was then known as Lower Canada, but into Upper Canada as far west as Toronto. Now and then they gave instruction to aspiring young men, who, after tinkering for a few months in the laboratory and getting hasty clinical ideas in operating, hung out their shingle without the necessity of law or license. In this way the rude school of self-reliance made many men of mark in the ranks of the practicing dentists, who have rarely been surpassed in practical skill by the products of our modern colleges. In fact, in the very front rank of our best thinkers and workers stand some of the fast disappearing dentists of that *ancien régime*. In the dark days of the profession, when every man was a law unto himself, success depended solely upon personal application, and every man was his own teacher. There was neither individual nor collective reciprocity. The discovery of arsenic for the devitalization of the dental pulp is due to Spooner (1836), a Montreal dentist. Modern science has rendered this operation less imperative. One of the most skilful men on the continent, a mechanical genius, the author of numerous inventions outside of his profession, was Dr. W. H. Elliott, of Montreal, a

brother of Dr. James Elliott, of Toronto. The late Dr. A. Bernard, of Montreal, formerly mayor of the city, was also a man above the average, both as a dentist and a politician. In 1842 he made an unsuccessful attempt to get a clause regulating dental practice into a medical bill then before the Legislature. Coincident with the passage of a law in Alabama, this was the first of the kind. The late Hon. Dr. P. Baillargeon, of Quebec, and Dr. Charles F. F. Trestler, of Montreal, were the most eminently successful among the dentists of French origin. The late Dr. McKee, of Quebec, was the first Canadian to graduate in a dental college. The late Dr. J. H. Webster, of Montreal, claimed to have been the first in British America to administer ether and chloroform.

In Ontario, Mr. Rand was the first dentist in Toronto in the early forties. He became acquainted with Lord Elgin, who induced him to go to London, where he built up a large practice. In 1845 there were several practising in Toronto. Among the notabilities in their line about 1855 were Dr. George L. Elliott, J. W. Elliott and W. C. Adams. Dr. C. S. Chittenden settled in Hamilton in 1849, where he practised for forty years. Dr. G. V. N. Relyea, formerly of Belleville, was one of the oldest and most successful practitioners in Ontario. There was a sturdy class of pioneers in the forties, who paved the way for reform—patient and practical, and most of them ethical, without any other code than their own personal honor. In the summer of 1860, Dr. Charles Brewster, of Montreal, issued a protest against the evil then existing of exhibiting specimens of mechanical dentistry at provincial exhibitions. This protest was signed by the leading dentists of Upper and Lower Canada, and was the first successful blow aimed at charlatanism. In a postscript to a circular he asked the following question: "What is your opinion as to incorporating the dentists by Act of Parliament, and by obliging all those who in future may wish to practice in Canada to pass a proper examination before a Board of Dentists?" There was a general approval of the proposition, but Dr. Brewster realized that on account of the numerical strength of the profession in Upper Canada, the first steps should be taken there.

Among his principal correspondents was Dr. B. W. Day, of Kingston, Ontario. It was not until January, 1867, that Dr. Day carried out Dr. Brewster's suggestion by inviting a number of dentists to meet at Toronto to organize a dental association. A draft of the "Act respecting Dentistry" was presented; a provisional Board of Examiners was appointed; forty-five active and fifteen incipient members (under five years' practice) were enrolled. On the 2nd of June a meeting of the Provisional Board and members was held in Toronto, and the following officers appointed for two years: Messrs. Day, Callender, Chittenden, O'Donnell, Ralyea, G.

L. Elliott, Scott, Wood, Bogarth, Kahn, Meacham, and Lalonde. The following were elected to special offices: B. W. Day, Kingston, President; J. O'Donnell, Secretary; C. S. Chittenden, Treasurer, and H. T. Wood, Registrar. Dentists having had five years' practice were entitled by the Act to a license without examination upon proof of practice and the payment of the fee. In July a second meeting was held in Cobourg. In January, 1868, 80 per cent. of the legitimate dentists of the province were present. The Medical Council and the heads of the medical schools in Toronto gave every possible encouragement and assistance to the movement for statutory incorporation, and in January a petition for the enactment of such was presented to the Legislature of Ontario, then in session. On the 4th of March, 1868, the profession was incorporated as the "Royal College of Dental Surgeons of Ontario." This was the second dental statute in the world—a very inefficient one in five clauses preceding it in Alabama. Undoubtedly, the Ontario Act was the first really efficient dental incorporation measure. Since its passage, 981 certificates of license have been granted. A standard of matriculation examination equivalent to that of the Faculty of Arts of a Canadian or other recognized university, or an equivalent certificate issued by the Education Department of Ontario, has been established, ahead of any dental college in the world.

In October, 1869, the teaching department of the Royal College of Dental Surgeons was organized, but the school was closed at the end of the first session on account of financial embarrassments. In July, 1875, the directors requested Dr. J. B. Willmott and Dr. Luke Teskey to undertake the re-organization, and in November the School of Dentistry opened with eleven students. After various vicissitudes and earnest effort on the part of the staff, to which was added Dr. W. T. Stuart and Dr. W. E. Willmott, a flourishing existence was insured, so that in 1895 it was decided to erect the substantial building which now stands on College Street, Toronto, costing \$46,000 and belonging to the dentists of the Province. The work was begun in August, 1895, and the building was opened October 1st, 1896. One of the difficulties in the way of complete success was the absence of the power to confer the degree of Doctor of Dental Surgery, and in May, 1888, the Royal College of Dental Surgeons was affiliated with the University of Toronto, and the first examination for that degree held in March, 1889. This was the first examination ever held by a British university for a doctor's degree in dental surgery. This degree confers no legal right to practice: the license (Licentiate of Dental Surgery) is alone necessary. In 1868 there was only one practitioner in Ontario holding a dental degree; in 1900 there are 519 members of the Royal College of Dental Surgeons possessed of the degree. The building is one of the most modern and best adapted dental colleges in the world. Dr. H. T.

Wood, of Toronto, Chairman of the Building Committee, has been a member of the Board of Examiners since 1868. It would be unfair to omit mention of the valuable services rendered to the cause of dental education in Ontario by Dr. J. B. Willmott, of Toronto, Secretary of the Dental Board and Dean of the College. Soon after the first organization, in 1867, he was granted a certificate of license, immediately took an active interest, and was the head and front of the re-organization in 1870, when he was elected on the Board of Examiners. He has ever since been a member and its secretary. Mainly through his personal devotion, amid discouragements and some factional opposition the profession in Ontario occupies a position in educational matters second to none in the world. The Ontario Dental Society, London Dental Society, Eastern Ontario Dental Society, the associations of each Province of Canada, and other such voluntary associations are also doing splendid practical and ethical work for the profession.

On the 2nd of September, 1868, Dr. Charles Brewster called a meeting of Montreal dentists to form the nucleus of a dental association for the Province of Quebec. Dr. Brewster requested Dr. Bernard to act as Chairman, and Dr. W. Geo. Beers was appointed Secretary. On the 17th of the same month a meeting of the dentists of the province was held in Montreal and the association formally organized. In February, 1869, the petition praying for incorporation was presented in the local legislature; in March the bill became law. The politics of dentistry in Quebec have necessarily differed very much from those of any other province on account of the existence of two legal languages and the necessity for the harmonizing of educational efforts so as to bring about fusion instead of confusion. A united French-English association and Board of Examiners and, in 1892, a united French-English Faculty in the college were the result of this most fraternal feeling. The examinations are held in both languages, and text-books in French have been provided for French students. In 1892 the Board of Examiners organized the "Dental College of the Province of Quebec." Each branch had an English and a French professor; a large clinical staff was also appointed. The work, which fell upon a few men, was most arduous, and as differing from Ontario, the persistence of faction met with some success in the local legislature. However, the college continued in its modest way, none of the teachers being paid until, in 1896, it was affiliated to Bishop's University, Lennoxville, for the purpose of obtaining the degree of Doctor of Dental Surgery.

In June, 1868, the first dental journal in Canada was published in Montreal under the name of the *Canada Journal of Dental Science*, a monthly of 32 pages. The first year it had just sixty-two paid subscribers, the second year ninety-one, but in the third year it obtained the third largest circulation among the many pub-

lished in the United States. In January, 1889, it was succeeded by the *DOMINION DENTAL JOURNAL*, published by the Nesbitt Publishing Company, Toronto, as a quarterly. It was made a bi-monthly for several years, and in 1894 became a monthly. It is the official organ of all the dental associations of the province. As late as 1868 there were only twelve persons practising dentistry in Nova Scotia, and not more than two or three who had degrees. There were fewer in the other Maritime Provinces. The movement for legislative reform in Nova Scotia and, in fact, throughout the adjoining province, was due to Dr. A. C. Cogswell, of Halifax, who secured an Act to incorporate the Dental Association of Nova Scotia on May 19th, 1891.

In 1838 L. E. Vanbuskirk was practising in St. John, New Brunswick, and it is a dubious compliment to say that he was the only subscriber in British America to the first volume of the *American Journal of Dental Science*, of Baltimore, the pioneer of dental journalism. New Brunswick dentists obtained incorporation in 1891; British Columbia, 6th April, 1886; North-West Territories, July 1st, 1890; Prince Edward Island, 15th July, 1891. Canada has contributed some of its leading practitioners and professors in dentistry to the United States. Among them are Dr. G. V. N. Relyea, Oswego, N. Y., one of the fathers and founders of the profession in Ontario; Dr. B. W. Day, now proprietor of an orange grove in California, the father of dentistry in Ontario; Dr. C. N. Johnson, a distinguished professor in the Chicago College of Dental Surgery and one of the most eminent practitioners and writers. Dr. Wm. R. Patton, formerly of Quebec, removed to Cologne, Germany, about twenty-four years ago, and occupies a Court appointment. Dr. E. Lafavre, formerly of St. John's, Quebec, was associated with the late Dr. Thomas W. Evans, of Paris, dentist to the Empress Eugenie. Dr. Lafavre died in Marseilles. Even in the land of the Aztecs Canadian dentistry is represented in the person of Dr. J. W. Bastow of Mazatlan, Sinaloa, Mexico. Dr. Brewster is enjoying a well-earned rest at his lovely "Camp Lodge" on the Richelieu River.

EXPERIMENTS WITH ROOT-FILLING MATERIALS.

BY DR. GREEN, OTTAWA.

GENTLEMEN,—As my paper is more of a demonstration than anything else I decided to let it speak for itself and only make a few remarks, and hope that I may start the ball rolling.

I have here prepared glass tubes and filled them as best I could with several materials, and then suspended them with their

points in a solution of permanganate of potash for twenty-four hours, to show their permeability to moisture. Before passing them around I would just like to say that my own opinion is that a slight tendency to absorb does not make as much trouble as many writers would have us believe; but I think it well to have our root fillings as impermeable as possible and slightly antiseptic.

Results :

1. Chloro-percha shrinks and becomes porous.
2. Chloro-percha and gutta-percha were impermeable as far as gutta-percha went.
3. Oxyphosphate absorbed moisture.
4. Oxychloride absorbed moisture to a considerable extent.
5. Silver amalgam was impermeable, but inadvisable on account of the difficulty in its use as a root-filling.
6. Cotton and cassia, and cotton and camphro-phenique indicated, are permeable to a slight extent.
7. Vaseline and zinc oxide showed no traces of absorption of moisture.
8. Mummification paste dissolves to some extent.
9. Vaseline, and vaseline and aristol do not show any signs of absorption.

TREATMENT OF BLIND ABSCESS.*

BY DR. EIDT, STRATFORD, ONT.

The same principles that apply to the treatment of an ordinary alveolar abscess hold good in the treatment of a blind abscess, it being simply one that has failed to establish an outlet or external fistula. Dr. W. C. Barrett, in *Oral Pathology and Practice*, defines it as one in which there is a cavity of decay communicating with the pulp chamber, and in which it is possible for the pus to be drained through the pulp canal.

The first step in the treatment of a tooth threatened with an alveolar abscess—and I may as well say in one where the disease exists in any stage—is the adjustment of the rubber dam over the diseased tooth to preclude the possibility of the entrance of any germs in the oral secretions into the pulp chamber. This should be the invariable rule.

The opening into the pulp chamber should always be made on a direct line (or as close to that as possible) with the end of the root in single-rooted teeth, or in a line as far as possible commanding the ends of multi-rooted teeth. Do not depend on a

* Read before the Ontario Dental Society.

small opening, but make it so large that there will be no question of an unobstructed view of the root-canal. It is far safer to remove a large quantity of healthy tooth-structure which can be perfectly restored by suitable filling material, than be compelled to operate in root canals entirely by the sense of touch. The contents of the canals should be then thoroughly removed, and by the careful performance of this portion of the operation is determined the successful prevention of the onsetting attack, or the cure of the disease if it already exists.

Frequently we meet with cases where the opening of the canals for the escape of gases, etc., fails to bring relief. This is an indication that the tissues of the peridental membrane have become so far implicated that the inflammatory process will go on independent of further irritation. This has no doubt proved the most difficult stage of the affection for most of us to control. I have found nothing better than the application of moist heat to the gums surrounding the affected tooth.

The method of procedure is as follows: Water as hot as the tissues will tolerate is taken up in a large bulb syringe, having a fine point. A jet of hot water is directed on the gums and into the cavity of the tooth. During the re-filling of the syringe the water is to be retained in the mouth and then emptied into the spittoon just previous to another application. The heat of the water should be gradually raised as the tissues will admit, as one of the essentials to success is to employ an exceedingly high degree of heat. The gum in the immediate vicinity of the inflammation will tolerate a much higher temperature than normal tissues; the latter, therefore, should be protected. The process should be kept up till perfect relief has been obtained. In some instances relief will be very sudden; in others it will require persistent treatment for perhaps thirty or even forty minutes before a substantial effect is produced.

When a patient has what is commonly called "a heavy cold," if the circulation and absorbent systems are badly out of condition, or if the excretory organs fail to perform their function, then relief is necessarily temporary, and we must resort to general treatment. Hot foot-baths, with laxative and diaphoretic remedies, will be useful. Citrate of magnesia, as a rapidly acting cathartic, in large doses, is one of the most pleasant and satisfactory.

After the debris and remains of the decomposed pulps have been removed and the canal or canals made as clear of obstruction as possible with a sterilized broach and washing with hydrogen

dioxide, a few fibrils of cotton dipped in some antiseptic, such as one of the essential oils (for front teeth preferably oil of cloves, as it will not discolor), may be carried as near the apex of the tooth as possible, and sealed up in the cavity. If there is much pain, an anodyne, like tincture of opium, may be introduced into the canal on a very few fibrils of cotton.

This treatment, both local and general, should be continued until the inflammation with its soreness and pain shall have passed away, when operative measures for the preservation of the tooth and its protection from further attacks may be instituted.

If it is impossible to pass a flexible broach through the foraminal opening, or to establish communication between the inside and the outside of the apex of the tooth, after the cleansing of the canal and the use of the general remedies, the antiseptic may be introduced on a few fibrils of cotton as near the apex as possible, and sealed up within the tooth. The agent used should be one of a penetrating character as possible, and in this respect carbolic acid is probably the best. It should be changed as often as necessary, sometimes every hour, until the pulp canal is thoroughly and completely sterilized. Then by slow infiltration and absorption it will be carried beyond the apex of the tooth, and sterilize the investing tissues.

There are instances in which none of the usual curative measures are effectual. It is impossible to get through the foraminal opening; perhaps the root of the tooth contains a filling that is difficult to remove, or there may be some deposit or other irritation, such as a point of a broach or end of gutta-percha point at the apex of the root.

For such cases during the last six years I have had recourse to a measure that has given my patients relief and myself the satisfaction of restoring to service teeth that were badly diseased. The tooth is carefully extracted, so as not to injure the pericementum, and the end of the root dressed down about one-sixteenth of an inch; the root-canal reamed out from both ends, the tooth immersed in a ten per cent. solution of carbolic acid, and the alveolus irrigated with a similar solution. The root-canal is filled with oxochloride of zinc, and the tooth, grasped firmly in the same instrument used in the extraction, is then thrust back into its former resting place and ligated with dental floss. My first case treated in this way was a lateral incisor, done over six years ago for a middle-aged gentleman. The patient has since come under my personal care, and less than two months ago, when I did some more work for him, I found it doing excellent service and in every respect a good tooth.

FISTULOUS ABSOESSES.

BY JAS. C. DEVITT, D.D.S., BOWMANVILLE, ONT.

Having been requested to give a short paper on Fistulous Abscesses, I thought I could not do better than relate in detail an account of a case which recently occurred in my practice. About the first of November a patient came to my office complaining of a severe toothache, caused by an abscessed tooth.

On examination, I discovered a decided swelling directly above the second left superior bicuspid. It appeared at first glance that this tooth was the cause of the trouble; but on further examination I found it to be apparently healthy. It had a small amalgam filling in it, but was not at all sore to touch. I tested the first bicuspid and failed to find any symptoms of an abscessed tooth. The first molar was in the same condition, also appearing perfectly healthy. When I examined the cuspid, however, I found it sensitive to the touch. It contained a large amalgam filling. I decided that was the one that needed attention. First of all I lanced the abscess and removed as much pus as possible, without inflicting too much pain, by pressure on the gum. Then I removed the amalgam filling in the cuspid, and found that the pulp had died and was in a putrescent condition. I opened up the canal with a broach, and instantly there was a flow of pus down the root canal. I removed as much as possible of this with cotton on a smooth broach.

I then took a metal hypodermic syringe, placed a couple of rubber discs on the needle, and filling it with warm water, attempted to send the water up the root and through the abscess, to prepare the way for the medicines which I intended to use. It took considerable force, but finally it burst through. By this method I washed it out thoroughly with warm water. After that I sent through a solution of peroxide of hydrogen. Having given this a few minutes in which to do its work, I used in a similar manner a 25 per cent. solution of boralyptol. This I considered sufficient for the time, and after placing some cotton saturated with eucalyptus in the root and sealing it in with a temporary filling, I sent the patient away with instructions to call again in two days' time.

The next sitting I found the swelling and inflammation very much diminished, but there was still pus. I therefore repeated the former treatment, finishing this time with a 50 per cent. solution of aromatic sulphuric. In the fourth treatment, I found

that the opening had closed between the root apex and the main body of the abscess. The root canal was also free from pus.

Having carefully prepared the root canal for filling, I put in a test root filling of cotton saturated with eucalyptus; this I sealed in with cement. There being still a trace of pus in the fistulous opening in the gum, I treated this with an injection of peroxide of hydrogen, followed in a few minutes by one of boralyptol or aromatic sulphuric. In about three weeks the swelling and inflammation had entirely disappeared, no signs of pus could be detected, and the gum had attained a healthy appearance. In about two weeks after the test root filling had been put in I removed it, and filled the root with chlora-percha and a gutta-percha cone. The cavity I refilled with cement. The operation has up to the present proved successful. I do not know whether this is a common condition in abscesses; it certainly was new to me to find one so far removed from the tooth which caused it.

Evidently this was caused by the mechanical action of the pus forcing itself along the line of least resistance. It indicated the need of careful diagnosis. Abscesses, from what I have seen of them, are in the habit of doing the unexpected, and bringing unpleasant surprises.

Proceedings of Dental Societies

EASTERN ONTARIO DENTAL ASSOCIATION.

The Eastern Ontario Dental Association held its twenty-first annual meeting at the Grand Union Hotel, Ottawa, on June 20th, 21st and 22nd. The President, Dr. Sparks of Kingston, called the meeting to order at 8 p.m., June 20th, and after the reading of the minutes of the previous meeting and the financial statement the following officers were elected for the ensuing term: President, Dr. Jno. Robertson, Ottawa; Vice-President, Dr. A. H. Mabee, Gananoque; Sec'y.-Treasurer, Dr. W. B. Cavanagh, Cornwall.

Drs. Parnell, Ottawa, and C. A. Martin, Ottawa, were elected hon. members of the Eastern Ontario Dental Association, with full privileges of ordinary members. Drs. Parnell and Martin were charter members of the Association, but at present, on account of ill-health, are prevented from taking an active part in the meetings. The members of the Association took this means to recognize their past services.

DR. SPARKS, in his retiring address, pointed out the growth of the demand for dentistry, and as an illustration, mentioned that a

number of applicants for service in South Africa were rejected on account of the diseased condition of their teeth. He regretted that a few had gained admission into the profession who advertise that they will do work for a low fee.

DR. CAVANAGH, Cornwall, read a paper on "The Care of Children's Teeth," pointing out the necessity of paying careful attention to the deciduous teeth and the permanent teeth that appear early in childhood.

Drs. Clement, Hanna, Martin and George Hutchison discussed the paper at length.

DR. J. C. BOWER, Ottawa, gave an interesting clinic, "Gold-filling," using de Trey's Gold. The preparation of the cavity was the same as for an amalgam filling.

H. A. CLARK, Brockville, gave a clinic on "A Gold Cap Crown." His method was to make and contour the band, fit to the root, and then take an impression. The operator should cause cusps to articulate with the opposite tooth and then strike up dies, using fusible metal; the cap swaged and the cusps filled with solder and the cap soldered to the band. This will give a perfect articulating crown.

DR. SPARKS, of Kingston, clinic, "Making and Filling of Cavities in Porcelain Teeth," was new to a great many. A space upon the porcelain tooth the size of the intended filling should be roughened by a corundum point. By the use of an old excavator and keeping the surface wet with turpentine, make the undercuts. Fill as an ordinary cavity.

"A Sketch of Dentistry in Canada," by Dr. W. Geo. Beers, of Montreal, was very interesting and appreciated by all, so much so that the secretary was instructed to insert the paper in full in the minutes.

DR. GREEN, Ottawa, exhibited some experiments he made with the different materials used for root filling. He filled glass tubes specially prepared for the purpose with (1) chlora-percha, (2) chlora-percha and gutta-percha, (3) oxyphosphate, (4) oxychloride, (5) silver amalgam, (6) cotton and cassia, (7) cotton and campho-phenique, (8) vaseline and zinc oxids, (9) mummification paste, (10) vaseline, (11) aristol. The tubes were suspended for 24 hours with their points in a solution of permanganate of potash to show their permeability to moisture. It was found that chora-percha and gutta-percha made the most impermeable filling.

DR. MABEE, Gananoque, read a very interesting paper on "Removal of Tartar," clearly showing the importance of keeping the teeth free from all deposits.

A resolution of condolence was tendered Dr. Hanna, Kempville, upon his severe loss by the death of Mrs. Hanna since the last meeting.

Owing to the action of the Board of the Royal College of Dental Surgery in providing for expert didactic and clinical assistance at the meetings of the dental societies to be held in 1901, the members of the Eastern Ontario Dental Association thought it advisable to hold the next annual meeting in Ottawa, as it is the most central point.

On Thursday afternoon the resident dentists of Ottawa entertained the visiting members and friends to a trip to the Chat Rapids. Cars were taken to Aylmer, where the party boarded the steamer *G. B. Green*. An orchestra furnished music. The return was made to the city at 8 p.m.

When the meeting was called to order upon our return, Dr. M. G. McElhinney, Ottawa, read a paper on "Random Notes."

A vote of thanks was tendered to the resident dentists for the manner in which they entertained the visiting dentists during their stay in the city.

W. B. CAVANAGH, D.D.S.,
Secretary.

BIENNIAL MEETING OF THE NEW BRUNSWICK AND NOVA SCOTIA DENTAL SOCIETIES.

The New Brunswick and Nova Scotia Dental Societies will hold their joint biennial meeting in St. John, N.B., on Wednesday, August 29th, 1900. The meeting is looked forward to by the members, as it is expected to be of unusual interest.

Clinics, papers read and discussed, incidents of office notices and a fund of information is looked for in the three days' session. All members of the profession are cordially invited to be present.

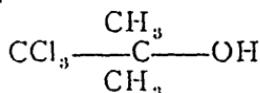
The dental manufacturing companies and supply houses will exhibit.

Selections

CHLORETONE IN DENTISTRY.

BY AUGUSTINE J. WALSH, D.D.S., NEW YORK.

Among the more recent advances in dental anesthesia is the preparation of Parke, Davis & Co., to which the name of chloretone has been given. It is a trichlor-tertiary-butyl alcohol formed from chloroform and acetone by the addition of caustic potash. After processes of chemical manufacture are completed it appears as acicular crystals, with a strong flavor of camphor. It is represented by the formula :



This material is highly soluble in chloroform and in acetone, in alcohol and in glacial acetic acid. In water it forms a solution of one per cent., which is the anesthetic equivalent of a four per cent. cocaine solution, with this advantage, that the amount of the chloretone solution which may be employed is practically without limit. The aqueous solution of one per cent. seemed to me, after my first experiments, a little too weak for the prompt action which our dental patients expect from us. Believing in the great advantages of this product, I made it my purpose to find a solution which would better meet dental needs. After several futile experiments, I found reason to congratulate myself on this formula :

Chloretone, $\frac{1}{2}$ drachm.
Etheri sulph., 2 drachms.
Water q.s. at 1 oz.

This took up all the chloretone readily. After standing, the solution, which is non-miscible in theory, divided in the container into a floating solution of chloretone and ether, and a solution of chloretone and water ; but by reason of the admixture of the ether there is reason to believe that the aqueous solution was in possession of more chloretone than would be the case without the presence of the ether. I conducted my experiments on the two parts of the solution independently, drawing from the surface or from the deeper solution as needed.

The floating ethereal solution was used in three dozen cases on sensitive dentine with marked success. It enabled me to drill out cavities with greater ease to the patient and caused but little pain as compared to drilling without chloretone. Although complete

anesthesia was not obtained, it was so successful as to command chloretoone in this branch of dentistry, and in my judgment nothing better could be used. Applied topically to the gums previous to adjusting crowns and bridges, the ethereal solution was, in my experience, most successful, making the operations perfectly painless and causing no distress to the patient. This proved uniform in its action in a dozen cases. On topical application to the gums the ether evaporated and left a close coating of chloretoone covering the entire surface of the parts operated upon and resultant anesthesia.

The aqueous solution under the ether layer was injected into the gums of a woman from whom nine teeth were extracted. The operation was accomplished with little pain, and was more safe than when cocaine is used. The latter often produces severe and dangerous depression of the heart. This patient was highly sensitive, weak and nervous, and was certainly not a subject on whom to use cocaine without fear of trouble.

The beauty of extracting teeth with chloretoone as the anesthetic is that the work can be done quite as successfully and with none of the latent fear which lingers in the mind of the operator who uses cocaine, for chloretoone does not depress the heart, and can consequently be used fearlessly.

To this brief paper I append a few typical case reports.

December 14, 1899.—Using ether and water solution, extracted a large first permanent molar from a child without pain.

January 14, 1900.—Using a dilute alcohol solution, extracted a tooth from a woman without pain.

January 27.—Extracted a tooth from a man with a solution of chloretoone in undiluted alcohol; the injection produced pain, which I attribute to the burning of the alcohol, but the extraction of the tooth itself was painless.—*Items of Interest, April, 1900.*

PROFESSIONAL RECIPROCITY.

VICTORIA.

The Dental Education and Examination Committee, reporting upon an application from the Dental Board of Victoria for full recognition of its diploma as entitling its holder to registration in this country, stated that a fresh set of regulations came into force in May, 1899, and it was under these that the present application for recognition fell. These new regulations in certain respects required less of the student than the old ones, and the curriculum exacted fell in some particulars far short of our own on the general medical side of the work. The regulations were in several respects

a distinct falling-off from those previously in force, judged from our standpoint. Were a diplomate who had obtained his qualifications under these rules to apply to the English college for admission to examination, and to be required before admission to examination to make up the subjects which would render his curriculum the equivalent of our own, he would have a good deal to attend. This did not apply to the special dental work, which was sufficient. In these circumstances, the committee regretted that they could not advise that the request for recognition for registration be acceded to.

On the motion of Mr. Bryant, seconded by Mr. Tomes, it was resolved: "That the Council is unable to recognize the diploma of the Dental Board of Victoria as entitling its holder to registration in the *Dentists' Register* of this country."

ONTARIO.

The same committee, reporting upon a proposition of the Royal College of Dental Surgeons, Ontario, that a measure of reciprocity in the matter of dental degrees should be instituted between the province and Great Britain, said the scheme proposed was that on either side the preliminary examination, apprenticeship, and curriculum of the other be accepted, but that, prior to admission to examination, an attendance during the last year be required in the country in which the candidate sought examination. This did not apply to students, but only to those who had already obtained their qualification in their own country. The curriculum of the Ontario College only took three and a half years, as against our four, but the additional year attended here would bring up the total to four and a half. This being the case, it became a question whether, whilst one year was required of the Canadian diplomate for admission to examinations here, bringing his total curriculum up to four and a half years, a somewhat shorter period,—namely, a half year—should suffice in the case of a British graduate applying for examination in Ontario, which would bring his total also up to four and a half years. Upon the whole, the diploma of Ontario appeared to be of a high character, and, should the several British licensing bodies, with whom the decision must rest, take a favorable view of the application, and consider that the requirement of general equivalence to their own curricula was adequately secured by the means proposed, the committee thought that the General Medical Council need offer no objection. The committee recognized the desirability of acceding, if possible, to a reasonable proposition from one of our colonies.

It was resolved, on the motion of Mr. Bryant, seconded by Mr. Tomes, to forward a copy of the report to the various licensing bodies.—*British Dental Journal*.

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VOL. XII.

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No. 7

NEWSPAPER CRITICS.

The juvenile editor of one of our morning papers has been giving loose rein to his vivid imagination, in connection with the exactions of the dental profession in the matter of the preliminary examination, and has come to the sage conclusion that, "whether the man stands at the chair as a dentist or at the same chair as a barber, it is all one as long as he does his appointed task honestly. The necessity of knowing the dead languages in order to pull a tooth, is no more apparent than the necessity of knowing the dead languages in order to cut one's hair."

Now this is neither funny nor logical. It is a very good

sample of a smart superficiality which prevails in the editorial chair, when "the man" is dumped there out of failure in another career, and who assumes that, because of his defects as a man of business, he must have been meant by nature for a leader of public opinion. Heaven save the mark!

It is all true that one need not be a scholar to be a good practical dentist. Our critic proves to us, too, that one need not have even common sense to be an editor. One may be as bewildered in the presence of a Latin numeral adjective as in an effort to count the stars, and yet be a good "tooth-puller." He may know no more about the six cases, or the declension of a simple noun in Latin than of Chinese, and yet amaze us by his deftness in operating. He may know the pharmacopeia without knowing Greek, and write from memory a model prescription in conventional Latin, without knowing the force of its inflections, or the nature of its idioms. A smatter of Latin syntax may be enough to enable one correctly to construct a prescription; and so through the whole gamut of technical knowledge, slipshod knowledge seems to be enough for people like our critic. Some one once caricatured the parishioners of a small hamlet in England, where the most prominent man had risen to his dignities by the awe which he had inspired by the constant use of "*vice versa*"; and we have no doubt that the critical youth at the head of one of our principal Canadian newspapers must regard our efforts to raise the matriculation standard as on a par with the scholarly fanaticism of the Oxford grammarian who regretted on his death-bed, that he had not concentrated all the energies of his life on the dative case. We would recommend our cheerful critic to come down from the soaring clouds of conceit and for a few years go back to school.

DR. W. C. BARRETT, LL.D.

We are sure the profession in Canada, as well as the United States, will heartily congratulate Dr. W. C. Barrett, of Buffalo, on the distinction of the honorary degree of Doctor of Laws (LL.D.) conferred upon him by Lake Forest University in recognition of

his important services as Chairman of the Foreign Relations Committee of the National Association of Dental Colleges. In honoring Dr. Barrett Lake Forest University honors itself.

Editorial Notes.

NO man is first called a quack or a quack imitator by his confreres. This stigma is self-made. Why should we desire to foul our own nest or to asperse in any way our own craft? Surely it is desirable that the public and the other professions should respect us as dentists. The best friends of the respectability of the profession are those who most vigorously defend it against defilement. Everyone has the choice for himself whether he will rank with the quacks or those who wish to be respected. No man can make another a quack—the quack is self-made.

GETTING THE GREATEST GOOD FROM BOOKS.—“Summer reading is often largely composed of fiction, and if we choose good novels and bright, wholesome short stories, we are not exactly wasting our time, although every one of these long summer days ought to give us a return in something besides entertainment and amusement,” writes Margaret E. Sangster, in the July *Ladies' Home Journal*. “I fancy that most girls would be the gainers by keeping on hand a good, strong book, a volume of history, or biography, or travels, or essays, and devoting a portion of their time to it each morning or each afternoon consecutively, keeping a bookmark at the place where they break off and moving it on day by day. If, added to this, each girl would keep near her a little blank memorandum book in which she should enter dates, copy passages which impress her as worth remembering, or write her own comments on what she reads, she would gain an incalculable store of mental wealth by the summer's end.”

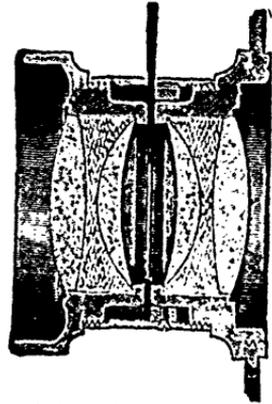
DR. BLANK is a gentleman who is all *suaviter in modo*. Unfortunately, he is destitute of the *fortiter in re*, and would not only turn the other cheek to be struck by an aggressor, but apologize for the existence of his very shadow. Dr. Blank has the

reputation of being a good bit of a toady, and somewhat of a coward, and he revenges himself by holding ungracious opinions about the workers, and thinkers, and fighters, who do not believe in hypocritical tenderness to quackery in all its forms. Dr. Blank has more than once suggested to us that we are "not gentle enough" with the quacks. He admits that they are boasters and liars, yet he wants decent men to cringe to them in order to seek their reformation! That sort of moral genuflection is evidently a distinguishing feature in Dr. Blank's composition. If he likes to play the tuft-hunter, he need not be surprised if we venture to suspect that he would be quite easily led to play the traitor. We do not want the friendship of dentists who play the quack. We do not fear their hate. They may go to the devil if they like his company; but our business has been to keep them from seducing others to follow them.

IT is enough to make honest men ashamed of the profession to witness the prodigious imposture which still exists among the gutter dentists. Sometimes we envy the placid people, whose environment removes them from the sight and sound of the dental *abattoir*, and who take such good care, ostrich-like, to hide from the storms. There is much moral cowardice in such an attitude. It is nothing more nor less than bonusing humbug. The wholesale slaughter of sound natural teeth is going on in Toronto and Montreal, in the offices of shady practitioners, under open pretence of the failure to save them! We all have weak points wherein we are vulnerable to some form of imposture, but the dealer in green goods is not half so vile a rascal as he who plies his natural instinct for imposture in the ailments and diseases of mankind. If a dentist is a rascal who deliberately extracts decayed teeth which should and could be saved, what are we to say of the man who deliberately condemns and extracts teeth which are in every sense free from disease, and as valuable as when they were erupted? There may yet be discovered some way of making such practice penal, or at least perilous. The public trust to the statements made by men whom our Boards have licensed. Surely the public have a right to expect protection from malpractice. And it is the nature of all imposture to wear a sleek air of veracity, and to sing pæons of honesty while its fingers are picking one's pockets.

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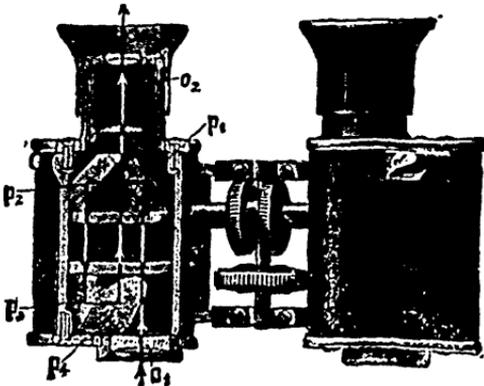
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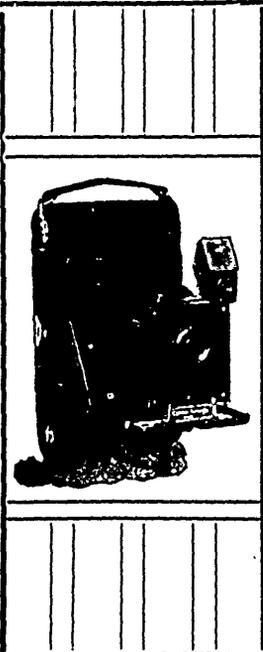


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