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Original Communications.

Hæmorrhage, Its Ætiology and Treatment.

By W. BELL, L.D.S., Smith's Falls, Ont.

The condition of hæmorrhage is generally described under two heads, viz., that of primary and that of secondary hæmorrhage.

When bleeding takes place from a wound immediately after an operation or injury it is called primary; when it occurs on reaction from shock or other causes within twenty-four hours, or sometimes longer, it is spoken of as secondary hæmorrhage.

The primary is due to the direct injury to the tissues and vessels; the secondary to the increased force of the circulation during the reaction; or, perhaps, the most frequent cause met with in the practice of the dentist is the hæmorrhagic diathesis of the patient.

Under ordinary circumstances the free bleeding of a wound or wounds, after the operation of extraction, need not cause any uneasiness. But should the bleeding continue for a prolonged period, there is danger of exhaustion and syncope, and measures should at once be taken to stop the excessive flow of blood.

The effect upon the constitution, of course, varies according to the amount of blood lost; and is more marked when the blood escapes rapidly than when it flows slowly. When the bleeding is less severe, the face and general surface become blanched and cold, and the lips and mucous membrane pallid, the pulse feeble, fluttering and rapid. These symptoms may end in syncope and convulsions; or the patient may suffer from anæmia or functional dis-

turbances for some lengthened period. Children bear the loss of blood badly, but recover rapidly, while the old stand the loss better, but the effect on their constitution is more permanent.

Sometimes, however, unless the dentist is intimately acquainted with any constitutional idiosyncrasy of his patient, it is extremely difficult to distinguish those subject to hæmorrhagic diathesis from those not so afflicted. In a case of this kind, when there is the slightest suspicion, it is always advisable to inquire whether the patient is subject to excessive bleeding from slight injuries, and thus be able to guard against any trouble. A case in point :

A young man from a neighboring town, a strong, healthy fellow of about twenty-two, was visiting friends here. He called and had a badly decayed superior cuspid and a bicuspid extracted. He bled about the usual amount, and when he left we did not anticipate any trouble. He returned in about two hours so weak that he experienced great difficulty in walking. The face and mucous membrane were pale, head aching, eye languid, and the skin clammy. The wounds had started to bleed shortly after he had left, and had been growing worse all the time. A compress of absorbent cotton saturated with tincture of kramerial and loaded with as much alumen pulv. as would adhere to it, was inserted into each wound. This effectually stopped the hæmorrhage, but the patient was so weakened that it was some hours before he was able to leave the office.

There are a variety of styptics and hæmostatics recommended for the alleviation of hæmorrhage, but our personal experience has been that there is none better than alumen pulv. in combination with some astringent tincture. We consider it superior to the ferri persulph. or the ferri perchlor., for the reason that in nearly every case it accomplishes the desired end, and there is no danger of a slough. In short, it possesses all the good qualities of the iron, without any of its bad ones. Of course we do not mean to say that the tinctures of iron should never be used, for there are cases in which they may be employed very advantageously, but we would use them in the capacity of styptics as a last resort.

Cold is also a powerful styptic. A stream of cold water directed to the bleeding part, or a piece of ice inserted into the wound, is, at times, of great assistance.

Before applying any of these styptics, however, the bleeding part should be wiped out as dry as possible and all coagula removed.

When syncope occurs from loss of blood, do not be too hasty to overcome it, since it is, without doubt, one of the most valuable means Nature employs to check bleeding and assist natural hæmostatics. But the dentist must exercise great caution during the syncope and see that the patient is in no danger.

Beneficial results are obtained from the internal administration

of hæmostatics, such as half-grain doses of pil. opii. But opium should never be given when there is any heart trouble. When the hæmorrhagic diathesis exists, iron in full doses is of great service, the tincture of the acetate, or the perchloride in half-drachm doses being the best. Oil of turpentine is likewise a valuable remedy, twenty-minim doses being sufficient for an adult. Gallic acid in ten-grain doses and acetate of lead in one-grain doses are also recommended. All these act upon the blood and dispose it to coagulate.

Reciprocity Between the Dental Boards of the Dominion of Canada.*

By FRANK WOODBURY, D.D.S., Halifax, N.S.

The following statements are only intended to open the question for discussion in this meeting, and do not pretend to be at all complete or exhaustive of the subject, but if our discussion should result in resolutions that will put this association in correspondence with other Dental Societies of the Dominion, my object will be gained.

Every Province now has a Dental Law of some kind, and the profession, from the Atlantic to the Pacific, can be reached officially by correspondence.

Upon examination it will be found that the literary requirements for matriculation as a student of dentistry are very similar in all the Provinces—that the time of studentship does not vary much. From three to four years, including college course, is required by every Board in the Dominion.

Ontario and some other Provinces require that students shall be articled to a preceptor under a definite contract. Nova Scotia demands thirty-six months' studentship and requires the certificate of preceptors to prove it.

Nearly all Boards recognize the degrees from a certain number of reputable colleges, which are agreed upon by the Dental Executive Board, and all applicants not possessing these must pass a certain examination, even if holding a degree from a college which is not recognized. This gives the Board practically the power to recognize none, or one, or any number of colleges, yet by not having a common law or reciprocity between the Associations, there are a half dozen other sections of our country where a member of the profession practising in any one, cannot go without undergoing some sort of a professional or matriculation inquisition. Granted that

*Read before the Dental Association of Nova Scotia, September 27th, 1893.

men should be able to meet a certain standard of literary qualification, and the standard should be high enough to guarantee an intelligent professional studentship, and culture enough to provide to each a mind well trained to think and capable of grasping the profession in its best sense. In no particular lower the standard, but rather raise it as fast as the facilities for education increase. The High School is at every young man's door. The State has undertaken to provide the present generation with educational advantages and mental training such as the world has never before seen, and dental surgery should demand of men now entering it, the highest necessary preliminary qualifications.

If I am informed correctly, every Board in the Dominion could agree upon a uniform standard of matriculation without great change to any curriculum. Now we come to the length and quality of the term of studentship.

It is my opinion that none of the Provinces exact too long a period. I think four years better than three. The physician can make a greater success on a three years' course than the dental surgeon can.

There are few occupations that require such continued delicacy and precision of manipulation, and this can only be acquired by practice.

Some Boards require that after matriculation the student shall sign articles with some registered practitioner, and shall by this ensure attention, and practical tuition in operative and mechanical dentistry which might not be given him under such a system as prevails in this province at present. It can readily be seen that while we require a three years' studentship and ask for proof of it, in a large number of cases we shall not be able to trace it, and there will be a great tendency to waste the time between college terms, with only nominal connection with some dental office. In Ontario and some other Provinces the student is compelled by his agreement to spend all his time in either office or college. This should secure the best results. It gives the college lecture and clinic and office practice their proper place. We could, with great benefit to the profession, to students, and satisfaction to ourselves, adopt this method of articling our young men, and thus securing the best results obtainable from this branch of student life.

Next comes the college requirements. Nova Scotia recognizes some thirty dental schools as reputable, and accepts the degrees from them in lieu of professional examination, but we do not accept their matriculation examination, because in most cases it is far below our own standard. Ontario does not recognize *for practice* the degree from any college, not even Toronto University, but compels all students to attend a three years' course in the Royal College of Dental Surgery and confers upon them a license

to practise in Ontario, must produce credentials equivalent to the Ontario standard of matriculation and a diploma from some recognized dental school in order to be admitted, not to practise, but to the senior year of the Royal College of Dental Surgeons of Ontario, and after passing the final examination he may have the title of L.D.S. conferred upon him.

New Brunswick will only admit members of the profession from another Province, after they have been residents of New Brunswick for three months, and have passed an examination before their Board.

These are a few of the distinctive features of some of the provincial laws.

Now, gentlemen, we must not look upon this heap of provincial legislation as selfish means used to save all the patronage for the men in each province. None are intended for offensive warfare, but are walls of protection for the public and profession. They are serving an excellent purpose. This legislation has been indeed a ladder upon which the profession is steadily climbing to its proper position among men. All the Associations have been inspired with the same unselfish motives and noble purposes. We understand why our own law exists. Up to this point the various provincial Acts represent a stage in the growth of the profession. Each provincial law has been a centre of crystallization and unification for the individuals in the separate provinces and the amendments from time to time have represented the growth that has taken place. The advance has sounded all along the line, but to make a familiar illustration, these Acts are like the centres of ossification in a molar—fine cusps, good structure, correct in form, but the *sulci* are not complete and show weakness, and are open to attack because not well united. They do not exactly match.

Many of the best colleges have recently extended their course to three years, and *no one* says with truth that their professional training is not excellent. It seems that with proper guards around the matriculation qualifications and office studentship, that graduates from our own or any foreign college should be given the license to practise anywhere they please in the Dominion.

In conclusion, it would seem that if the Associations would re-arrange their qualifications for practice that they might agree sufficiently well to be recognized throughout the Dominion, it would be a stride in advance, and would give our profession in Canada an *esprit de corps* that would surprise the most sanguine, and lead to the establishment of colleges of dentistry in various parts of our Dominion, as well as be an object lesson to other countries and some older professions.

Snow and Salt.

By B.

When you have no local anæsthetic convenient, chop up a little ice, or take some snow, mix it with salt, put it in a thin napkin, adapt it to the gums where you want to operate, and after about two minutes' application the gum should be "frozen," and you should be able to extract with little or no pain. In hospital practice, where you want to save poor people pain, this simple application can be used anywhere on the body. I have opened abscesses; I even found it useful in hypersensitiveness of dentine. I constructed a little cup or bowl on the end of a dental instrument for the purpose of carrying the snow-salt and applying it to the gums, but it is easily applied in an ordinary mouth napkin. If a pulp is exposed, close the cavity with cotton before applying the snow-salt.

Why do Vulcanite Upper Plates Crack?

By BREVITY.

1. Because they are too thin.
2. Because they are too thick.
3. Because they are vulcanized too hard.
4. Because they are vulcanized too soft.
5. Because they are badly articulated.
6. Because the *dens sapientiæ* in the process of growth presses too much on the part of the plate which covers the tuberosities of the superior maxillary.
7. Because of the want of lower bicuspid and molars.
8. Because they are not worth a cent at any rate.

Proceedings of Dental Societies.

Dental Association of Nova Scotia.

The third annual meeting was held on the 27th of last September, in Halifax, but owing to various circumstances there were not as many present as at the two previous gatherings. Vice-President, Dr. H. Clay, occupied the chair. The following officers were elected: President, Dr. H. Clay, Pictou; 1st Vice-President, Dr. F. H. Parker, New Glasgow; 2nd Vice-President, Dr. F. W. Stevens, Halifax; Secretary, Dr. Frank Woodbury, Halifax. Executive Committee: Drs. A. C. Cogswell, F. W. Stevens, S. D. Macdonald, J. W. Angwin, J. A. Johnson, Secretary. Auditors: Drs. F. W. Stevens and A. W. Cogswell. The Provincial Board of Nova Scotia consists of Dr. A. C. Cogswell, President; Drs. W. C.

Delaney, J. A. Merrill, H. Woodbury, M. P. Harrington, A. J. McKenna, F. H. Parker. F. Woodbury, Secretary-Registrar.

The reports of the Board and the Secretary-Registrar were read, which showed seventy-four names on the register. The deaths of Drs. C. U. Smith, of Halifax; Jas. E. Crosby, of Yarmouth; R. W. Macdonald, of Halifax; and Geo. Hyde, of Truro, were announced, and resolutions of regret and sympathy passed. Attention was called to a number of dental advertisements in the public prints, which are violations of the Code of Ethics, and a resolution passed disapproving of the same. Some interesting demonstrations were presented. The Secretary read a paper on "Reciprocity between the Dental Boards of the Dominion of Canada," which appears among our Original Communications, and after a long and thorough discussion the Association adopted the following resolutions:

Whereas, Believing that the Dental Profession in Canada has arrived at the stage of the development that renders it desirable that the standard of qualification for the practice of dental surgery in each Province should agree sufficiently well to be recognized and endorsed by all other Boards of the Dominion; and

Whereas, It is the desire of the Dental Association of Nova Scotia to promote this object;

Therefore resolved, That this association hereby recognizes the advantages and necessity of having the qualifications for practice in dentistry in any Province recognized in all other Provinces of the Dominion; also

Resolved, That the Secretary be instructed to correspond with the Associations of the other Provinces of the Dominion asking them to discuss the question at their next annual meeting and to appoint a representative to meet or correspond with representatives from the other Associations, for the purpose of formulating a standard of qualification to be presented at the next succeeding annual meeting of the Societies for endorsement.

Resolved, That the period of studentship should be increased to four years in this Province, and for the securing of better results and the protection of the students there should be a legal form of articles signed by preceptor and student, and that the Dental Board be authorized to prepare a Bill for presentation at the next session of the Legislature.

Dr. Parker invited the Association to hold the fourth annual meeting at New Glasgow, but Halifax was decided upon.

Vermont State Dental Society.

The next annual meeting will be held the third Wednesday of March, 7.30 p.m., at White River Junction, Vt. Our Vermont friends always manage to have successful meetings. A number of Canadian dentists will attend.

Selections.

Teeth Below Medium in Structure.—Their Treatment.*

By WM. W. BELCHER, D.D.S., Seneca Falls, N.Y.

During our last census considerable discussion was had and indignation manifested by certain dentists as to whether or not they should be classed as manufacturers; whether or not dentistry was a mechanical or a professional calling. The making of a set of teeth is certainly a mechanical operation, likewise the burring out of a simple cavity and the filling thereof with amalgam or gold. But where a careful examination of the mouth is made to determine the best method of constructing a denture; where the trained eye is called into play to determine the most suitable tooth for the sex and temperament of the patient; in operative dentistry, where the operation necessitates not only the mechanical act of stopping a cavity, but also calls into play the judgment as to the most suitable filling material for the patient, the tooth, and its position in the dental arch, different cases requiring different treatment, then the mechanical ends and the professional begins. The treatment of teeth below medium in structure, I find, calls for more professional attention than mechanical.

What is the most suitable material for these teeth? Gold? How many times in the course of a year you examine mouths studded with soft, frail teeth and find patients completely discouraged; undecided whether they shall continue to have their teeth filled and refilled, or have them extracted. You examine the mouth and find eighteen or twenty teeth filled with gold in which decay has recommenced around the filling. Of course, they are not *your* fillings; they were inserted by your competitor down the street. If you are recently graduated, you say, "Fill those teeth with gold, certainly." You talk airily, indiscreetly also, about improper manipulation, and refill with gold. We are sorry for you of course, but more sorry for the patient. If, however, you have been in practice for several years, you have come to the conclusion some time past, that there are other conscientious operators in the world besides yourself, and hesitate for fear of a similar experience. "He who has not discovered cause, has no remedy for effect." To do nothing unless you know what to do, is practice that will be pursued by every judicious practitioner. Can we diagnose the case before us? I have diagnosed it; it is a case of *incompatibility of tooth structure and filling material*. One of the plastic filling materials is called for. What! not use gold? Yes, in its proper place; in

* Read before the VIIth District Dental Society.

teeth above medium in structure nothing compares with gold as a filling material. It is as durable when properly manipulated as the rock on which the man built his house. Use gold by all means as a filling material when it is consistent with tooth preservation; but in proportion as the teeth fall below the average in density will be the number of failures with gold, though the greater the skill the better will be the result. Our only recourse, then, is a plastic filling. We must really descend and become in some degree "tooth-plasterers." It is apparent that some are prejudiced against the use of plastics, to the injury of the teeth, their owners and as often the claims of the operator. As the late Dr. Atkinson happily puts it, "Such a man ought to be prayed with."

The successful utilization of plastic fillings depends as much upon specific adaptation of means to ends, as does the successful utilization of gold depend upon manipulative ability. The plastic fillings commonly used are amalgam, cement and gutta-percha. Amalgam is the sheet anchor for the treatment of soft teeth; it answers admirably most of the requirements of a filling material, its color alone making it non-applicable to the anterior teeth. In teeth of the lowest scale of density, even amalgam has to take a second place. Nearly everyone uses it nowadays more or less. No other material has had such a hard struggle for a place in dentistry. In the early days of amalgam, the better class of dentists waged war against it on "general principles"—it would lower the manipulative skill and professional standing of dentists. Time has brought its own refutation. Never in the history of dentistry has professional standing and manipulative ability been so high as to-day, notwithstanding tons of amalgam have been used as a filling material. It long ago outlived an inherited prejudice, and we are now in danger of going to the other extreme of using it when not indicated.

In filling the teeth with amalgam, the cavity should be prepared with as much care as with gold; edges should be beveled and all angles removed. When the decay is deep seated and the removal of the decomposed dentine would expose the pulp, it is excellent practice to thoroughly carbolize the cavity, cap with gutta-percha or cement, using great care to have the edges of the cavity free from decay. The enamel should be cut away until the edges become thick and strong. Always have your patient return in three or four days that you may polish the fillings with sand-paper and cuttle-fish disks. This gives the filling a smooth surface and frees it from any overhanging edges. It also adds not a little to its appearance, as it will not tarnish to the same degree as if left rough. Another consideration not to be overlooked is the opportunity to examine your work at your own leisure. Now and then you will find a little fissure you had excavated and in your hurry had forgotten to fill.

Quite as frequently you find in spite of all your warnings and the care of the patient, that while in a plastic condition the filling has been fractured. You now have an opportunity of rectifying all this. It is impossible to properly fill and polish an amalgam filling at one sitting.

A new amalgam which has received considerable attention during the past few years is composed of pure copper and mercury. I have experimented with it during the past four years, and in my estimation it is a material of considerable value. It cannot be used in places in teeth that appeal to the eye, as it discolors badly; but in soft teeth, where everything else has failed, I have found it invaluable. It is particularly useful in deciduous teeth, being very plastic, and not affected by moisture as other amalgams. I know it is the fashion to condemn this material—"the blackest sheep of them all"—but it has done so well for me, in cases where I had despaired of ever putting in anything more permanent than cement, and had begun to doubt whether the fault was with the material or myself, that I must say a good word for it. One case was that of a young lady for whom I refilled with silver a dozen or more cavities that had been filled a short time before, only to find on her return for professional services six months later thirteen additional places that needed attention, this time not only cavities that had been filled by her former dentist, but also a goodly number of those I had so carefully re-treated. I refilled her teeth, using copper amalgam. A few months ago she was in my office and I had the pleasure of again examining her teeth. Two years had passed since the introduction of the copper; meanwhile she married and had a child, passing through one of the most trying periods for the teeth. Her health, if anything, was not as good as when I had last seen her, and yet I found but *three new* cavities. Comment is unnecessary.

Another case was that of a lady who had come to the conclusion that nothing could save her teeth, unless perhaps having them filled every year with cement. I found her mouth in a deplorable condition; decay had taken place around the gold and amalgam fillings; one of the worst cases I ever saw. I filled several of the worst cases with this material, the others with cement. The result was gratifying in the extreme. At the end of the year I replaced a number of the cement fillings that had worn away with the copper. She returned on a visit to her old home in New Hampshire, and while there had her teeth examined by her former dentist, who had obstinately refused to use the copper amalgam in his practice. The copper amalgam fillings in her mouth convinced him of its value. I received a letter from him some time ago, in which he stated that the amalgam in soft, frail teeth had more than exceeded his expectations. I have used the copper only in teeth

far down in the scale, structurally, and am sure that I save many teeth permanently, which I could only hope to temporarily repair with any other material. I am confident that many of the failures in using this material are due to the fact that it is not mixed thoroughly. There is generally enough mercury, and to spare, in the material as it comes from the depots. It is not enough to heat the amalgam until the mercury appears—the mortar and pestal should be thoroughly warmed. Amalgam so treated is plastic in a surprisingly short time.

Cement, as a tooth preserver, stands at the head of the list. As it lasts only from one to three years, it loses much of its value ; still, we occasionally find fillings of this material that have lasted longer, many times in teeth below medium in structure outwearing gold fillings. Great care should be exercised in the use of the phosphoric acid to keep it pure, as it easily absorbs water and deteriorates. The powder, if long exposed, may bring about the same result. It absorbs moisture from the air, like plaster of Paris, and becomes unfit for use. Cement requires the most careful manipulation to obtain the best results ; in fact, next to gold, it requires the most skill of any material used in dentistry. I find a six-sided mixing block very handy when in a hurry, six mixing surfaces instead of the two on the ordinary block.

It is a fact that a given amount of acid only can unite with a quantity of powder sufficient to satisfy its affinity, and if there is an excess of powder, the compound formed is brittle, crumbles and admits moisture freely. Apply the rubber dam, mix the powder and acid until you have a creamy mass, trim as much as possible before it sets, and if you are particular, let your patient read the paper for thirty minutes or more, before removing the dam. Many coat the filling with sandarach or shellac varnish ; but the alcoholic constituent penetrates deeper than could the saliva and does more harm than good.

Dr. Bonwill has suggested coating the filling with heated paraffine which melts at a temperature lower than wax when heated. He claims to get very good results from its use, saying that it renders the filling and interstices around it impervious to the action of acids. Dr. Flagg suggests a mixture of one part white wax to five parts resin. This simply acts as a protective covering for twenty-four hours. I have tried Dr. Bonwill's method, but have not used it long enough to vouch for its preventing the decomposition of the oxyphosphate. Either method seems preferable to the varnishing process.

One of the most satisfactory methods of filling frail or soft teeth is found in gold inlays set with cement. The work requires time and considerable skill, and is necessarily expensive. By this means, contours can be restored, having all the appearances of gold, with the advantages of cement. For exposed positions, where

appearance is an object, this method is *par excellence*. Never attempt to insert and polish an inlay at one sitting. Let the cement harden thoroughly, then make a second appointment for the final smoothing and finishing. Occasionally you find teeth which from the moment of their eruption seem marked for destruction. This is particularly true of the six-year molars, decay often commencing at a dozen different points. The surface of the enamel seems pitted in every direction. I find it casier and less expensive to the patient in the end, to immediately adjust a gold shell covering the whole tooth.

Combination fillings are quite the fad nowadays—combinations of gold and amalgam, cement and gutta-percha, etc. I have found the latter a very satisfactory method. How often we examine an oxyphosphate filling and find it to all appearances perfect, until we discover a pocket along the cervical border, leading directly to the pulp. Gutta-percha is especially valuable here. Place a small pellet at the cervical border of the cavity, finishing with cement. A chlora-percha lining is recommended for the entire cavity before filling with cement, though I have not tried it. Gutta-percha as a permanent filling has a limited field, but it is almost indispensable in cervical or buccal cavities, those exquisitely sensitive points of decay next to the gum. Where it is properly protected, I find it more valuable than gold or amalgam in low grade teeth. In using gutta-percha it is essential that the largest possible portion of both enamel and dentine should be carefully conserved. It is not important that the walls of the cavity should possess thickness or strength—every portion of enamel should be saved. Gutta-percha should always be finished from the centre toward the edges of the cavity. As a final finish, use a moderate amount of pressure to consolidate the filling.—*Odontographic Journal*.

Dental Education.

A large part of the union meeting of the Pennsylvania and New Jersey State Dental Societies was occupied with the important question of education. Dr. Jack's address was scholarly and practical, and we regret that we must merely outline it. Speaking of the professional functions of men, and the high educational requirements for entrance upon a professional career, he shows that the absence of this training is principally responsible for the existence of the pettifogger in law, the quack in medicine, and the fanatic in theology.

“Up to a recent period, nearly all applicants for matriculation were received, and since a preliminary examination has been required, the standard has been of too elementary a degree, and unfortunately is conducted by those who have had the interest to make up as large a class of matriculants as possible.”

"The complaint is being made to me, that young men who have been taken as laboratory and office-helpers, without more than the commonest school education, are, after two years of pupilage, entering the ranks of the dental profession. This is one of the degrading influences which have been keeping low the standard of dental education, and have been launching too large a number of poorly fitted novitiates upon the public. If one may, from a common workman with a little knowledge of English, be relegated, in the short period of eighteen months, or, as now, thirty months, to the performance of one of the most difficult and responsible functions, what must be thought by the intelligent members of the community which requires five years for its members to learn properly to do the work of ordinary trades, of a pretended profession which has no higher preliminary standard than the majority of the schools require? How different the result would be in case each student had been required to have, at least, an academic education, or have been subjected to the most rigid tests, by an academic board, *independent of the dental schools.*"

Dr. Chas. J. Essig criticized the fairness of State Examining Boards, demanding further examination before practice from holders of dental diplomas, and very clearly exposed the inferiority of such examination to that demanded by the college faculties. He maintained that it required just as high a degree of knowledge to examine students as to teach them; and the question arose as to the qualifications of some of these examiners. "The present method of examining by state boards is as arbitrary as it is slipshod and superficial. It will not be long before it will become apparent to all who are interested in this phase of dental education, that such examinations should be written; questions and answers should be in writing, and be placed on record for reference when occasion requires. The questions should be in the handwriting of the examiners, and the answers in that of the candidate."

[It may interest the worthy Doctor to know that this has been the invariable rule in Ontario and Quebec ever since the organization in 1868, and has never been departed from.—ED.]

Dr. Essig stood up bravely for the work of the colleges, and showed that in spite of many difficulties, their faculties, through the National Board of Dental Examiners, and the National Board of Dental Faculties, had lengthened the terms and generally raised the standard of teaching. He deprecated any effort to antagonize the schools and teachers: favored the extension of the time to five years—but "how many students do you think we would have?" "The commercial side of the question could not be ignored."

Dr. Essig doubted if "any subject in the curriculum can be presented to dental students in a more practical way by well-posted and well-educated dentists than by a medical practitioner. There

is a very attractive sentiment embodied in the idea of having the entire faculty of a dental school composed of dentists; but take chemistry, anatomy and physiology—can these positions be filled with dentists? No. How many of your dental examiners are really competent to examine in these branches. A man cannot take up the study of chemistry successfully in a year, and the same is true of anatomy. He cannot learn anatomy from books; he cannot take Gray and read it over at sight, and make himself proficient in that branch. You must study anatomy from the cadaver and that takes a long time. One of the leading professors in the chair of anatomy in a dental college, has stated that after he graduated in dentistry he spent seven years in the study of anatomy."

For the Teeth—Some Excellent Rules to Follow in the Care of Them.

One of the most skilful dentists in New York gives these rules for the care of the teeth: Use a soft brush and water the temperature of the mouth. Brush the teeth up and down in the morning, before going to bed, and after eating, whether it is three or six times a day. Use a good tooth powder twice a week, not oftener, except in case of sickness, when the acids from a disordered stomach are apt to have an unwholesome effect upon the dentine. Avoid all tooth pastes and dentifrices that foam in the mouth; the lather is a sure sign of soap, and soap injures the gums, without in any way cleansing the teeth. The very best powder is of precipitated chalk; it is absolutely harmless, and will clean the enamel without affecting the gums. Orris root or a little wintergreen added gives a pleasant flavor, but in no way improves the chalk. At least a quart of tepid water should be used in rinsing the mouth. A teaspoonful of Listerine in half a glass of water used as a wash and gargle after meals is excellent; it is good for sore or loose gums; it sweetens the mouth, and is a valuable antiseptic, destroying promptly all odors emanating from diseased gums and teeth. Coarse, hard brushes and soapy dentifrices cause the gums to recede, leaving the dentine exposed. Use a quill pick if necessary after eating, but a piece of waxed floss is better. These rules are worth heeding.

Correspondence.

Friendly Criticism.

To the Editor of the DOMINION DENTAL JOURNAL:

SIR,—I believe much of the reading matter, especially the papers, of our dental journals would be made more interesting and profitable if they were criticized by the readers of the journals.

An essay read before a society often does more good by the discussion it evokes than by the information it may contain.

Many are deterred from writing for their professional journals because they feel that they have nothing new to offer ; while if they would write what they do know, and their papers were criticized in a friendly way, by readers of the journal, the essayist would often profit by it.

These criticisms should not refer to the literary get-up of the papers, for many of us know more than we can properly express.

I have often gained many practical ideas from reading the details of some very commonplace operation. On the other hand, I have often noticed where many of the details of operation described, could be very much simplified.

It would be in such cases where much benefit could be afforded by drawing attention to the paper, and describing the simpler methods.

Kingston, Ont.

R. E. SPARKS.

Fees.

To the Editor of the DOMINION DENTAL JOURNAL :

SIR,—When we were first organized in Ontario we had an Association Fee Bill, if I mistake not. We have still at any rate a pretty-well-understood agreement, which I need not refer to in detail, and when we find a dentist making an upper set on vulcanite for \$10 beside men who demand \$20 or \$25, we have to conclude that one of them is a fool or a rascal. The question which one, and which horn of the dilemma will we place him on, is generally solved by personal knowledge. Last week I had a gentleman from Montreal who came to have me insert a filling put in a week ago, which he brought me in a pill-box. It was a dirty, cheap amalgam. When he asked the dentist his fee, the operator replied, "Are you related to —," mentioning the name of one of the millionaires of Montreal. "Yes, I'm his son, my own dentist is out of town." "Oh! well, I'll only charge you \$5." I understand the regular fee for amalgam in Montreal is \$2, and many insert it for \$1. Evidently that dentist was both a fool and a rascal.

Now, is it contrary to ethics to have a provincial fee bill, and to fine men who sign it, and who are convicted of breaking it? A dentist in my own town freely tells his patients, "Oh! I'm not dependent upon my practice, and therefore I can afford to work cheaply." And yet he has'nt a cent on earth except what he makes in his practice.

Yours,

HURON.

[One of the convictions which maturity has brought to us, is the folly of a fee bill. It was never ethical. Moreover, it is never

possible. You can combine to sell coals, butter and cheese, but a professional combine to regulate fees would never work until all men were not only equal but honest. The result of attempting anything of the kind would end like the experiment of Charles XII. who after trying in vain to make twelve watches run together, came to the conclusion that it was as great folly attempting to make everybody think alike on matters of religion.—ED. D.D.J.]

The "Dominion Dental Journal."

To the Editor of the DOMINION DENTAL JOURNAL :

DEAR "JOURNAL,"—You have made your New Year call in the shape of a January number of '94. We always appreciate your visits. You used to come but once a quarter: then your visits became as frequent as six times a year, while now you call upon us every month.

You are growing nicely for your age. You are not yet as corpulent as some of your cousins who come to see us. No doubt you would grow faster if those you call upon would give you more five-o'clock teas—something to fill you up.

However, what you do get is wholesome, independent fodder.

I hope you will grow so big you'll bust your "galluses." By the way, your call reminds me that I must send a New Year card, in the shape of a one dollar bill, to your Pa, to help clothe you and pay your travelling expenses, for another year.

Good bye, come again.

Yours truly,

APPRECIATION.

Reviews.

Dental Metallurgy. A Manual for the use of Dental Students. By CHAS. J. ESSIG, M.D., D.D.S., Professor of Mechanical Dentistry and Metallurgy in Dental Department of University of Pennsylvania. 3rd edition, revised. Philadelphia: S. S. White Dental Manufacturing Co., 1893. Pp. 283.

This is one of the valuable little works which has no rival in dental literature. It needs none; because Dr. Essig has the rare art of condensing a quart of wine into a pint bottle, or, in other words, of putting necessary knowledge into convenient space. It embodies the recent improvements in the production of amalgam, aluminum, iron and steel, and follows the system of spelling and pronunciation of chemical terms as recommended by the chemical section of

the American Association for the Advancement of Science. It is sufficiently illustrated for all practical purposes. The chapter on amalgam is very complete, including a table of the composition of some of the well-known dental alloys. Every student and practitioner will be better off in every sense after they have bought and read this work. Any of our Canadian depots can supply it to order.

Editorial.

The Title of "Doctor."

We have always been averse to the use of this title by dentists who do not possess a medical degree. When we were first organized in Ontario and Quebec, a few practitioners wanted the promoters to ask the Local Legislatures for the title of "Doctor" instead of "Licentiate," but it was so strenuously opposed by the good sense of the very large majority that it was destroyed at conception. In Canada we cannot be accused of hungering after the title as a purely dental degree, in spite of the fact that patients persist in dubbing every dentist a doctor, and that a good many dentists, who have no right to it, allow it to be assumed that they have. In conventions and conversations we carelessly address each other in the same way: while nothing is more common in the colleges over the border—and nothing rarer here—than to find the students using it even to the freshmen, if not to the janitor. When it was first established by the Baltimore College of Dental Surgery there were objections made to its separation from medicine, and in 1851, Dr. E. B. Gardette, proposed the abolition of dental colleges, and substituting for them lectureships in dentistry in each of the medical schools. The fact that a large proportion of the dentists, fifty or sixty years ago, were mechanics and tradesmen who had picked up ideas and entered practice without any preliminary or regular dental training, no doubt prejudiced many respectable men from the advocacy of the title.

At the annual meeting, a few years ago, of the Irish Branch of the British Dental Association, Dr. R. Theodore Stack, himself a D.M.D. of Harvard, and an M.D. of Dublin, condemned the use of the title "doctor" or "surgeon" by dentists, and proposed that the title "dentist" be prefixed to one's name, as the title "surgeon" in England. We should then speak of one another, and be addressed by our patients as "Dentist Jones," for instance. It is a title that does not run glibly off the tongue: but as a destined professional title it would be as becoming after awhile as to say "Lawyer Brown," or "Judge Robinson." We cannot imagine any better substitute than Dr. Stack's suggestion:

In making dentistry a distinct profession, Dr. Chapin Harris and his contemporaries were wise in their generation. It was never intended to make a perfectly definite distinction between the primary studies of anatomy, physiology and chemistry, but the average dental student got a mere sessional smattering of these three branches until the National Association of Dental Faculties increased the period of study to three years. Many who fully appreciate the pioneer work of the early men of Baltimore, are yet free to believe, that dentistry would have attained quite as notable progress, without infringing upon a title which at the time was recognized as the exclusive possession of the profession of the physician. How much better, it seems to us, it would have been to adopt some such title as "Master of Dental Surgery," or as in Britain and Canada, "Licentiate of Dental Surgery," and to have left the degree of "Doctor" undisturbed, as a higher title to which students might aspire.

Imagine the oculists and aurists separating themselves from general medical studies, cutting off from their curriculum all that does not pertain specially to the eye and the ear, and claiming that in such a departure the diseases of these two organs would have more thorough study. It would be simply absurd. When the degree of doctor was created in dentistry, our profession was largely mechanical. There were a few men who contended for its constant affiliation with general medicine, but dental pathology and therapeutics were vaguely understood. There was at the time no reason, why the dentist could enter a claim to share in this title on the basis of the slim education which the dental colleges then gave. Certainly we have made great strides. So have medicine and surgery. Yet we can no more pretend to-day than fifty years ago, that we have an equal claim with the original possessors of the degree of doctor to use that title. The fact that there are doctors of philosophy, of science, and of divinity, is no argument, because neither of these encroach upon any branch of the healing art, and it can never be imagined that they assume to possess the doctorate in medicine. No fair argument can be advanced why the dentist educated exclusively along the lines of dental teaching, even in the best of our colleges, should claim a right to use on equal terms, a title which is widely recognized as involving a medical and surgical education of the most comprehensive character.

Anyone familiar with the course demanded of the surgeon in Britain will not question its thoroughness, yet the British surgeon is a plain "Mr." The course of dental studies in Britain to obtain the right to practise is more comprehensive than that required by the National Association of Dental Faculties, yet the British dentist is a plain "Mr." In Canada, after a course of three and a half or four years of twelve months each year, the Board of Examiners

have granted the title of "Licentiate" only, and that of "Doctor" emanates only from the University of Toronto. The Legislature of Quebec, only last month, refused the Dental College of the Province of Quebec the right to grant the doctorate in dentistry as an independent college—ignorant of the fact that so many independent colleges in the United States grant it irrespective of universities.

The effort to obtain this privilege was simply to harmonize the requirements of the Quebec school with those of the colleges under the N.A.D.F., which the school in Quebec desired to join. The fact that the D.D.S. was necessary to the College under existing circumstances, does not affect the general principle we are representing in these remarks.

Let us glance at the past history of most of the colleges which have given the D.D.S., and by way of parenthesis, we hope our criticism will not be construed as applicable to the schools since the organization of the N.A.D.F. We can name men by the score who, without any preliminary examination, without even a knowledge of the language in which the lectures were delivered, without any previous practice, and some with less than twelve months' studentship, obtained the degree in one session under six months, in colleges that to-day would not grant it under three years. What value can be attached to such a title so cheaply obtained? It seems to us that the National Association of Dental Faculties would be glad to rid itself of the title, and inaugurate a new one, free at the outset from any suspicion or reproach. It is true that the degree is, as a rule, worthily won to-day. It is equally true that it was unworthily granted for nearly thirty years, and that even when the most deserving men received it after one session, it could not honor them half as much as they honored it by accepting it.

If the N.A.D.F. would empower the colleges to grant another title under the regime of the three years' requirement, with a higher standard of matriculation and recognize it as a superior degree, students would aspire to obtain it, and we in Canada would follow suit. It is rather hard upon Canadian students who, after passing a classical and mathematical preliminary almost equal to the requirements for B.A., and studying for three and a half or four years, find themselves occupying an inferior rank beside scores of doctors of dental surgery who received their parchments after one session of six months. The law of necessity seems to compel the perpetuation of the doctorate in our profession, unless the N.A.D.F. should take the bull by the horns, and not only recognize another title as constituting a legal right to practise, but as one superior to that so long in use. The title originated in the United States, and it is the prerogative of the N.A.D.F. to continue or to supersede it. The latter would best meet our convictions.

Our Manufacturers.

It seems to be an instinct of humanity to disparage if not to denounce manufacturers. It does not matter whether they are cotton kings, sugar kings or tooth kings, we who are consumers are apt sometimes to believe that they get far too big a bite of the bun. There are two sides to this question, but we only fully know our own. We observe that there have been several millionaires made out of dental manufacturers; and it would need a dozen of the most successful dentists at least to make one millionaire. We must remember, however, that every man has his choice, and if he can get the capital and chooses to run the risk, he can become a manufacturer in a month. We may believe, perhaps, that we pay too high for many of our goods, and it is perfectly natural in this age of depreciation and bad pay, that professional men who, perhaps, suffer more than merchants, and who cannot, or do not, attempt to compromise their obligations, should have consideration shown them, and, that when the cost of platina goes down, the cost of teeth should go down, too; just as the manufacturer expects when flour goes down that his baker will lower the price of bread. The production of quite a number of the necessities of dental practice does not cost as much to-day as ten years ago; but the selling price has either been increased or remains the same. If we are wrong in this opinion, we are open to correction.

Now, there are many suggestions practising dentists could, if they would, make to manufacturers, which the latter would be glad to receive. We imagine that a number of articles we daily use were not constructed by men in actual practice. Just to name a few: The joints of all forceps made on this continent have sharp edges, and open and close in one of the most ingenious ways to wound the mouth. The joints of the forceps made in England cannot possibly wound the lips. Dental engines and office lathes are made so that if you turn them the wrong way, a screw comes out, and the whole thing is reduced to chaos. We have a new office-lathe, the pedal of which depends for security upon a small pin of steel, and when the pedal slips out of the pin, which it is perpetually doing, the pedal wobbles and the assistant swears. It is a good thing for that pin that blasphemy has no effect upon it. The head-rests—but now we despair. We have waited twenty years for a sensible head-rest, without all the nonsense which provokes patient and operator to distraction, and it is not yet discovered.

Would it not be a good plan, and one by which our manufacturers might profit, for each of the various societies to appoint a committee to report once a year on "suggested improvements?" It is not all the fault of the manufacturers that we have not everything just as we would like it; but committees such as this would

not only help the manufacturers, but they would help ourselves, and very soon, perhaps, the former might find that they had received so much material benefit from the scheme that they could afford to bring about the millennium of supplying us with all we want, just as we want it, and at such low prices that some of the next generation of dentists may also get a chance to become millionaires. What a curiosity a man would be who, by entire devotion to dentistry, had become a millionaire?

Official Zeal and Official Reward.

In every profession a spirit of antagonism against the responsible officers of the representative societies is frequently developed. Quacks and impostors regard these officials as their natural-born enemies. Cranks would assassinate them if it was no more illegal than a breach of the dental law. And a great many others who do not know the vexations with which they have to contend, regard them with distrust.

And yet, what does the zeal of the comparatively few in our ranks mean, who are working on Boards in societies, colleges and journals? Does it mean that individual effort is nothing better than individual selfishness? Or is it true that the workers are actuated by an honest desire to improve the professional and moral tone of dentistry as a whole? One thing is true, as surely as a man takes a leading part in education, and shows open hostility to quackery and ignorance, he becomes a target for the mischief-maker. And not only for the mischief of the ignorant from pure "cussedness," but that of the most malevolent of all mischief-makers—the deep, sly, silent enemy, to whom a confrere's success is a personal insult, and who

"Damn with faint praise, assert with civil leer,
And without sneering, teach the rest to sneer;
Willing to wound, and yet afraid to strike,
Just hint a fault, and hesitate dislike."

Imagine the shame we would feel as Canadians if our progress in dentistry was not proportionate with that of our neighbors. We believe we have proportionately about the same number of men who help and men who hinder. And if some men in both countries had their way, every dentist would be a hermit in his own office, and label his secrets "poison." Somebody must take the lead in associative work, but after all "the post of honor is the private station," and the men who are zealous in the ranks are the men, all things being equal, who merit promotion. It may not be possible always to agree with the actions of the officials. It ought to be possible to believe that their intentions are honest.

It seems a fatality of prominence in any good work to be exposed to a fire of criticism and suspicion. When a man gets his fingers into the public purse; when he dabbles as a boodler in such dirty business as the politics of Quebec, he can afford to stand abuse. But there is no boodle in the responsibilities of any dental office. When men are zealous in the educational and legislative work of dentistry, it is fair to believe that they are animated by an honest desire to serve the best interests of the profession, just as surely as when men are zealous in the effort to sneak into the profession through special legislative enactment, that they are moved by a spirit of selfishness and a consciousness of their personal ignorance. Busy and honest men have no time to intrigue. Dishonest men have nothing better to do, for all their hope hangs upon the success of their lying. It is a suggestive reflection which ought to be taken to heart by all respectable dentists, that the zeal of one mendacious quack will frequently outweigh and defeat that of a body of honest officials. When the quacks and impostors of dentistry combine for mischief, it is time for all honest practitioners to combine for self-defence.

Dentists in Politics.

Dr. Ed. Casgrain, of Quebec, suggested the idea that we, as dentists, would never get our rights, or be able to obtain proper legislation to protect the public from empiricism, until we brought our profession as a body into politics. In Quebec, for nearly twenty-five years, we have had proficient experience in this line; but in such isolated and inconsequential detachments, that nobody in the Legislature seemed to be able to afford the time to study what we were driving at, and unless some of our officials almost made their beds in the lobbies, it was impossible to watch the tricks and intrigues of the obstructionist. The only dentist in Parliament is Dr. Ahrens, member for North Perth, Ont. If we had even one in Quebec, we should not be harassed the way we are with tricksters making false representations, and obtaining special privileges denied to men who are willing to enter dentistry by the front door, instead of sneaking in through a hole in the fence. We do not suppose that our brethren in the sister provinces feel the need as we feel it in Quebec. Some day we will give the history of our efforts. In the meantime let us look out for a candidate in our ranks, familiar with both languages, who can afford to devote the time. If we can get him elected for a constituency as an independent candidate, he would serve his constituents as well and us better than if elected on purely party lines. We do not want any of your boodling Mercierites. The Province had one experience of that iniquitous gang. It will be enough for all time to come.

Reciprocity between the Provinces.

Dr. Woodbury, of Halifax, echoes a sentiment at which this journal has frequently hinted. In the suggestion made editorially in the first number of our first volume for the organization of a Dominion Dental Society, it was mentioned that one of the objects would be "to discuss our provincial positions and endeavor to harmonize them," and we are very glad that the first substantial movement has been made down by the sea, and it seems to us that in no way can the object in view be so thoroughly discussed as in a Dominion Dental Society meeting in Toronto, for instance, represented for organization purposes by any number of delegates sent by each province. The proposition could be referred back to the Provincial Associations, and in course of time something practicable could be accomplished. One of the chief difficulties is the great stretch of territory between the Atlantic and the Pacific. Why should not the Maritime Provinces, first of all, complete some unity of legislation on the subject among themselves? The North-Western Province could do the same. It would make it easier of accomplishment subsequently in Ontario and Quebec.

A Pathetic Appeal.

If love or money will induce anyone to send us the following missing numbers of exchanges, we will also acknowledge them in the JOURNAL. Now that the weather is cool, our readers might poke in their garrets for odd numbers, which may be no use to them, but which will enable us to complete the largest dental library in Canada.

American Journal of Dental Science. Vol. 7, No. 5 ; Vol. 8, Nos. 1, 4, 7, 9.

Johnston's Dental Miscellany. Vol. 1, No. 7 ; Vol. 2, October, November ; Vol. 5, May, July ; Vol. 8, May, June, July, August.

The Independent Practitioner. Vol. 1, Nos. 4, 11 ; Vol. 2, Nos. 2, 3, 4, 5, 6 ; Vol. 3, Nos. 1, 2, 3, 4, 5, 6, 8, 9, 11, 12.

Southern Dental Journal. Vol. 4, Nos. 4, 12 ; Vol. 8, Nos. 4, 5, 6, 7, 8, 9, 10, 11, 12 ; Vol. 9, Nos. 1, 2, 10, 12.

Ohio Journal of Dental Science. Vol. 1, Nos. 6, 7, 8, 9, 10, 11, 12 ; Vol. 4, 1, 2, 3, 5, 6, 7, 8, 9, 10, 11, 12.

New England Dental Journal. Vol. 3, No. 11.

We need others by and by. We have a large lot of duplicates which we will exchange.

Annotations.

HENDERSON—THOMAS.—At the manse, 612 Erie St., Port Huron, Mich., on December 12, by the Rev. T. A. Scott, pastor First Presbyterian Church, G. H. Henderson, L.D.S., Elora, to Lucy, youngest daughter of Rees Thomas, Esq., of Thedford, Ont.

ONE of the best measures of the progress of man is the degree of his ability to stand alone, in thought and action, undisturbed, though he may often profit by the adverse opinions and judgments of others. "When the people are a herd they are easily swayed and ruled by one man; when they are individualized, the dominion of one is not possible." Let us hold, then, and teach that better than great riches and possessions is a brave heart, an enlightened and well-balanced mind, an appreciative, hopeful and helpful soul. Let our labors be a sort of religion, urging us to elevation, seriousness, and chastity of thought and actions.

To quote from Charles Kingsley: "Men can be as original now as ever, if they had but the courage, even the insight. Heroic souls in old times had no more opportunities than we have; but they used them. There were daring deeds to be done then; are there none now? Sacrifices to be made; are there none now? Wrongs to be redressed; are there none now?"—*International Dental Journal*.

Dr. F. T. Paul recently presented a case before the Pathological Society of London, Eng., in which the patient, a boy aged 5, was born with an irregular patch of skin on the left cheek, near the nose and beneath the inner corner of the eye. Five months before passing under observation, a tooth came to project from the spot; this was a left upper lateral incisor, and projected from a little red, gum-like tissue; beneath the tooth was a second, smaller, corresponding with that of the permanent teeth. Neither of the teeth was connected with the superior maxilla. The proper dental arch was well formed, and all the normal teeth were represented in it.

[Several years ago the late Dr. R. P. Howard, of Montreal, asked us to see a similar case. The tooth was a superior supernumerary bicuspid, not fully developed at the apex; projected below the orbit on the right side, and had no connection with the jaw. The patient felt a hard growth developing for nearly a year. It would have been interesting to examine the histological and microscopical characteristics of such a tooth—containing dermoid from the face—but the patient would not allow it to be touched, and some time afterwards was drowned at sea.—ED. D. D. J.]