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THE
CANADA JOURNAL
OF
DENTAL SCIENCE.

Vol. II.]

MAY, 1870.

[No. 10.

ORIGINAL COMMUNICATIONS.

EDITORIAL NOTES ON PRACTICAL SUBJECTS.

SEPARATING TEETH PREPARATORY TO FILLING.

BY C. S. CHITTENDEN.

As it is admitted, on all hands, that it is necessary to have room enough to work in before we attempt to fill proximate cavities, the thing to be considered is, what is the best method of obtaining this room, or rather in what manner can the teeth best be separated.

Many substances have been employed for this purpose, from time to time. Twenty years ago wooden wedges were used almost exclusively, but as they were not easily retained in position they were abandoned, to be succeeded by bits of India rubber. These, by being stretched out till they formed only small threads, could be passed between the teeth, and by contracting would force the teeth apart. But as the rubber "didn't know enough to stop contracting when it had separated the teeth sufficiently," it gradually went out of use, to be superseded by other substances. Latterly, what is called "forcible separation" seems to be taking the place of all other methods. The teeth are forced apart by driving a wedge, made of some firm, solid wood, between them, as near the cutting surfaces as it can be done, and then driving another wedge at the necks of the teeth. The former produces the separation, and the latter retains it after the first has been withdrawn. By this process the operator is enabled to fill at once; but, after having tried it on a large number of patients, I have found the pain so intense, that I have abandoned

it except in cases where it is absolutely necessary that the filling should be done at the time.

I have for some months past used cotton almost entirely for this purpose, commencing with a small pledget which I allow to remain for a day or two, when I put in a larger one dipped in sandarach. By this means I can spread the teeth as far apart as I wish, with very little pain. A tiny pledget between the teeth gives but little more uneasiness than the particles of food which often remain after eating, but it acts most powerfully, and will start apart the most firmly fixed teeth, and do it so gently that the patient is hardly aware they are being moved at all.

NECROSIS OF A PART OF THE SUPERIOR MAXILLARY BONE.

BY CHAS. P. LENNOX, L.D.S.,

A little girl eight years of age was brought to my office, about the 15th of November last, for the purpose of having an ulcerated tooth extracted. Upon examination I found the second superior molar of first dentition on the right side carious, and extracted it without making further investigation. A week passed, and the patient again called to have the first permanent molar extracted, it being loose and ulcerated. I found the crown healthy, but the tooth much diseased at the roots, and pus being discharged from the gum. Being busy at the time, I extracted the tooth with the intention of making an examination at some future time. I found upon examination of the tooth, what I supposed to be a genuine case of spina ventosa, and sent it to Mr. Callender as a contribution to the museum.

Having called upon the patient, I made an examination of the part, which I found to be in an advanced stage of necrosis. I operated immediately, removing all the sequestra I could find, bringing away the germ of the second permanent molar, the floor of the antrum of Highmore, and the alveolar process from the tubercle to the region of the second bicuspid. At a subsequent operation, I removed a large sequestrum, bringing away the germ of the second bicuspid, and a part of the outer wall of the antrum; leaving bare the root of first bicuspid to its apex, which had erupted prior to the commencement of the disease, which I feared would ultimately come away, it being very loose. I could now freely pass an instrument to the floor of the orbit through the opening made in the mouth.

I questioned the father at the time of the first operation, but could not determine the cause. At the time of the second operation, I had an opportunity of seeing the mother of the patient, and having suspected disease of the antrum, questioned her in that particular; when I ascertained that for four months she had been suffering from diseased antrum, originating from a cold. The natural opening of the cavity being closed, engorgement ensued, distending the walls, forcing its way through the floor of the orbit, and was lanced at the edge of the orbital cavity. A physician was consulted several times during the process of the disease, and finally put his lancet into the tumor with no further treatment. The wound made by the lancet was healed when I saw her, and the natural opening of the antrum restored; but the inflammation of the lining membrane, consequent upon the long continuation of the disease, was productive of the necrosis of the bone.

My treatment of the case was as follows. The patient was a very healthy child, free from any scrofulous taint, but very weak from the long continuation of the disease. Having removed the necrosed bone, I injected a solution of nitrate of silver first; ordered

Tinc. Mur. Iron, dr. 1½
Sulp. Quinine, gr. 16,
Water, oz. 4,

to be taken in teaspoonful doses three times a day, and daily injections of solutions of myrrh, tinc. of iodine, and occasionally a drop of carbolic acid. I ordered a nutritious diet, and I now have the pleasure of seeing the patient well, with no defect save the loss of the second bicuspid, first and second molars, and a small opening to the antrum which I think will eventually close.

PRESERVATION AND FILLING OF TEETH.

W. R. PATTON, D.D.S., QUEBEC.

Read before the Quebec Dental Society.

MR. PRESIDENT AND GENTLEMEN :

The honor you have conferred on me as an essayist of this meeting, I can assure you is somewhat gratifying, and therefore the few remarks I have to make on the "Preservation and Filling of Teeth" will, I hope, meet with your approval; the only apology in connection therewith being that, not having the advantages of an unlimit-

ed experience, like some of my respected confreres of the Society, they will kindly excuse any plagiarism or defects of style in the following :

As the preservation of the teeth depend on the manner of their *personal* treatment by the patient, and their treatment pathologically by the dentist, I will first allude to decay and causes of decay, and conclude by stating the means resorted to for the eradication of disease, under the heads of cleanliness, and filling of teeth.

Caries or decay of the teeth in every instance commences externally, and remedies externally applied will ever arrest and prevent it ; and though disease originates in this manner, it does not attack the entire surface of a tooth, but merely *certain* points common to the same class of teeth in all mankind, where from some peculiarity, accidental or of shape, morbid action necessarily commences. So do we frequently find decay attacking the teeth in *pairs*, on account of shape and the circumstances in which they are placed at every stage of their existence being similar ; what I mean by pairs are the organs corresponding to each other on either side of the arch, at the same time I may properly say that they decay in *double pairs*, the same rule being applicable to the corresponding teeth of the lower jaw.

The saliva in its purity is incapable of injuring the substance of teeth, especially the enamel, and thus we inevitably find the most prominent portions of an organ the most perfect ; even the dentine when left unprotected, by filing, having the enamel broken off or worn down by mastication, if in a situation where it can be kept cleansed, resists decomposition for years, though very much less calculated to do so than enamel. From this we must conclude that the saliva, in itself harmless, when in combination with substances introduced into the mouth, different kinds of food, etc., and allowed to rest there, becomes stagnant ; its properties change, and by a chemical agency on the relics of food lodged on, in or between the teeth, a deleterious change takes place, resulting in the formation of an active acid, which by reiterated contact with the organs, exerts a pernicious influence, attacking and destroying the tooth structure. Therefore the advantages of cleanliness, which in connection with the mouth means literally the free use of tooth-brush and water, for we can easily understand how by their aid the alimentary particles so snugly hid away in the indentations and crevices of the teeth after meals, can be thoroughly washed out of their otherwise strong and evil positions. This is the personal treatment I have alluded to, and

which should be the more particularly attended to, as decay, in many instances, originates *notwithstanding* the utmost attention to cleanliness; this can be easily accounted for from the shape of teeth, their pressure laterally against one another, and irregularity, which I regard as primary causes of decay.

Though the use of the brush will ever protract incipient decay, I am of opinion that once the enamel is decomposed and the dentine reached, no amount of cleanliness will arrest it until the patient comes under the hands of the dental surgeon; for though the dentine be affected through the *minutest* cavity in the enamel, the resistance of the latter being greater than the former, the decay of dentine spreads laterally beneath the shell of enamel, and none of the ordinary means resorted to for cleanliness can stay its progress; the saliva ever finding the entrance no matter how minute, and acting in a similar manner in connection with the disorganized dentine as it did with the alimentary deposits, the substance of the tooth becoming a devourer in its turn of its more healthy remains. Arrived at this stage the time required for the total destruction of a tooth depends on its constitutional character, for some teeth will decay as much in a month as others during a year.

At this point in the decay of teeth, when ordinary means have failed, the unfailing pathological means of treatment, the specialty of the dental surgeon is or at least should be resorted to. As with scaler he removes all salivary deposits, and by aid of excavating hatchets and hoes, he, like a careful husbandman who lops off the decaying branches of his valuable trees, covering the wound made by the knife with some substance to exclude air and moisture; so he cuts from every organ the decay attacking it, replacing by some dental material (of which I shall speak further on) which shall effectually exclude air and moisture from the healthy remains, and moreover resist the effects of the corroding acids. That this manner of treatment is an efficient means of prevention we have ample proof, for teeth that have been filled in this way are known to last in their imperfect state for years, while others more perfect, but left to their fate had long before been reduced to corroding fang merely.

I have stated that shape, lateral pressure, and irregularity of teeth were primary causes of decay, and will proceed to give reasons for such a conclusion. Bicuspids and molars are the teeth most affected from this cause. Incisors commence to ossify from one point, bicuspids from two, and molars from four, the latter presenting much the

appearance of several incisors tied in a bunch. As the process comes to a finale, various grooves, fissures, and indentations result from the union of the points of ossification, severally named crown fissures transverse and lateral, and fissures lingual and buccal; these being more or less deep in accordance with the peculiar shape of teeth. And here we might notice a fact that has been observed, viz.:—that a molar whose cusps centre towards each other, have, as a rule, the fangs widely diverging, rendering extraction difficult; but when the cusps diverge the fangs are correspondingly close, thereby tending to render the operation of much more facility. To return; incipient decay makes its appearance by gradually darkening specks, and wherever these symptoms are perceived, you will inevitably find that it has chosen, or rather fallen on one of the natural fissures or indentations in the surface of the teeth caused by their shape, as the starting point for its ravages. This decay is very deceitful, especially when situated in crown fissures of molars; the patient being generally ignorant of the ruin taking place, until suddenly made aware of it by the enamel giving way from loss of foundation. The incisors sometimes decay from this cause, but 'tis very seldom, and when so, the lingual surfaces are found to be the point of weakness, the enamel forming there a deep corrugated pit well adapted for the retention of corroding substances; but, as a general rule, it may be considered that the grinding surfaces of molars and bicuspid are the unfortunate victims of this cause of decay, and those of the maxillary upper much more subject than the teeth of the lower. Observe the teeth attentively for a moment, and what is stated cannot but be remarked; for wherever there is a natural hollow in the organs, there will be a dark line pointing out, as it were providentially, the defect leading to decay which should be remedied. It is also worthy of remark, that persons whose teeth from natural shape are not liable to decay, have the grinding surfaces more even and unbroken, thereby being less capable of retaining moisture, etc., although the process of original construction can be distinctly traced in every instance. However it is gratifying to know that this species of decay is the most easily noticed, and the skillful dentist perceiving at a glance the affected portion at its earliest stages, and remedying it immediately; the subsequent pathology being *great cleanliness and periodical inspections*.

That teeth decay from "lateral pressure" is evident to every careful observer, for we know, undeniably, that teeth in close contact decay

sooner than those between which there is space, and it would be difficult to instance a case of "proximal decay" where the teeth do not press severely one against the other. Teeth have sometimes from the size of the maxillary an insufficiency of space, the lateral pressure is consequently increased and becomes injurious, serving to crack the flinty enamel by diminishing the supply of nutritive material to that portion of the tooth, but principally by forming a space or nook for the irremediable lodgement of impurities, as in the case of indentations in the molars, as formerly alluded to. That we can deduce this conclusion, may be proved by the fact that, *crowded teeth* will decay in spite, as it were, of every means of cleanliness, and also that in cases where they are so much crowded as to have some of their members pushed out of the arch, presenting the appearance of supernumerary teeth, these outcasts are very seldom found decayed. All the teeth are liable to decay from this cause, though not in the same degree; the molars and bicuspid being victims as much to this cause as to that of shape, for being of a square compact build, they cannot slip to one side or the other, as in the case of the incisors, whose alveolar processes are more yielding, the latter thus escaping to a great extent from the too affectionate contact of their neighbours. This decay is found very frequently in the incisors of the superior maxillary, forming a cavity well known among the profession as the proximal (or near to), and wherever a cavity of this kind is discovered in an organ, the one in contact will indubitably be found suffering from the same cause. It makes its appearance in the form of a darkening speck at the point where two teeth are in close contact, hence an idea that the decay of one affects the other. This may literally be true, but I am of the opinion that the two organs being situated under similar circumstances are affected at one and the same time, and in the same manner; the speck gradually enlarges, the enamel decomposes from the effect of the impure matter constantly lodged there, and the dentine once reached, if not arrested by dental means, the organ soon disappears by the undermining process, generally preserving its outward appearance to near the last, when by coming in contact with food of a hard nature it, to use a once popular phrase, "can't stand the pressure," and therefore gives way. Nothing can be more deceitful than this species of decay, even more so than that of shape. I have often passed over teeth on an examination, which on closer inspection have turned out to be the most decayed in the arch, and I have no doubt 'tis from this species

resulted the exploded idea of "internal decay." It may be here remarked that decay from lateral pressure is frequently caused by mismanagement, and this observation can be more particularly applied to that class of society for whom too much rather than too little has been attempted by the dental surgeon. As irregularities of the teeth lead to this decay, they in turn being caused by the too premature extraction of the temporary organs of childhood, and are consequently more met with in high life than in low. It is equally common to strong teeth and to weak, to those of persons who enjoy the best of health and those who do not, and if they were capable of being kept *perfectly* clean, I have no doubt but disease would be imperceptible from this cause; fortunately it can be remedied as formerly stated, if brought into our hands when necessity or rather prudence compels the sufferer to apply to our ranks for relief. Decay from irregularity of the teeth can be accounted for from the same causes as heretofore alluded to in lateral pressure, the teeth from want of space being pushed into abnormal positions tending to form the works of destruction already pointed out. I find from the length of this article, I will be obliged to curtail as much as possible the remarks to be made on cleanliness and filling; but before coming to this part of my subject, I would state that the shedding or temporary teeth decay from the causes stated as much if not more than even the permanent, as less care is devoted to the organs in childhood than in adult life.

The great preventive means of decay is *cleanliness* on the part of the patient, who should make use of some powder in common with the brush which should be resorted to after every meal. Many persons use the brush vigorously but fruitlessly, and it will generally be found in such cases that it is merely passed round the arch across the teeth, consequently the fibres are thus pressed down against the organs, passing over the exact spots most needed to be cleansed, whereas if an up and down movement was brought into action the fibres would necessarily pass *between* the teeth, clearing out everything foreign that may have settled there. Again, the large majority of persons labor under the idea that it is merely to the anterior surfaces of the teeth it should be applied; and they therefore devote much time to the fore part of the mouth, leaving the interior and rear portions to look after themselves, and be satisfied in lieu with the motions of the tongue. As a result of this very unreasonable treatment, the most useful organs of mastication are sacrificed. The brush should be used thoroughly, be manipulated in all directions,

inside and outside, back and front, laterally and in every way in which it is capable of being handled, so that every tooth be brushed, and thereby derive benefit from the use. Tooth-picks have often been abused unjustly; in my opinion they should ever be made use of, always choosing for such an object an article of a soft nature, such as the German wooden tooth-pick, or the quill; for the purpose the latter cannot be surpassed, as it is softened by the fluids of the mouth and can be inserted in every crevice without detriment, pain, or injury to the organ or the surrounding tissue. Floss-silk should also be resorted to as a means of cleanliness, for it can be readily passed anywhere between the teeth where the brush or tooth-pick would fail, and so dislodge everything injurious. These observations may seem unimportant, notwithstanding their simplicity they should be attended to and given as advice in office practice, for it is remarkable what ignorance prevails even among the higher classes in connection with this subject. Should the above simple hygiene be daily put into general practice, I have no doubt but it would effectually arrest to a great extent the dental decay which leads to so much deformity and suffering.

PROCEEDINGS OF SOCIETIES.

QUEBEC DENTAL SOCIETY.

A regular meeting of the above Society was held at Dr. Bernard's office, on the 2nd of May.

Present—Messrs. Bernard, Venner, Valois, Leblanc, Mathieu, Poutier, Patton, Young, Bazin, Trestler, Sen., Trestler, Jr., Baldwin, and McKee.

Dr. Bernard in the chair.

The name of the Society was changed from "Dental Association of the Province of Quebec," to "Quebec Dental Society."

An essay on the "Preservation and Filling of Teeth," was read by Dr. W. R. Patton, of Quebec, and a vote of thanks tendered to him. An interesting discussion followed.

After the meeting the members adjourned to an entertainment at the "Carleton Rooms," provided by the Montrealers, as a slight welcome to the confreres from Quebec, &c. Mr. A. Ogilvie, M.P.P., Alex. M. Stevenson Esq., and Mr. A. Booker were present by invitation—Mr. Cartier being unable to attend.

QUEBEC DENTAL BOARD OF EXAMINERS.

BY W. GEO. BEERS, SECRETARY.

Montreal, Monday, May 2nd, 1870.

The regular meeting of the above corporation, in accordance with the Act of Incorporation, was held to-day at the office of W. G. Beers, Montreal. The following members were present:—A. Bernard, C. F. F. Trestler, J. McKee, J. H. Webster, C. Brewster, J. A. Bazin, M. Pourtier, E. Lefaivre and W. G. Beers.

The minutes of the former meeting were read and confirmed. The President explained the amendments made to the Act, and the following resolution was passed, "That the action of the officers in procuring amendments to the Act be approved, and that the expenses incurred be paid."

The following applications for license with examination, were read, A. Knowlton, of Knowlton; J. C. Nichols, Montreal; C. H. Wells, of Sweetsburgh; C. H. Stewart, of Montreal.

The three former were received for examination. The application of Mr. Stewart was unanimously rejected, on the grounds of bad moral character, and having applied for examination under an assumed name; his real name being C. Sill. Letters and a photograph of the applicant were produced from the police office identifying him as a dentist who had run away with a woman named Kate Fry, from the United States, leaving a wife and several destitute children. The applicant had admitted having left his wife and children.

The honorary degree of L. D. S., for Province of Quebec was conferred upon Messrs. B. W. Day and J. O'Donnell, President and Secretary of the Royal College of Dental Surgeons of Ontario; and upon C. S. Chittenden, President of the Ontario Dental Society.

Mr. Ed. Carter, Montreal, was appointed to prosecute all parties practicing dentistry in this Province without license.

The examiners were arranged as follows: Anatomy, C. F. F. Trestler; Physiology, W. G. Beers; Chemistry, C. Brewster; Surgery, J. McKee; Pathology, W. G. Beers; Filling Teeth, J. A. Bazin; Mechanical Dentistry, J. H. Webster; Anesthetics, E. Lefaivre; Irregularities and Anomalies, J. A. Bazin; Hygiene, M. Pourtier.

The candidates were examined in succession, orally and in writing. Tuesday, May 3.

The adjourned meeting was held this morning. J. McKee in the chair. Present—J. McKee, M. Pourtier, C. Brewster, J. A. Bazin, J. H. Webster, E. Lefaivre, W. G. Beers.

The application of Mr. Baldwin (St. Andrews) for Licentiate with out examination was granted.

Messrs. Knowlton, Nicholls and Wells were presented with their certificate of license by the chairman, and the meeting adjourned.

MICHIGAN DENTAL ASSOCIATION.

THE fifteenth annual meeting of the Michigan Dental Association convened pursuant to adjournment, Tuesday Oct. 12, 1869, at Detroit, Mich.

The President being absent, Dr. Holmes, of Grand Rapids, was called to the chair.

The question of "Sensitive Dentine" was taken up for consideration.

Dr. Corbin said: If the cavities were numerous, and the patient sensitive, he generally found cotton saturated with creasote quite effective; if chloroform was used, a coating of gum mastic with cotton would protect the dentine from the action of the saliva, as well as prevent evaporation, for weeks. Chloride of zinc was more prompt, but painful.

Dr. Douglass said that he had been accustomed recently to diet his patients who were subject to sensitive dentine, and found the results very satisfactory; in connection with this treatment he uses carbonate of lime. In dieting he uses Graham bread, taking little or no drink at meals, tea without milk or sugar, and no sugar except in food; to drink nothing until meals have digested, and then to drink three or four times of water before the next meal.

Dr. Thomas preferred chloride of zinc though the latter must be used with care; arsenic with creasote is sometimes used, but it destroys the pulp, and should therefore be abandoned. He thought also that a sharp excavator was the best instrument for dealing with dentine, though remedies for deadening the pain may be employed, but is somewhat dangerous unless the greatest care is used.

Dr. Field has used the various remedies except arsenic. He greatly favored the free use of the excavator, and is strongly favorable to the use of creasote.

Dr. J. H. Warner said there was nothing like sharp instruments; he liked carbolic acid, for, if the cavity could be reached, he believed there was something in it that operated well. Arsenious paste, chloride of zinc, etc., were all right if removed at exactly the right

time. A bold hand was needed to do the cutting, yet, without constitutional treatment, all remedies might be unsuccessful.

Dr. Corbin regarded sharp instruments as a foregone conclusion. He believed the fibrillæ in the dentine analogous to nervous matter.

AFTERNOON SESSION.

Dr. Crooks deprecated the practice of using arsenious acid as most dangerous to the teeth; the use of chloride of zinc he favors, and uses extensively in his practice, with favorable results.

The next subject was "Alveolar Abscess."

Dr. Thomas contended that after the abscess had once formed it was impossible to save the tooth. He held that abscess never occurred until the tooth was dead.

Dr. Crooks would cut through the alveolar process and remove the diseased portion of the alveolus or root of the tooth.

Dr. Douglass said that in cases where there was little or no pain, and no outward inflammation, his plan was to clean out the pulp canal, washing it with creasote, and then sponging creasote into the abscess till it emerged through the fistulous opening. He then proceeded, at the same sitting, to fill both root and crown with gold.

Dr. Holmes thought that a great number of cases that came under the notice of dentists could be cured, if carefully and assiduously treated. He greatly valued a natural tooth. He thought that when there was any hopes of saving the natural teeth, it was the duty of the dentist to do all he could to do so.

Dr. Bancroft suggested that in difficult cases a good deal might be gained by pursuing vigorous measures for a short time, and then suspending operations long enough to allow nature to act.

Dr. Douglass advocated the application of chloride of gold, provided great care was taken in its use.

Dr. Holmes thinks that to extract all teeth with abscess would not only be a serious injury, but a wrong done to patients. He treats through the pulp canal invariably, cleans the cavity well, and applies remedies to assist nature in affecting a cure, and has been markedly successful.

Dr. Warner always opens through the canal, breaking up the sac. If the case is obstinate, treats through the alveolus, and generally finds the case yields to such treatment.

Dr. Thomas presented the case of a little girl, twelve years of age, with necrosis of the jaw, from which he had taken two teeth and a piece of necrosed bone.

A motion was made to suspend the rules making it necessary for practitioners to go through a definite course of study and graduate before they could be admitted into the Association, which called forth the almost unanimous voice of the members of the Association against "letting down bars" in *any case*, thus practically lowering the standard of qualification.

ODONTOGRAPHIC SOCIETY OF PENNSYLVANIA.

On the fifth of January, 1870, a meeting was held, the President in the chair, at which many of the students of the Philadelphia Dental College were present as visitors.

The Corresponding Secretary called attention to a superior right second bicuspid tooth, the property of Mr. A. Enos Perry, a member of the class, which his preceptor, Dr. J. L. Baker, had extracted from the mouth of a boy fourteen years of age, for the purpose of correcting an irregularity. The tooth was remarkable from having the root terminating in three well-marked cones, arranged like the roots of a superior molar, but not so widely spread. It was about the normal size, with a well-developed crown. No one present seemed to have ever seen such a case before, and Mr. Tomes in his "Dental Surgery" only mentions having seen such in the *first* bicuspid of a Chinese. The bifurcation of the superior first or anterior bicuspid is so frequent an occurrence as to make it a very fair rule by which to distinguish them from the second, which are generally found with single roots.

The same person also exhibited a pebble which he had extracted from the nares of a child; he said that, after making an attempt with a pair of forceps and finding that they only pushed it farther in, he had hooked an ordinary hair-pin over it, and with the aid of a probe had removed it. The danger of inflammation and swelling in such accidents makes it imperative to act at once, if possible before they have set in and thus complicated the operation by closing the nostril.

Prof. C. Wedl, of Vienna, Austria, was unanimously elected as honorary member, and Dr. Alfred C. Cogswell, of Halifax, Nova Scotia, as corresponding member.

The essayist for the evening, Dr. E. L. Hewitt, then read a paper on "The Irregularities of the Teeth, and their Treatment."

Dr. W. H. Trueman was opposed to the use of caps upon the molars to keep the jaws apart, especially small metallic caps covering one or two teeth. They bring the entire force of biting upon a few teeth, at a point where the pressure is most severe, and are very liable to cause troublesome inflammation, if not permanent injury. There is also danger of the patient swallowing them: the last one he made met this accident. It was of gold, fitting the first molar quite tightly. The patient, a young miss, while sitting reading, was startled by a member of the family abruptly entering the room, and swallowed it. It immediately passed into the stomach without causing any trouble; but she was under medical treatment several months before recovering from the mental shock of the accident and the effect of the powerful purgatives used to urge its passage.

Regular inclined planes answer the purpose much better; the force is distributed over the jaw, and the planes not only facilitate movement of the teeth, but also prevent the patients exerting the force they otherwise might. He had used a large number of them, and found they answered the purpose nicely, especially in those cases where we are not able see the patient as often as we would like,—for instance, children attending school.

He thought the great fault and the chief cause of their failure was in *not making them large enough*. He always preferred to carry them back so as to rest upon the molars of each side; this not only distributes the pressure, but makes the plates fit more firmly, and enables us to dispense with ligatures to hold them in position. The patients can readily remove and cleanse them. In case the patient will not bite upon them, or the teeth move too slowly, he assists them with rubber bands. He thought it very difficult to do anything without the co-operation of the wearer. It is hard enough to regulate the teeth without having at the same time to regulate the patient and perhaps the parent.

When the teeth were at all crowded, he did not hesitate to extract; would rather have too much room than too little; did not believe in forcing the teeth in position with the expectation of the jaws expanding to give them room. If the patient is young enough for any appreciable stimulation of the natural growth, there is danger of the maxillæ being forced apart at the symphysis, especially the upper, which in early life is not perfectly united. Accidents of this kind have occurred. If old enough to escape this danger, the formative process is so far completed as to prevent any great expansion.

When the front teeth are forcibly crowded together, we invariably find them decay early on the approximal surfaces. Very often in the effort to save one or two of the bicuspid, the six front teeth are either lost or their beauty marred forever.

We frequently meet with cases of marked irregularity, where, on simply extracting a bicuspid on each side, the teeth will fall into their natural position without further trouble. To know when and where to commence often requires more real skill and experience than in the actual performance of the operation. Nature should be allowed to do all she can before we presume to assist.

He was decidedly opposed to the use of rubber plates for this purpose; they are thick and clumsy; they do not admit of that ready adaptation to the change going on attained with metallic plates. A silver plate with platina-gold springs can be made to do the work of half a dozen plates of vulcanite, with far less trouble to the operator or inconvenience to the patient.

The idea that these operations do not pay is a mistake, at least, so far as his experience had gone, they had paid him as well as any, and far better than some of the operations he was called upon to perform. Although cases may be "hanging on" for a long time, and often require our attention, if properly managed they need not consume much time. The changes required from time to time are often quite simple, and can be made without interfering with our other operations. When busy he usually waited upon them in the reception room. A spring can be lent, a band tightened, or a ligature adjusted without disturbing, and only detaining for a few moments, a patient in the chair.

Although the actual amount of *hard cash* may be small, we must remember that it is but a small part of the fee we receive. A case of this kind, successfully treated, is a standing advertisement as long as the patient lives—known and read of all men—and not only *men*, but what is of far more importance to us, *the women* also.

The mouth of a patient is by far the best medium in which to insert a dental advertisement—providing you don't plaster it up with show-bills and posters. A *neat business card*, although packed away in some nook or corner out of sight, will find a tongue to sing forth your praise every time those pearly gates are opened.

A little money thus invested in the way of time and patience cannot fail to yield a handsome return. A dentist of this city has often related a case in point. Some forty years ago, while in charge of the

office during his partner's absence, a young man, a perfect stranger, came in to have a tooth extracted. Upon examination, he thought it could be saved. The patient consenting, he filled it with gold and charged *one dollar*, although it was a large cavity and took fully a dollar's worth of gold to fill it. His partner on hearing of it ridiculed him, saying "he would have just jerked it out and made a quarter, and not fool away a couple of hours for less than nothing." That filing is in yet. The young man, then poor, is now rich, and whenever he has a chance delights to exhibit the tooth he went to have extracted forty years ago, which, "thanks to the kindness and skill of his friend, Dr. B., is in his head as sound as a dollar." The Doctor estimates that he has received at least *one thousand dollars* clear profit from patients sent to him by that single operation. Could two hours' time and a dollar's worth of gold have been invested to better advantage? But leaving all this out of the question, let us not forget that every case we treat, if we improve the opportunity, increase our knowledge, our skill, our experience—*our stock in trade*, if you please; we do not lose, but receive in our brain that portion of the reward we cannot jingle in our pockets. To young men especially, with the world before them, these cases, if properly treated, cannot fail to yield a handsome return for all the time, patience, and skill spent upon them.

Dr. Eisenbrey is of opinion that nature is the best regulator of irregular teeth, and if not interfered with will accomplish surprising results in the way of providing room for and accommodating the teeth—as is instanced in the case of those that live rudely, and those that are beyond the reach of a dentist. *Instruction* and not *extraction* is what our patients, in their earlier years, want; and their parents to see that the instructions are carried out as much as possible. A piece of hardwood or bone or vulcanite of the proper shape, which is easily fashioned, to bite upon, is a requisite; these with oft-applied pressure of the tongue and fingers, will work wonders in the way of securing regularity in the teeth of young persons.

Nature seldom furnishes too many teeth nor of too large size. When they are very irregular and crowded, the defect is to be found in the contracted state of the maxilla, to remedy which, and to hasten or assist a further development, reason would protest against extraction. The teeth are there, and should be there until the waste and repair of the system are in equal proportion; then, if nothing else promises success, he would extract and correct. When me-

chanical appliances, ligatures, bands, etc. are needed to make the teeth regular, the patient should not be under sixteen years of age. Two or three years later is still better, for then we have the reason of our patients under better control, and the teeth then are moved sufficiently easy.

Rubber tubing and ligatures are among the indispensable mechanical appliances, and almost the only things needed for the worst cases.

The length of time regulated teeth should be held in position when corrected varies from one month to five,—much depends on the adjoining teeth; some, after being moved out or in, are kept there by antagonizing and approximating teeth—would be governed by circumstances.

Prof. Stellwagen considers that the treatment of irregularity of the teeth has been sadly neglected, and that it was mainly due to the want of general knowledge sufficient to make the proper attempts successful.

If so many dollars have been made by the performance of a plain *duty* in saving a tooth by filling, how much greater should the effort and the pecuniary return be for the retention of one that is perfect and necessary to prevent contraction of the arch of the alveolar processes, which deformity is becoming an hereditary condition of the mouths of whole families, who suffer from the effects of hasty and misguided operations.

To give an exact description of the time and modes of proceeding would be useless, without minute details of the growth and development of the teeth and maxillary bones are fully understood. There are certain general rules which seem almost to present themselves, and should be followed as closely as possible.

Having in mind that *the object is to bring about a normal condition*, the indications are clear that we should endeavor to retain all the teeth that nature designs to act as permanent organs, and place each in the natural position with relation to all the surrounding parts.

To do this there must be no alteration of the teeth themselves, by filing to gain room or pitting to adjust apparatus. Hard plates of metal must be used with caution, lest they abrade, and all unhealthy conditions must be combated. Cleanliness must be strictly observed, and undue irritation avoided, while inflammation is controlled by local and general means. Where it is necessary to cap teeth, gutta-percha is preferable, as it does not cut or wear the teeth as plates do; it is sus-

ceptible of ready and perfect adaptation, and, from the ease with which it may be altered, can be changed to suit the modifications that arise as the teeth move ; and it further presents a softer surface for the occluding teeth to strike upon, thus partially avoiding periostitis. He suggested, where metal caps are used, thin platina plate pressed over models of the teeth and stiffened by flowing gold over them ; then, with saw or file-cuts, making them so as to spring over the tooth.

To bring the teeth into proper position, steady, constant, and not too severe pressure is needed. This is, perhaps, best attained by ligatures and rubber springs, and the patient is prevented from removing or interfering at pleasure, while, at the same time, the annoyance does not usually equal that occasioned by the use of more bulky materials.

Perhaps the most important matter is to avoid the complication of the difficulty by unwarranted interference, such as the use of too harsh or untimely measures to reduce the deformity ; and, above all, *the premature extraction of any teeth, particularly the canines*, is a very tempting but objectionable practice.

The rule that the deciduous teeth should be allowed to remain until the corresponding permanent teeth present, seems so self-evident that it is only mentioned, as in numerous cases met with by him, it has been neglected. Indeed, the shedding of these organs is a matter that is generally best accomplished by nature. Almost always they may be left in their position without harm, unless the permanent teeth present posteriorly to the arch in the upper, or anteriorly in the lower jaw, or where, by being wedged in, they interfere with the natural forces of the replacing teeth.

He thought the remark once made by Prof. Stille, could not be too well known : " Nature is a most excellent handmaid, but terrible mistress."

He rarely used plates ; their inefficiency and the dangers attending their use are evident to the most casual observer, and the gilling twine ligatures, with rubber, and occasionally gold springs, had accomplished all the tasks which he had met with for the last four years, and this more easily, readily, and at less expenditure of labor, money or time. For the perfection of this method of orthodontia we are greatly indebted to Profs. Flagg and McQuillen. Finally, he could not close without calling attention to a very instructive and novel course adopted by the latter ; a description will be given in the DENTAL

COSMOS,* and a series of papers by the former,† all of which would repay those desirous of information for hunting up and reading.—*Dental Cosmos.*

SELECTED ARTICLES.

OF WHAT USE ARE OUR PROFESSIONAL MEETINGS ?

It contributes to improve us in our social relations, elevating us both intellectually and professionally, each contributing his share of Dental knowledge, acquired during the intervening time, noting what he may have seen or done, and communicating to his fellows what might seem to be important or useful ; stimulates us to higher accomplishments, elevates us in each other's esteem, thereby indirectly in the estimation of our patrons—for in proportion as the brethren respect, and speak courteously of each other, so will our patrons estimate us, both as to our moral and professional character ; our frequent gatherings prevent or annihilate that prejudice or jealousy that many of us may have been imbued with, and which is engendered and fostered by estrangement ; it dissipates those disagreeable feelings some may have harbored while making a call on a brother chip—a consciousness of having stoen sheep on his back, and a fear of being caught, perchance apprehensive that some of his own patients might see him, and he thereby be lessened in his patrons' estimation.

Let us take another view of our meetings. When anything new or useful is presented, and we make no objection to it, giving it at least our silent approval, do we always try it and ascertain for ourselves its relative merits, or, after trying it, do we report the same at a subsequent meeting, relating our own experience ? Not very often—and yet it is our undeniable duty, for by doing so we give encouragement to those who freely communicate their experiments. Why is it we have so many patents in our profession and none in the medical branch ? (save patent medicines)—and yet there are as many improvements made for the amelioration of suffering humanity, in that branch as in ours. That question was asked not long since. This rich answer was given : “ Dentists generally were such *worthy* sub-

* “ Hereditary Transmission of Dental Irregularities.” Published in the DENTAL COSMOS for January, February, and April, 1870, pages 27, 73, and 193.

† Orthodontia. Ibid., vol. vii. pages 14, 64, and 468.

jects to be Doestick's companions—that it required a patent, to make a Dentist try it, take hold of it, and use it.” I thought the man was disposed to be cynical, particularly so when he added: “They won't try anything good or useful, or pay any attention to it—unless it is ushered into their presence by a patent—then he at once becomes convinced—or instruction from a clever peddler forces conviction, and the tin is transferred.” Some time since Prof. Judd presented improve pluggers, to facilitate the filling of the distal proximate cavities of the back molars, no report made. Prof. Eames obtained a duplicate set, no report from him. I borrowed his pluggers, used them, found them a decided benefit, no report from me. I was favored with a loan of Dr. Morrison's Dental Chair, found it to be superior to any I had previously used, and yet I have manifestly been delinquent in not having reported. This remissness on our part to report has a tendency to discourage any one from presenting any useful offering, and yet that simple offering might prove of great value.

Again, for many years I have been in constant use of Mr. Chas. Hunt's diamond dust, (as he calls it,) and it was pronounced to be the best material for smoothing and polishing India Rubber plates, requiring only one grade and accomplishing the work in less time, and I was so highly pleased with it for finishing fillings, that I sent samples to several dentists abroad—no report from any on its comparative merits,—and from only one acknowledging thanks for sending it,—yet, I continue its use in preference to any thing else.

Again, how many of us have tried the suggestions of Dr. Black, in so far at least, as never touching the foil with our fingers? Who ever tried the wooden compressor instead of the tin, or chamois foil roller instead of the india rubber? We know that every little, apparently insignificant, item that has any tendency to deteriorate the essential properties of the foil, must in the aggregate, destroy its integrity, and thereby prevent us from realizing those agreeable anticipations when we say to ourselves “I intend to spread myself in filling this tooth.”

The simplicity of many offerings may cause an indifference to give it a trial, when in fact, its simplicity makes it the more important, and offers greater facilities for instituting a comparison on its merits.

When any member relates his experience he believes it to be new, and beneficial, both to us and our patients, either in Medicine, or

Surgery, or Mechanical Dentistry, and it, therefore, becomes our courteous duty to investigate the same and report.

This applies not only to those subjects related in our society, but also those presented through the medium of our journals, for by so doing, we are much more likely to retain it in our memory, and will better enable us to maintain the enviable reputation we now enjoy among our professional brethren abroad—preventing us from becoming old fogies, or Doestick's companions.—*Missouri Dental Journal*.

HYDRATE OF CHLORAL.

The distinguished Dr. W. A. Hammond publishes in the *New York Medical Journal*, the following interesting and important article upon chloral. Although it is long, we feel that our readers will thank us for placing it before them :—

All the experiments which have been performed with the hydrate of chloral, whether upon man or the lower animals, go to show that it is a powerful hypnotic ; but there is a difference as to whether the first effect is not the very reverse of sedative. Demarquay has shown by *post mortem* examinations that it produces congestion of the brain and its membranes ; but his researches are, in this respect at least, very precise, for they do not touch upon the point of different effects being produced by different doses ; nor was any accurate examination of the state of the cerebral circulation made during life. My first object, therefore, was to determine the influence of hydrate of chloral over the cerebral circulation.

Experiment—I examined very carefully with the ophthalmoscope, the retinae of a rabbit, and ascertained that they were in a normal condition. I then injected several grains of the hydrate of chloral, dissolved in water, into the cellular tissue, and two minutes afterwards made another ophthalmoscopic examination. The vessels were decidedly increased in size and several that were previously invisible made their appearance. The pulse and respirations were both increased in frequency. At the end of five minutes another retinal examination showed increased congestion, not only of the retinae, but of the optic disks. The pupils were largely dilated. After seven minutes had elapsed, the animal exhibited signs of drowsiness. The pupils began to contract ; and examination with the ophthalmoscope showed that the retinal congestion was greatly lessened. At the end

of ten minutes sleep was profound. The pupils were strongly contracted; the temperature had fallen four degrees; the action of the heart was less frequent; the respirations were diminished, and the retinae were of a pale pink color, with but two or three very minute veins visible. At the end of two hours the sleep was very deep; the respirations were feeble and slow; the ears were cold, and the retinae were pale and exsanguined. After nine hours and twenty minutes the animal was found awake, and in a perfect normal condition as regards temperature, circulation, respiration, and the condition of the retinae.

This experiment was repeated three times, and always with similar results.

Now, as is well known, the ophthalmoscopic examination of the retina affords very exact indications as to the condition of the cerebral circulation; but by means of an instrument devised, though in somewhat different forms, by Dr. Weir Mitchell and myself, independently of each other, we are enabled to determine the point directly. This instrument, which I venture to call the cephalo-hæmometer, consists of a brass tube which is screwed into the opening made into the skull with a trephine. The lower end of the tube, which rests upon the dura mater, is closed with a very thin piece of India rubber cloth; the upper end of the tube is closed with a brass cap, into which a glass tube is inserted. To this tube a scale is attached and the brass tube is filled with colored water, so that when it is screwed into the skull, and the end touches the dura mater, the level of the liquid stands at zero. When the apparatus is in place and properly adjusted, it is very evident that any increase in the amount of blood circulating through the brain will cause the dura mater to press with increased force against the rubber membrane, and will thus cause the liquid to rise in the glass tube. Any diminution of the circulating fluid will cause the level of the liquid to fall. We have thus a very accurate means of measuring the cerebral hæmodynamic pressure.

Experiment.—I operated on a rabbit with a small trephine, and inserted a cephalo-hæmometer. As soon as the instrument was *in situ*, I injected seven grains of hydrate of chloral into the cellular tissue. In one minute and ten seconds the fluid began to rise in the tube, and in three minutes it stood at a point an inch higher than the normal level. After five minutes it was an inch and seven-eighths higher. This was the maximum point. It now began to

fall steadily, and in two minutes and fifteen seconds reached the zero, the point from which it had started. Coincident with its further depression, drowsiness came on, until when the level was about an inch below zero, the condition of sleep was well established. The fluid continued to fall till the level was two inches and-a-half below the zero, which point was reached in thirty-two minutes after the injection was made. It remained stationary about an hour longer, and then fell about a quarter of an inch lower. It was not further depressed. After the lapse of seven hours and forty minutes it began to rise, and with this change the respiration, which had been feeble, became stronger and more rapid, and the animal exhibited signs of returning animation. At the end of nine hours and twenty minutes the animal awoke, and the level of the liquid, which at the time was about half an inch below the zero, rose rapidly to the original point. It continued to rise for a few minutes, but gradually fell again to the zero. This experiment was repeated on three other rabbits, and similar results elicited.

Up to this time, it will be observed, that what may be called large doses for rabbits had been employed. Desirous of ascertaining the effects of a small dose, I performed the following experiment:—

Experiment.—Having adjusted the cephalo-hæmometer to the skull of a large rabbit, I injected under the skin a solution containing one grain of the hydrate of chloral. The water in the tube began to rise in a minute and forty seconds, and at the end of five minutes was three-eighths of an inch above the zero. The animal continued lively, and the pupils were dilated. The respiration and pulse were both accelerated. In half an hour the level of the liquid was at its highest—about three-quarters of an inch above the starting point. It now began to fall slowly, and in fourteen minutes was at the zero. During the whole time of the experiment the animal showed no signs of sleep, but was, on the contrary, unusually active. Ophthalmoscopic examination revealed the existence of a state of congestion of the retinæ, which lasted till the liquid in the cephalo-hæmometer had fallen to its original point. The experiment was repeated, with similar results, on two other rabbits.

Demarquay found as one of the results of his investigations, that the hydrate of chloral in large doses produced continued congestion of the cerebral blood vessels of the rabbits to which he administered it. His observations were made *post mortem*, and cannot, therefore, be considered as altogether reliable. The congestion was in all probability, caused after death.

To be still further assured upon that point, I performed the following experiment:—

Experiment.—I removed from a large rabbit nearly one-half of the cranium, and opening the dura mater, laid bare the cerebrum and its membranes. I had thus almost the whole superior and external surface of one hemisphere exposed to view. I now injected one grain of chloral into the cellular tissue. In about two minutes the surface became redder and the vessels larger. I now injected five grains. The surface of the brain became of a dark blue color, and protruded through the opening in the skull. In something less than five minutes, however, a change ensued. The color gradually changed to red, the brain sunk again below the surface of the opening, and a state of anæmia ensued. With these changes the animal fell asleep. At the end of half an hour the surface of the brain was colorless, and no blood vessel could be perceived. After seven hours and thirty-three minutes from the first injection, the brain again resumed a pale red color, and the animal awoke.

I regard these experiments as showing conclusively that the first effect of hydrate of chloral is to cause congestion of the cerebral blood vessels, and that subsequently it induced the opposite condition. With a small dose, this latter effect is not reached, congestion only being produced.—*Boston Journal of Chemistry.*

(To be Continued.)

PERMANENT SETS OF ARTIFICIAL TEETH.

BY D. L. OVERHOLSTER, M.D., LOGANSPORT, IND.

There are several points which seem to me of considerable importance in regard to so-called permanent sets of artificial teeth, which are seldom if ever alluded to in either the dental periodicals or societies, and in regard to which the only text-book I have upon the subject is unsatisfactory. Among these is the length of time that should elapse between the extraction of teeth and the insertion of artificial substitutes. The instructions I have seen upon this subject seem to be based upon the idea that after a certain period, varying from six months to two years, or an average of about a year, all changes affecting the fit of a plate cease. That this is a fallacy it requires but little observation to prove. Who has not frequent opportunity of

seeing mouths which, in consequence of having been for a long time without teeth, have undergone changes that make the insertion of satisfactory substitutes very doubtful! That the wearing of plates lessens these changes can scarcely be doubted; but that they generally continue in some degree, even with the use of plates, seems to me equally beyond doubt. There probably are exceptions, but I do not remember ever seeing a plate that had been worn from five to ten years that fitted as tightly as a new plate ought to. If, then, there is no time when the "gums" become unalterable, how long is it necessary to wait to avoid the consequences of rapid change? I have no exact data from which to determine this point definitely, but probably every dentist of experience has observed numerous instances where temporary sets, inserted in from two to four weeks after extraction, were worn year after year,—in some cases, to be sure, after they ceased to be comfortable, but in other cases where they continued quite satisfactory. So often have the people observed this that, where the foolish practice of inserting temporary sets for a mere nominal sum still obtains, patients frequently expect from the first to escape the expense of a permanent set. If a set of teeth, no matter when inserted, is useful a year after extraction and afterward becomes useless, it is evident that the trouble arises in part from changes occurring more than a year after extraction. My general observation has led me to believe that, ordinarily, rapid changes do not continue beyond three or four months after extraction, and consequently that it is sufficient time to wait for the insertion of permanent sets.

Another important question is, How long do permanent sets of artificial teeth on an average last? The question is of practical importance, as having a bearing upon an evil cherished by many in and out of the profession,—namely, that of neglecting or sacrificing natural teeth for artificial. Persons frequently neglect their natural teeth, on the supposition that it will cost them much less to have them removed and artificial ones substituted than to have them preserved. While this supposition may be correct in some cases, still, it is evidently based upon the false consumption that if once an artificial set is secured there will be no further expense while they live. In fact, a lady told me once that a dentist had insured her gold set for her lifetime; and, if I remember rightly, he had made her the second set on gold; and later, rubber came to his relief and was used for a third set, he taking the gold. Webster, says: "Permanent is

equivalent to durable or lasting, but not to undecaying or unalterable." If it meant the latter, it could certainly not fairly be applied to artificial teeth in their relations to the mouth. Changes in the mouth affect the continued usefulness of a plate in two ways: first, by making it difficult or impossible to retain it in place; and secondly, by depriving it of proper support, it is liable to break from the increased strain of mastication. This I believe to be a very frequent cause of breaking of plates in the mouth, of whatever material they are made.

To these causes must be added the various accidents to which they are liable out of the mouth, and the recklessness with which some persons use them. I have no statistics from which to form an estimate of the average duration of permanent sets, but my impression is that full sets on rubber average from five to eight years; partial sets on the same base considerably less, and whole sets on gold somewhat more,—say ten years. Suppose, then, a person neglecting his natural teeth on the score of economy, begins with a partial set, which he may find it necessary to have replaced before desiring to part with all his teeth; later he gets an entire set, which, in addition to occasional repairs, requires to be renewed every five or ten years; and the financial argument—that which to him is the most weighty—will upon examination be found less favorable to artificial teeth than it seemed at first sight.

Another question worthy of attention is this: Are not those changes which are constantly going on in the mouth destitute of natural teeth, even where substitutes are worn, liable, if commenced early in life, to become so great before old age is attained as to make the continued use of artificial teeth impracticable? If so, it ought to be known, as it might tend to check recklessness in regard to the natural organs.

The above has been written rather to get an expression from others upon the points involved than to determine them myself, and I hope I will not be disappointed.—*Dental Cosmos*.

WORK AND REST.

In these days of fast living and hard working, when every nerve is strained to get the most done in the shortest time, it is well to remember that the

"Sweet vicissitudes of rest and toil make easy labour."

It is not so much for physical toil that the present day is noted;

though there is abundance of that. The heaviest strain is upon the nervous system. We multiply our engagements, increase our business, and often introduce an element of labour into our very amusements. The best workers will be found to do a few things thoroughly, and things of so opposite a nature that the very change of work becomes a relief.

But absolute rest is a necessity; and that is obtained in sleep. Good workers have a faculty of sleeping well and soundly, some of them may only sleep for a short time, but it is thorough. They enter a dreamless land almost the moment their heads touch the pillow. For such, a shorter period of sleep may be sufficient than for others. But every man has to be a rule for himself, provided he has sense enough not to stint himself of "Nature's sweet restorer." Eight hours will meet the necessities of most people. Those, however, who do the most mental work need the most sleep; and it is too often the case that they are the very ones who allow themselves the least.

But, apart from sleep, we need more quietness in social life. Our evening gatherings are too numerous, and partake too much of the nature of public meetings, with this difference, that they are protracted to a much later hour. The object of a social gathering is supposed to be enjoyment and relaxation. But when it extends so far into the night as to rob us of our needed rest, it becomes a labour in itself, and leaves behind it a weariness of soul and body.—*Canada Health Journal.*

CORRESPONDENCE.

SIMCOE, May 3, 1870.

To the Editor of the "Canada Journal of Dental Science."

SIR:—Dean Trench, in lectures on the study of words, gives some notable examples of human perversity, ingratitude, and the like, indicated by words and expressions which have come down to us from other days. Some future philologist will, no doubt, find enough in some of the expressions now current, to lecture his audience upon the mental and moral peculiarities of the present generation. When he finds the words *ulla bona* upon a return writ, he will be able to say that they do not necessarily mean *no traps*, but that they have a deeper significance; he will be enabled to say such an expression in-

dicated a violation of law, and an evasion of its penalties. It is said to be an impossibility to frame a law that cannot be driven through with a coach and six. I am inclined to yield assent to this saying. At any rate, the Act respecting dentistry in Ontario is puerile to a *cobbler and all his kit*, if not to a coach and six.

In the county of Norfolk there are seven persons practising dentistry in contravention of the Act of '68. One of these, a short time since, was convicted before two magistrates, and fined accordingly; but though a married man and keeping house, his brother steps in and claims his *kit* and every article of furniture in his establishment, and thus prevents the execution of the penalty. He goes on setting the law at defiance, and laughing in his sleeve at the impotence of Ontario legislation.

Permit me, sir, to suggest that, as soon as possible, the members and licentiates of the Royal College of Dental Surgeons petition the Legislature to so amend the Act of '68, that parties violating it, and having *no goods*, be liable to such other punishment, by imprisonment or otherwise, as to protect society from the consequences of ignorance and impudent pretensions.

Yours fraternally,

LYMAN WELLS.

EDITORIAL.

DENTAL INCORPORATION IN NOVA SCOTIA.

In September 1868, we advocated the extension of dental legislation to Nova Scotia, and we were glad some time ago that our friend Dr. Cogswell of Halifax and some others who have the honor of the profession and the protection of the public at heart, rather than their pecuniary interests, had made a move towards obtaining an act of incorporation. We are much surprised, however, to learn that though the law was passed in the House of Assembly, it was finally defeated in the Upper House, and that honorable gentleman of the Local Legislature stated that no laws were enacted anywhere in the Dominion, to regulate the practice of Dentistry. We happened lately to see a number of the *Halifax Citizen*, and were not surprised to meet with a flaming advertisement of a little humbug named De C., who left this Province for its good, some seven or eight years ago, just in the nick of time to save himself from arrest. If anything would arouse our sympathy

for the Nova Scotian people and the profession of our sister Province, it would be the fact that De C. is around there, seeking what he may devour. Ten years ago he was perambulating the suburbs of our cities, and the country districts, where he used to collect crowds in the streets, and spout upon the care of the teeth; cleaning discoloured teeth with nitric acid, filling front cavities with filthy amalgam, extracting useful masticators wholesale, to insert the worst kind of artificial work. In 1863 he was unable to make a set of teeth, and engaged a Montreal dentist to work upon his cases, and finally finding the country too hot for him, and after utterly destroying valuable dentures and disfiguring hundreds of people for life, he disappeared one morning, to the sorrow of his landlady, and to the grief of his "friends." De C. is a small man physically, but he was giant humbug when in this Province, and judging from his advertisement, we should say that his reputation in that respect has not at all diminished.

As the only organ of the dental profession in the Dominion, we appeal the intelligence of the Nova Scotia Legislature, in behalf of those dentists who aim to elevate the social and scientific character of the dental profession in Nova Scotia and to protect the public from the imposture of dental quacks. The Provinces of Ontario and Quebec now enjoy this protection, and the De C's., Stewarts and Edwards have left or are leaving for—perhaps Nova Scotia. We are much surprised that intelligent people anywhere cannot or do not appreciate the importance of protecting the public from the quackery and robbery of dental as well as well as medical charlatans. Pennsylvania, New York, Indiana, Ohio, North Carolina, Delaware, &c., have or are about to have legal protection, and perhaps when Nova Scotia is overrun with the imposters who find their occupation gone elsewhere; perhaps when reputable practitioners have left the field disgusted, and plausible quacks remain to treat important members of the human body such as the teeth, perhaps then the Upper House of Nova Scotia may have good cause to regret their vote upon their dental bill. We appeal to them now, to redeem the intelligence of their Province, and give a mutual protection to the public and the dental profession.

W. G. B.

THE VALUE OF DENTAL LEGISLATION.

When the dental bill for Quebec was passed, certain wisecracks looked knowingly, and pooh-poohed the whole affair, as of no more

consequence than a Fenian proclamation, or a "message" from the lunatic, George Francis Train. The Montreal *Herald* and *Witness*, in the usual jumble-style with which those organs manage to treat questions they do not understand, vented forth their respective columns of editorial bosh, which served to fill their papers, but not to increase admiration of the judgment of their editors. Certain practitioners, too, having taken legal advice, expressed their determination to resist the requirements of the law. But "a change came over the spirit of their dream." Editors and lawyers have been proven fallible, and it is now believed that our legislators did know what they were about when they passed a *retroactive* law; and that in spite of legal advice to the contrary, the dental Act was intended to be, and can be enforced.

The Quebec Board fully determined to show these wiseacres that they could enforce the law, and in one particular instance, which, if we are not mistaken, is without a parallel in the history of dentistry or medicine in Canada. In Section 17, the Act provides that the Board must be "further satisfied that he (the applicant for license) is a *person of integrity and good moral character*;" and with one of the applicants for license at the last meeting of the Board, a test was determined upon.

Some months ago, an individual named C. H. Stewart, hung out his shingle in Montreal, and attracted considerable attention by the lowness of his prices, and the marvellous promises he made. Without any trouble or investigation on the part of the Board, documents and a photograph were produced at the last meeting, identifying Mr. Stewart as a dentist named C. Sill, who ran away from Pittsburg, Pa., with a woman named Kate Fry, leaving a wife and several children in a state of destitution; and that the said Kate Fry was living with him as his wife. A Montreal comic paper, *The Free Lance*, got hold of the circumstances, and as our readers will see below, made Mr. Stewart's name still more notorious in the eyes of the Montreal public. After such publicity, the Board determined to reject Mr. Stewart's application, and did reject it, on the sole grounds of "immoral character." So satisfied was Mr. S. of the position of the Board, that he at once retired from the profession.

Nothing will win more respect for Canadian law, than just such action on the part of corporate bodies who have the legal power to rid society of the contamination of scoundrels and knaves, who escape Sing-Sing, and expect to find position and honor in our Dominion. If such an individual merited punishment in the eyes of the civil law—and that no honest man will deny—then it is fortunate for society that a Dental Board of Examiners possessed and used the power to expose such unnatural conduct. Not only every **licentiate**, but every good citizen has a personal interest in at least

ejecting from a respectable position, every dentist who thus sullies the moral code, and the honor of the profession, and who has the sharpness to escape an apprenticeship in a penitentiary. W. G. B.

DOCTOR SILL.

"A dentist named C. Sill who ran away from here with a woman named Kate Fry, leaving a wife and several children in a state of destitution, has been traced to Canada, where he is practising under the name of Stewart."—*Pittsburg, Pa., Commercial*, March 19.

Ah! Doctor Sill, to run away,
And leave your "better fraction,"
And olive-branches, was, we think,
A very *sill-y* action.

In fset, we are inclined to say,
—Now, please, don't shed our blood, Sill,—
That, in the language of the South,
You are a precious "mud-sill."

A dentist, too—well hold your *jaw*,—
Canadian skies beneath,
By *gum*, there are some folks who dare
To cast it in your teeth.

Kate Fry!—such an appropriate name,
But rarely meets our eye.
Were you sick of domestic *broils*
That you preferred a *Fry*?

Consistent too, untill the last,
Your *nom-de-guerre* shows true art,
For you've converted Mrs. *Fry*,
Into a Mrs. *Stew-art*

Ah! Doctor Sill, ah! Doctor Sill,
This is no theme for laughter,
Take care lest *Fry-ing* be your fate
In this life *and hereafter*.

—*Free Lance*.

MEETING OF THE ONTARIO DENTAL SOCIETY,

Again we call the attention of our readers to the circular which has been, or will be forwarded to every licentiate of dentistry in this Province, whose address is known to the Secretary of the Society, from which it will be seen that a large, varied and most interesting "bill of (Dental) fare" will be served up for those who attend, and we hope to see a much larger number in attendance than ever before. Very wisely, we think, it has been decided to hold but one meeting of the Society in each year; and certainly each and every dentist should make a point to be present, and come prepared to give a report of success in some of the various operations which we are all called upon to perform, or to report whatever failures he has made.

We copy in this number an article from the *Missouri Dental Journal*, on the subject of "Our Professional Meetings," which we think is so full of plain, homely, good sense, that we have great pleasure in calling the attention of our readers to it, and trust that they will "read, mark, learn, and inwardly digest," and act on the suggestions contained in it.

The meeting will be held in Halley's Hall, corner of Bay and King streets, Toronto, on Tuesday the 7th of June, at 2 P.M., and the election of the new Board will take place at seven o'clock in the evening of the same day. C. S. C.

THE USE OF AMALGAM.

Not long since a dentist of Montreal, by the name of Bowker, who, we understand, entirely ignores all associative and legislative action for the improvement and elevation of the members of our profession, wrote an article to the *Canada Medical Journal*, against the use of amalgam for filling teeth, giving a statement of its chemical proportions, etc., which we considered to be very erroneous in many respects. The general tone of the communication, and the fact that it was sent to a medical instead of a dental journal, for publication, led us to believe that it was written as an advertising dodge for the purpose of securing the patronage of the medical profession in his locality, and had he not stated that the teachers of the Royal College of Dental Surgeons, of Ontario, instructed those who receive their licenses from that institution, to use amalgam in ordinary practice, we should never have thought of noticing his effusion. Even then, we decided not to waste any powder on such small game, and we would not do so now if our Baltimore name-sake had not copied the article from the *Medical Journal*, which might lead some of our American cousins to think that we, in Canada, instead of advancing with the times, were retrograding to the medieval ages. The *Missouri Dental Journal*, in speaking on this subject, says: "As stated by the editor of the *American Journal*, in his review of this article, much that is said about the employment of base metals as a filling for teeth is true, but we prefer to hear from the *Canada Journal of Dental Science* upon this subject, before we shall be satisfied that the Royal College of Dental Surgeons, at Toronto, have recommended it for general use."

We beg to say that the teachers of our Canada College have never "recommended it for general use," or to be used at all except in very extreme cases. We do not entirely and utterly condemn amalgam as some of our confreres do, because we do now and again meet with teeth too frail, or not sufficiently firmly fixed in their sockets, to admit of any but the gentlest handling, where the force necessary to condense gold properly cannot be borne, and under such circumstances we would certainly use amalgam, rather than compel a person to lose a tooth which is of great service for mastication. C. S. C.