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# DOMINION DENTAL JOURNAL.

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# Original Communications.

The Status of the Profession in Ontario.

By C. N. Johnson, L.D.S., D.D.S., Chicago, Ill.

It is sometimes very tempting to tell people what we think of them from our own individual standpoint, and if this communication should at times seem at all personal, it must be attributed entirely to a weakness on my part in yielding to this temptation. And yet this article is written, not so much from inclination as from the suggestions of several Ontario dentists, who wish their brothers tuned up by an outsider.

The truth is, that the rank and file of the profession in this Province are at least ten years behind the times, and in the present progressive era of dentistry ten years means something more than one hundred and twenty months.

There must be some reason for this. Probably there are more reasons than one, but it seems to me that the main cause of the backwardness of the profession, resolves itself down to the one evil of professional narrow-mindedness and bigotry. This is manifest, of course, more particularly with the men who years ago settled into a groove and have remained there ever since—men who never had the advantage of collegiate training, and who do not believe in colleges or dental societies. It is this class of men who, the

world over, constitute a drag on the profession; but it would seem that Canada had more than her share of them. The vast majority of the profession in the Dominion have no membership in any dental society, nor do they seem to have any inclination to fraternize with their fellow practitioners. Much missionary work is needed here, but, of course, in many instances the case is hopeless. Time, in her beneficent designs, will do more than anything else to remedy the matter with some of these men, and, meanwhile, I do not feel like quarrelling too much with them. They are their own worst enemies.

But I have a word for another class of men who, I have every reason to believe, may be benefited by advice. These are mostly the young men who have graduated in recent years, and whose bent of mind is usually in favor of professional progress. They are well educated, to begin with, and education in an individual ordinarily stimulates a desire for research. Probably these men constitute the majority of the membership in the societies, and they are the main hope of the profession in Canada.

But from some serious defect many of them do not seem to realize what successful society work means. They do not yet know how to run dental societies. They allow matters of too trivial a nature to keep them away from the meetings. When a dentist becomes a member of a dental society, and signs the constitution and by-laws, he places himself under an obligation to forward the best interests of the society at all times, even at the expense of his own personal comfort and inclination. There are two objects in joining a society. One is to get benefit for oneself, the other to benefit others and elevate the profession. The latter of these is too often entirely ignored. Selfishness is as great an evil in society work as elsewhere, and while few members would bow their heads to a charge of being selfish, yet in point of fact, they are selfish when they allow their own individual convenience to interfere with their duties to the society.

I have watched somewhat closely the average attendance on dental meetings during my visits to Ontario, and seldom do I find anything like a representative membership present. I have attended two consecutive meetings of the principal city society of the Province. At one meeting there were eight or ten members present, at the other there were two members of the society, with two

visiting dentists besides myself, making a total of five. This in a city where there are over sixty dentists!

But the most suggestive feature of these meetings was the fact that on neither occasion was there a single officer present, with the exception of the president. When a man accepts office in a dental society, he should consider himself under obligation to the society to do his share of the work. It is a betrayal of the confidence the society has placed in him to have him neglect in so flagrant a manner the duties which belong to his office. Some of my recent experiences with officers of societies in the Province, have convinced me that much of the lukewarmness exhibited by the mass of the profession in society work, is due to the fact that the men who hold office fail to appreciate the responsibility that devolves upon them. To say it in brief, they do not attend to business. They allow matters to drift along, and expect the society to run itself. It has has been a matter of some wonderment to me whether or not these men conduct their own private affairs on the same principle.

If I might be allowed a word of suggestion to officers of societies, it would be something in this line: Study at all times the best interests of the society you represent. Think of it, not only when in attendance on the meetings, but between the meetings. While working at your chair, or sitting in your study, try to devise means of increasing the interest. Enthuse your fellow-practitioners on the subject of societies at every opportunity. If asked for information, by letter or otherwise, on any matter pertaining to the society, be sure to answer promptly and fully, and do not shirk correspondence because it is sometimes irksome, when the society's interests are in any way involved. Be prompt and constant in attendance at meetings, and stir the other members up to a like necessity. In short, do not be afraid of work; for no dental society was ever successfully conducted without work.

But truth to tell, it was another class of men altogether whose attitude induced the writing of this article. There are men in the Province who have been in the dentistry long enough to have a well-established practice, men who have prospered in their profession and who are in a position to do an immense amount of good; but who, through some little petty jealousy—probably of many years' standing—hold aloof from professional fellowship, and ignore the duties that every professional man owes to his calling.

Sometimes they hang around the outskirts of a society, and absorb all the benefit they can without the slightest effort to yield anything in return. I have all cha ity for a man who lacks in ability, and who avoids a prominent place in society work from conviction of his incapacity, but these men are not of that stamp. They assume superiority over the common herd, and consider it not worth their while to fraternize with their fellows. They are not only derelict in their duty to the profession, but they form a dangerous example for young men to point to and imitate.

If dentistry in Canada is ever to advance to a position equal to that of the profession in the United States, there must be a unity of endeavor all along the line, and the present petty spites and jealousies must be suppressed. Canadian dentists have the ability to advance, but they lack the liberality and true professional spirit of progressive men.

It may not do any good to tell them so, but somehow there is a certain form of satisfaction in it, and I trust the article will not prove altogether faultless.

#### Dental Caries.\*

By D. V. BEACOCK, L.D.S., Brockville, Ont.

There are three divisions of micro-organisms in the production of dental caries. The first transforms starch and unfermentable sugar into fermentable sugar; the second changes this sugar into lactic acid; the third produces a kind of digestive fermentation. Now, if the normal secretions of the mouth are not able to counteract the effect of these acid producers, in some part of the oral cavity where food or other matter may find a lodgment, then decalcification, or breaking down of the enamel will begin; and when once the way is opened to the dentine beneath, and the micro-organisms have gained an entrance into the tubuli, the rapid breaking down of the lime salts of the tooth goes on till the tooth is beyond redemption, if the ravages are not arrested by the hand of the dentist. Dr. Ormiston says, that "bacteria do not reach the tubuli until decalcification has occurred in the enamel. Lactic acid fermentation very soon takes place in saccharine or

<sup>(\*</sup> Read before the Eastern Ontario Dental Society, Brockville, July 2nd, 1891.)

starchy food that may have lodged in the teeth. The way once being opened, the coccus(a) of Miller enters the dental tubuli and completes the decay." Where teeth are exposed to the motion of the lips and tongue, causing constant friction, as in mastication, etc., these organisms are deprived of the opportunity to increase or grow. Consequently, we rarely or ever see caries at these exposed points. But, on the contrary, we do often find organisms growing and forming small colonies in out-of-theway places where the brush cannot dislodge them. These secluded spots are mostly between the teeth, fissures, pits or grooves, or any irregularities, margins of badly-finished fillings, etc., furnish them with a secure lodgment. All these points give the opportunity for fungi. Sugar in the mouth provides the bacteria with food, and every crevice or flaw in a tooth, or any part hard to reach. or difficult to keep clean, becomes a locus of destructive activity for these acid producers. It has been shown by direct experiment that they will produce acid abundantly in a few hours after implantation. If in any protected place this acid is produced in immediate contact with teeth, and this is allowed to proceed without interruption, the effect will be to decompose the enamel, and finally to penetrate it, then the fungus finds a secure lodgment and can continue its development without danger of frequent disturbance. These fungus growths have no power of themselves to attack enamel or growing into anything, except it be a something that affords openings or spaces that are filled with soft matter, that its rootlets may gain a foothold.

The rootiets of plants cannot get a firm hold on the bare, smooth rock, neither can the fungus of caries grow on the smooth, glassy surface on the enamel of a tooth. But let a seed once find a crevice or opening where even the smallest quantity of earth and moisture can collect, it will soon germinate and throw out rootlets, that will give forth a solvent that will in time disintegrate the stone and cause the hardest rock to give it nourishment. Every one has seen gravestones that were covered with moss, especially in damp situations, that have lost their beautiful polish, the surface crumbling away, leaving it rough and porous. There is little doubt that the fungus of caries attacks teeth in a similar way. The three principal factors in the production of dental caries being heat, moisture, and microbes; these conditions the mouth supplies to perfection.

It is not the organism that first makes the attack on the hard substance of the tooth, but the waste product of the organism, the lactic acid. This lactic acid is one of the waste products of bacterial life, and in the presence of any fermentable matter, forms one of the so-cailed ptomaines so destructive to teeth, in the form of caries. Dr. Allan says, that "were it not for the constant absorption of the lactic acid formed by bacteria into the lime salts of the teeth, forming lactate of lime, bacterial life in the cavity of a tooth would soon cease. They would be smothered in their own waste products, and die as naturally as we would die were we compelled to live in a close room in the presence of the waste products of our life, viz., the carbonic acid from our lungs, urine from the kidneys, and the fecal matter from the bowels." Exactly what the ptomaine is that produces this work of destruction, breaking down the animal basis substance, is not yet definable, but is supposed to be some waste product of bacterial life. are the smallest of all known organisms, and, though bordering on the line separating animal from vegetable life, are now placed among the plants. It is said that fifty millions would not occupy a space larger than the dot of a pen; they were first discovered by a German, in the year 1675. Yet small and infinitesimal as these micro-organisms are, they are endowed with a peculiar quality called life; they can reproduce their kind, but are not capable of themselves of migrating from place to place only as they are conveyed by the air, in food, or from one mouth to another by instruments, etc.

A filthy mouth may well be said to be a bacterial hot-house, or forest of bacterial algæ. These fungi are composed principally of protoplasm; they are unicellular plants of the simplest form; they reproduce themselves by spores; from one to several may be produced from each cell. Their activity consists in converting sugar into lactic acid. The manner in which they effect an entrance into enamel is quite different to that of entering the dentine. These fungi, as previously remarked, cannot attack enamel; no signs of them are ever found on it until after it has become so far disorganized, that its prisms, crystals, or enamel rods, are so loosened that they begin to fall apart and separate, the lactic acid having destroyed the connecting tissue which unites these rods or crystals into a compact mass. The rods or crystals are not so

readily dissolved, and can often be seen and scraped from the surface of a tooth where the enamel has been attacked in this manner, in the form of fine powder. The enamel first becomes porous, then the rods, being deprived of their connecting substance, give way, leaving minute of enings all through its substance; through these openings the fungi of caries find a ready entrance to the dentine beneath. After the dentine is exposed, the enamel is undermined by the more rapid softening of the dentine which underlies it. The enamel in this condition is more or less disintegrated from its internal surface, and in this way it is, by the rapid disintegration of the dentine beneath, weakened and left unsupported, afterwards breaking away, leaving the cavity jagged and irregular. As soon as the dentinal tubes are invaded, they form a protection to these filaments of the fungus, which strike into them in the process of growth, and development occurs in that direction. Hence the rapid process of caries when it has once got a foothold in the dentine. This growth will continue in any and every direction, in which sufficient space is afforded for the development of filaments. In this way the dentinal tubes become filled with organisms, and the surrounding dentine is always decalcified in advance of the growth of the fungus by the lactic acid produced. This accounts for the circle or zone of semidecalcified dentine to be found at the bottom of cavities. And this should forcibly remind us how important it is for dentists to carefully sterilize every cavity previous to inserting the filling.

For much of the material in this paper, I am largely indebted to the notes and observations hastily jotted down, while listening to the valuable and interesting papers read and illustrated by such eminent authorities as Drs. Black, Sudduth, Andrews, Allan, Ormiston, and others, at the different society meetings held in New York and Boston, which I have had the pleasure of attending from time to time.

#### Dental Dots.

By D. V. BEACOCK, L.D.S., Brockville Ont.

When a man makes a Quack of himself, he could not by words more plainly express the fact that he is not qualified to command a first-class patronage. If he was, he would certainly prefer it, but knowing his inability, his only hope is to get up an extensive practice among the ignorant, poor and penurious.

In cavities that are very shallow, the pulp not being exposed, but very nearly so, it might be dangerous to drill for retention of filling or otherwise shape the cavity, a sticky oxyphosphate placed in the bottom of the cavity, and a pellet of gold placed thereon and pressed into place, may be used successfully, the rest of the filling can then be built out, condensed and finished.

Antipyrine in solution applied to the cavity after extracting a tooth, is good to arrest the hemorrhage, and much more pleasant than perchloride of iron. I sometimes use chloroform in the same way, which answers a double purpose.

Bristles, such as can be had at the shoemaker's, are very useful for cleaning hypodermic needles, better than wire in many instances, as they do not corrode.

Other things being equal, a dentist ought to improve as he grows older, within certain limits; but some can learn more in one year than another would in a whole lifetime. But all can improve themselves in this age of reading and progress.

Iodoform oil is made by shaking amorphous iodoform into ten parts of oil of lavender. Very pleasant and useful.

Much of the unsatisfactory working of copper amalgam arises from ignorance in not knowing how to work it properly. The material should not be heated and thrown into a cold mortar and instantly chilled, but kept warm while being vigorously rubbed and worked with a pestle in a good-sized mortar. Small-sized glass or porcelain ones are utterly useless for preparing copper amalgam with any satisfaction.

No dentist is worthy of reputable patronage who is not master of his profession, a gentleman in his manners, cleanly about his office, free from demoralizing habits, honest in his dealings with his patrons, and of good moral character; while he may more reasonably expect to be more and more successful the more nearly he meets the requirements of modern, refined and intellectual society.

Save up all your old waste bits of lead and other soft metal. Melt into a round or square block by pouring into a collar-box or other similar mould. Very useful for striking up gold caps, etc.

The dentist or surgeon who communicates a disease, syphilis perchance, to his patients, by the use of an impure instrument, has a burden of sin upon him greater than which there are but few. Besides, exquisite cleanlinesss and absolute freedom from germs, constitute half the battle in many operations in dentistry as well as in surgery. (Millar).

The ambition of every dentist should be to preserve the natural teeth, and we sometimes see dentists advertising "The preservation of the natural teeth a specialty" Their usual practice is more in harmony with the announcement, "The destruction of the natural teeth a specialty." What say the Vibrator advocates? See Canadian circular of testimonials. Some of these dentists, and they are spread all the way from Galt, in Ontario, to St. John, in New Brunswick, boast of having cleaned out over a dozen mouths in one week (this is preservation with a vengeance), and state that they hope to do a great deal more of this kind of wholesale slaughter by the aid of this electric machine. Some of these same machines, which cost seventy-five dollars, after a few weeks' use, are now offered for sale for a mere trifle. Only last week I had a call from a cravelling dentist, offering for sale another wonderful local anæsthetic. Only twenty-five dollars for the secret (not worth twenty-five cents). He demonstrated for me, and left with the secret in his pocket, and I kept my money. Dentists who subscribe for, and read carefully, a good dental journal, ought not to be caught by these glib tongued gentry.

Buy a sheet of carbon paper at any stationer's store, and cut it up into strips three or three and a half inches long by three-quarters wide; this makes just as good articulating paper as any you can buy at the dental depots, and not one-twentieth the cost. There is a red kind which I use, and find very useful in certain cases. In fitting teeth and crowns, this carbon paper is almost indispensable for getting nice adjustment.

To clean wax get any old tin or skillet, put all your waste bits of wax, cards from artificial teeth into it, put a couple of inches of water in to keep the wax from burning, boil till all the wax is melted, then pour a pint of hot or boiling water into a washbowl or other suitable vessel, empty the contents of the skillet into this and let it stand till next morning. All the sediment will have gone to the bottom. Scrape this off, and should the wax not be clean

enough, repeat the same process, only this time add a teaspoonful of sulphuric acid to the melted wax before pouring; this will make the wax clean and yellow, as when first made by the bees. It will not do to pour it into cold or even warm water, it must be either hot or boiling. If the above directions are carefuly followed, there is no wax so dirty but what may be made just as good as ever. Wax can be toughened by adding either resin, Burgundy pitch, or, what is better, Venice turpentine.

## Pyorrhœa Alveolaris.\*

By G. Ed. Hyndman, D.D.S., L.D.S., Sherbrooke, Que.

Pyorrhœa alveolaris, commonly known as "Riggs' disease," is a suppurative inflammation of the gums and peridental membrane, attended in acute cases with the destruction of the alveolar process, and resulting in the loosening and finally in the loss of the teeth.

The first indication to the patient of a pathological condition is an uneasy sensation in the gums and teeth, which, if not attended to with care, soon becomes painful, and the margin of the gums appear decidedly imflamed and bleed from slight causes.

As the disease progresses the inflammation extends deeper into the tissues, and they become congested with venous blood, swollen and have a tendency to separate from the necks of the teeth.

The separation of the gums from the cervical portions of the teeth gives rise to the formation of small sulci or pockets, thus permitting the retention of pus and micro-organisms, which become a further source of irritation to the peridental membrane and alveoli.

As the destruction of the alveolaris progresses the teeth become loose, and if the teeth affected by the disease be the incisors, they will usually protrude and separate from each other. There will be a viscid, fetid discharge, which will cause a disagreeable taste, and give the breath a very offensive odor. The gums will be of a purple or livid hue, with congested margins, which are sometimes denuded of epithelium, giving them a polished appearance. The roots usually become coated with calculus, which is of a

<sup>\*</sup>Thesis presented at Examination for L.D.S.

greenish-brown color, and adheres to the teeth very firmly, and is sometimes in such thin scal as to render its removal very difficult. Of the two forms of calculus, salivary and serumal, the latter is more commonly associated with this suppurative inflammation than the former.

This pathological condition of the tissues about the teeth causes a serous exudation and diapedisis of the white blood corpuscles, which all combine to form this harder variety, known as serumal calculus.

Although pyorrhœa alveolaris depends almost entirely upon local causes, yet it is affected, no doubt, by any unfavorable diathesis which may aid local causes in producing more serious results than would be possible under more favorable systematic conditions. Low vitality, and all diseases which affect the circulation, may be looked upon as predisposing causes of pyorrhœa alveolaris.

Dr. Black contends that this disease is of a purely local origin, while Dr. Atkinson believed it to be from constitutional causes. There seems, however, to be good reasons for believing, with Prof. Truman, that the causes of this disease are both of a predisposing and of an exciting nature. In the treatment of this pathological condition, all teeth and roots of teeth which are so badly decayed, or so loose, as to be past restoring to usefulness, should be removed at once, for if allowed to remain they would be a constant source of irritation. Then the removal of all deposits from the teeth is of very great importance, and on the thoroughness with which this part of the operation is done will depend, to a great extent, the results of further treatment. The removal of the deposits from the roots requires skill and patience on the part of the operator, for lying close against the sides of the roots there will be found very thin scales which are so smooth that their outlines are with the greatest difficulty detected by the touch; for this reason much care is required for their complete removal. This calculus is an irritant, no matter how small the amount, and any particles left will serve to continue the inflammation. The instruments for this operation should be narrow and slender, and formed with care and delicacy. The bulk of calculus may be removed by curved or hoeshaped instruments, but for the removal of the last portions, or for serumal calculus, the instruments should be so formed as to

work with a pushing motion, that is, they should work from the hand in the removal of concretions.

In cases where the alveolar process is affected? and absorption has left the edges rough and jagged, the edges which are rough and any particles of the process which are diseased should be removed. In doing this, care must be taken not to wound or cut away any portion of the gum margin, for upon the preservation of the gum depends for the most part the renewal of lost tissues. will remain denuded as far as the gum has been destroyed. pockets formed about the roots should be injected with peroxide of hydrogen to cleanse the parts, and to remove pus and all foreign matter. To inject the peroxide of hydrogen, and, indeed, any of the remedies, use a syringe having a straight and a curved canula. The canula is to be well introduced at both the mesial and distal sides of the neck of the tooth, so as to cleanse the inter-alveolar parietes which form the seat of disease. I believe the use of the syringe for applying the remedy to the affected part to be of very great importance, for without it one cannot apply the agent used directly to the affected parts, except in a very dilute form.

After thoroughly cleansing the parts by the use of H<sub>2</sub> O<sub>2</sub>, inject the suici about the teeth with a 20 to 30 per cent. solution of commercial sulphuric acid, which will be found very effective in constringing the gums and removing from the tissues that condition of extreme congestion. The acid should be allowed to remain for two or three minutes, and then neutralized by the use of carbonate of sodium. Syringe the parts with tepid water to remove all debris, and as a final dressing use sulphate of quinia made into a paste with some of the essential oils, as they are not so readily acted upon by the fluids of the oral cavity. This paste should be carried into every pocket where there is disease. If any of the teeth are loose, they should be supported by means of ligatures, or if they will require permanent support, gold clasps made to fit the teeth accurately and attached to some of the adjoining teeth will be found to give satisfaction.

The patient should be seen, at least, twice a week, so that the parts may be washed out with  $H_2$   $O_2$ . This may be followed by the injection of phenol camphor, or with a solution of one part of carbolic acid to two parts of oil of cinnamon, which will be found more agreeable. This treatment is to remove septic matter and to

stimulate the tissues to their normal vitality. Usually when a decided disposition to heal is shown, the treatment may consist in simply keeping the parts free from foreign matter. The patient should have a wash which has stimulant and disinfectant properties, and for this purpose the following wash is good: Oil of cinnamon, 1 part; carbolic acid, 2 parts; and oil of gaultheria, 3 parts. This may be diluted with lemon oil to about one-half its strength, or may be used without dilution by placing half a dozen drops on the brush when washing the teeth and gums. The more assiduously the patient assists us brushing his teeth, two or three times a day, using a soft brush and the mouth wash recommended, the more favorable will be the results of our treatment. fore, impress upon the patient, that your efforts will be without avail if he does not persevere in cleansing his teeth in the most thorough manner. The most important part of this treatment comes under the head of prophylaxis, for it is deficient care of the teeth and gums that is the chief cause of this local lesion which, once present, endangers every one of the teeth. In the case of young patients, who present deposits of concretion under the gums, make every effort to carefully remove them, twice a year, and persuade the patients to undertake the rational care of the teeth and gums, which is so frequently neglected. Attention to the gums must be more strongly insisted on; without it we can expect no success whatever in our treatment of the disease under con-The advantage, however, which patients derive from sideration. carefully cleansing their teeth of concretions of tartar, is, as is generally believed, far greater; and the more the dentist directs his efforts in this direction, the more good will he do.

# Adhesion vs. Atmospheric Pressure.

By E. A. TESKEY, L.D.S., St. Thomas, Ont.

Dr. Moyer exhibits quite a glow over my treatment of his criticism, and complains that I have left his arguments unnoticed, ridiculed science, that I misquote his learned dissertations, and am ignorant of the first principles of physics, etc. I have re-read his article, and must say that I have left no argument bearing on the issue unnoticed, but by branching off on kindred topics I might

have given him more extended notice, but space is too precious. Science I profoundly respect, but I cannot say so much for those so-called axioms which, when intelligently considered, contain not a particle of truth. Of physics, what I know is but a drop in the bucket; but I have learned that the pressure of the atmosphere is constant at about fourteen and one-half pounds to the square inch, a knowledge that serves me well. As to the charge of misquoting, I made no attempt to give the exact words; I only gave samples of his style, and in that the critics will bear me out. Dr. Moyer has apparently failed to grasp the point under discussion, but seized upon a passing opinion I expressed as an excuse to quote his doubtful experiments, to prove that the dental air chamber can be evacuated, but appears conscious that there is another force, for he says, "All I claimed . . . was that they increase the retentive force that already exists." This force that already exists can be very properly called adhesion, and were I to grant the possibility of evacuating the dental air chamber, it counts little against the premises that adhesive attraction is the principal force exerted in the retention of artificial plates. For argument, I refer the readers of your Journal to my last article in the March number, when dealing with the thimble experiment (which, by the way, Dr. Moyer passes over very lightly, being evidently not much in love with the result), and which has remained practically unanswered, but all will understand my meaning. He puts forth a comprehensive but indefinite claim of support by all the authors and colleges as well as dentists, forgetting that one man with the truth is always in the majority. If he will open the "Britannica" at "Adhesion," and in the last complete sentence of the first column, on the 153rd page, he can read, "This force is almost entirely independent of atmospheric pressure," which should settle the author question, and dispose of the next assertion, which is his repeated assumption that it is all due to atmospheric pressure. [This controversy is closed.—ED.]

# Proceedings of Dental Societies.

#### Ontario Dental Association.

Minutes of the Third Annual Meeting of the Ontario Dental Association, held in the town of Barrie, July 21st, 22nd and 23rd. 1891.

The meeting opened Tuesday, 21st, at 2 p.m. President Dr. N.

Pearson, Toronto, in the chair.

The minutes of the previous meeting were read and adopted.

The Secretary read letters of regret from Dr. Law, Chicago, and several members who were unable to be present.

The election of officers for the ensuing year was then taken up, and resulted as follows:

President, Dr. C. H. Bosanko, Barrie. Vice-President, Dr. H. R. Abbott, London. Secretary, Dr. R. G. McLaughlin, Toronto. Treasurer, Dr. W. E. Willmott, Toronto.

The Secretary then proceeded to enrol members and collect fees.

The report of the Committee on Membership and Ethics was presented, and, after considerable discussion, resulting in a number of amendments, it was adopted.

Meeting adjourned at 6 o'clock.

#### EVENING SESSION, 8 o'clock.

Dr. W. George Beers, Montreal, read an able and interesting paper on "Dental Legislation," which deservedly brought to Dr. Beers a hearty vote of thanks from the members present.

Dr. H. T. Wood, of Toronto, then took up the subject at considerable length, and was followed by Drs. J. B. Willmott, Leggo,

Roberts, McLaughlin, and Lennox.

The new officers were, with considerable ceremony, conducted

to their respective positions.

The retiring President, Dr. Pearson, of Toronto, then delivered the annual address, in which he dealt very ably with many matters in reference to the education and training of the dental student. The paper was listened to with interest and profit by an appreciative audience.

Dr. Ward followed the paper with a few remarks.

At this juncture Dr. Woolverton brought in a notice of motion to add a clause to the constitution providing for the appointment of auditors.

Moved by Dr. J. G. Roberts, seconded by Dr. F. J. Brown, that the following members be a committee to consider amendments to the Dental Act, and report at the meeting to-morrow night: Drs. Lennox, Leggo, Woods and Beers.—Carried.

The meeting then adjourned.

## WEDNESDAY MORNING, 9 o'clock.

A paper on the "Treatment of Deciduous Teeth," by Dr. W. A. Leggo, of Ottawa, led to a lively discussion of the subject by Drs. Roberts, Spaulding, Johnson, Klotz, McLaughlin, and J. B. Willmott.

The notice of motion providing for the appointment of auditors was then considered, and carried.

The President accordingly appointed Drs. Bennett and Sudworth as auditors.—Carried.

Moved by Dr. W. E. Willmott, seconded by Dr. Eidt,—That the Committee on Constitution hand over to the Secretary a copy of the constitution and by-laws as adopted, and that the Secretary have printed 600 copies of the same, and have sent one copy to each licentiate of the Province.—Carried.

Dr. J. C. Roberts, Brampton, then read a paper on "Root Filling," and at once the smouldering embers of old fires were stirred into new life, and such materials as oxy-chloride of zinc, gutta percha, and saturated cotton were held up to the professional gaze by Drs. W. E. Willmott, C. N. Johnson, J. B. Willmott, and E. H. Eidt. Dr. Roberts closed the discussion.

The report of the committee appointed to propose some amendments to the Dental Act was then brought forward, and on motion of Drs. Lennox and Kilmer, it was received. The Association then considered the report, and on motion of Drs. Lennox and Roberts, it was referred back to the committee.

The meeting adjourned.

#### WEDNESDAY AFTERNOON, 2 o'clock.

Dr. C. N. Johnson read a paper on "The Preparation of Cavities," in which some valuable information was given. Special attention being called by the essayist to the preparation of the cervical margins of proximal cavities. Dr. J. B. Willmott and Dr. W. George Beers added some further points on the subject.

Dr. Johnson then read his second paper, "A Plea for Gold," in which he set forth the many advantages of gold filling over the plastics, and strongly urged the dentists, especially those practising

outside the cities, to endeavor to educate their patients up to the standard of using gold more generally in bicuspids and molars.

Dr. H. Kilmer, St. Catharines, read a carefully prepared paper on "Pyorrhea Alveolaris."

The disussion was opened by Dr. A. W. Spaulding, and continued at some length by other members.

#### WEDNESDAY EVENING, 8 o'clock.

The Treasurer, Dr. A. W. Spaulding, presented his report, which was received and adopted.

The Auditors' report was also received and adopted.

The Committee on Proposed Amendments to the Dental Act then brought in its report, which was read by Dr. Lennox. On motion of Drs. Brown and Roberts, it was received.

Moved by Dr. Willmott, seconded by Dr. Lennox, that Dr. Woods' name be struck off the committee.—Carried.

Moved by Dr. Lennox, seconded by Dr. Cleary, that the report be adopted.—Carried unanimously.

Moved by Dr. J. B. Willmott, seconded by Dr. Klotz,—That, in the opinion of this Association, it would be desirable to have each licentiate vote for all seven members of the Board of Directors.—Carried unanimously.

Moved by Dr. Brown, seconded by Dr. Cleary,—That, in the opinion of this Association, the annual fee should not be more than four dollars.—Carried.

Moved by Dr. McLaughlin, seconded by Dr. Leggo,—That, in the opinion of this Association, it would be advisable to extend the lecture course for students in dentistry from two to three sessions, and the term of pupilage in proportion.—Carried.

The following Executive Committee was then nominated by the President and elected by the Association: Drs. Brown, Oakley, Richardson and Klotz.

Drs. A. W. Spaulding, Toronto; O. H. Zeigler, London; and E. H. Eidt, Stratford, were appointed to constitute the Committee on *Membership and Ethics*.

Moved by Dr. Lennox, seconded by Dr. S. Woolverton,—That Dr. G. McLaughlin, Toronto; Dr. H. R. Abbott, London; Dr. J. G. Roberts, Brampton; Dr. W. A. Leggo, Ottawa; and Dr. F. Kilmer, St. Catharines, be a committee to prepare the circular to the licentiates, specifying the proposed changes in the Dental Act, Dr. McLaughlin as convener.—Carried.

Charges of violating certain clauses of the code of ethics of the

Association were at this juncture brought against three members of the Association.

Moved by Dr. Klotz, seconded by Dr. Lennox, that these charges be referred to Committee on Membership and Ethics.— Carried.

Dr. Woolverton, London, then read a paper on "Diseases of the Antrum," which was well received, and proved, from the doctor's illustrations, to be very interesting.

Dr. Brimacombe, Bowmanville, opened the discussion, which was carried on by several of the members.

It being past the time for adjournment, Dr. Richardson asked that his paper on "Sensitive Dentine" be not asked for. This was granted on condition that the paper be handed in for publication.

The meeting then adjourned.

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#### THURSDAY MORNING, 9 o'clock.

The Association, according to instructions, adjourned to the commodious offices of Dr. Bosanko, where the clinics were to be given.

Dr. C. N. Johnson, Chicago, gave a clinic of a gold filling in the merial surface of a lower second molar, using the hand mallet for condensing.

Drs. Spaulding and Lennox demonstrated the powers of hot nitrous oxide gas in soothing sensitive dentine, each using his own peculiar apparatus.

Dr. N. Pearson gave some practical hints on regulating, from models of cases in hand. Also the powers of a new local anæsthetic in extracting teeth was tested by a few of the members.

In the afternoon, the members were treated to a four hours' sail on Lake Simcoe, by Dr. Bosanko, of the town of Barrie. During the much enjoyed trip, speeches, votes of thanks, songs and yarns were freely indulged in by the entertained members.

R. G. McLaughlin, Secretary.

#### Eastern Ontario Dental Association.

By J. C. Bower, Secretary, Ottawa.

BROCKVILLE, July 2nd, 1891.

The twelfth annual meeting of the Eastern Ontario Dental Association was held in Brockville, on July 2nd and 3rd, 1891. Meeting called to order at 4 o'clock p.m. President Dr. J. H. Parnell in the chair.

The following members answered to the roll call: Messrs. George H. Weagant, Morrisburg; C. J. Brace, J. C. Stewart, D. V. Beacock, Brockville; G. E. Hanna, Kemptville; R. E. Sparks, L. Clements, J. H. Clarke, Kingston; C. A. Martin, J. Robertson, J. H. Parnell, F. Pearson, J. C. Bower, Ottawa; S. B. Chandler, Toronto; A. A. Stanley Burns, A. H. Weagant, Smith's Falls; H. S. Wood, Toronto; A. J. Smith, Prescott; J. H. McCullough, Perth; J. Mansel, Smith's Falls; W. G. Beers, Montreal.

The President, Dr. Parnell, delivered the following address:

GENLTEMEN,—Another official year has been told off on the dial-plate of time, and our annual meeting again brings us together for the purpose of deliberating on measures that will advance the best interests of our noble profession. Twelve years have passed since our Association was organized, and our first meeting held in the beautiful town of Brockville. At thatmeeting, if my recollection serves me right, Dr. Clements, of Kingston, was chosen our first president, and your humble servant, first secretary. Our membership roll then numbered some sixteen. As we take a retrospective glance over these years, we cannot but congratulate ourselves on the great advantage to ourselves and the profession at large of these annual gatherings, opening up, as they do, an avenue for the interchange of individual ideas and discussions on the improvements of modern dentistry. Since the establishment of these organizations we note with satisfaction the higher scope and increased study required to qualify a student to attain that degree of proficiency which is absolutely necessary to assure success in our profession.

During the past year certain amendments to the Dental Act were proposed, and submitted at the last session of the Ontario Legislature by certain members of the Board. I regret that such important legislation should have been enacted without receiving the serious consideration of the dental profession of Ontario. In April last, when that measure was before Parliament, we accidentally came into possession of a copy of the proposed amendments, in consequence of which a deputation went to Toronto, consisting of G. E. Hanna of Kemptville, George Hutchinson, J. C. Bower, Messrs. Pearson, Davidson, Ira Bower, Robertson, Armstrong, McIlhenny and myself. The deputation were cordially received by the Hon. Minister of Education, before whom we stated our case, Drs. Willmot and Wood, with their solicitor, being present. It appears extraordinary to me that such a measure should be framed and laid before Parliament, without the knowledge of the Secretary of the Ontario Board. But we have it on their own authority that

such is the case. We might reasonably ask who are the authors of these amendments to the Dental Act? In addition to this very important matter, there are other questions pertaining to our pro-

fession which will be brought before you.

Before closing, I desire to tender the members of this Association my sincere thanks for the honor they have conferred on me by electing me your president for the past year; and, I might say, that the best interests of the Association and its future usefulness, largely depend on the efforts of its members working in harmony together, and I trust that the result of our deliberations will tend to promote and foster a lively interest in all that pertains to the advancement of our noble profession.

Dr. Charles Martin, after reading the circular which was issued

when the society was organized, read the following:

This is the circular issued which resulted in the formation of our Eastern Ontario Dental Association. Considerable enthusiasm was manifested amongst the members enrolled, and it was anticipated that nearly all, if not all, the dentists in Eastern Ontario would become members. Our anticipations have not been realized fully; however, much good has accrued from the efforts of the staunch adherents. By our union we have been able to cope with our western confreres (who, bye-the-bye, are composed largely of intellectual and social gentleman), in having a voice in the ministrations of our dental laws, and keeping one or two representatives on the Board of Directors of our Dental College. It has afforded us the means for discussing the rights of the licentiates, and a pleasing opportunity to exchange views regarding the progress and welfare of our important profession—a profession which is growing daily more and more of importance in the estimation of the public. Our meetings have, to a large extent, been the means of dispelling the little jealousies existing heretofore in localities, and somewhat modifying the claims of superiority of some individuals.

Still there are some who will not take any part in our proceedings unless they can be at the head; others, from timidity or other causes, do not try to lend active aid. Much valuable assistance is and has been lost to us for want of an effort on the part of many of our capable men; this has been proven in the past by the able contributions produced after much urgent persuasion. Then there are those who (I regret to say it), will not join any association of dentists, from fear of having to comply to some code of ethics, which might check them from taking mean advantage of their collaborators, such as condemning operations, or slandering, offering services for less fees, or making special concessions, always, of course, for special patients, and exceptional cases.

In their isolated position, they resort to menial condescensions, sacrificing professional dignity in acquiescing to unreasonable

demands from ignorant and arrogant patients, thereby lowering the status of the profession in the estimation of a portion of the public. Is there any pecuniary benefit accruing from such conduct? I question very much that there is: at all events it is but temporary; it cannot be lasting, as it taxes the dentist sorely. Each succeeding class of graduates from our college show an increasing tendency to elevate the standard or our profession, and greater harmony exists with regard to their conduct towards the public. May the spirit of co-operation go on increasing, then a uniform attitude towards our patients will certainly result, and be a benefit to all concerned. Let us continue our assemblies with increased numbers and enthusiasm. Crush out the feelings of jealousy that sometimes arise. Let us applaud the meritorious, and give full credit to those who show superiority of skill and evidence of inventive genius. We should show gratitude for their efforts, no matter how feeble they may be. There is always something to learn from those who contribute. If one cannot excel, he can at least attain equal proficiency to those with whom he associates, by conversation and observation. We should not look forward to our meeting as a task on our time and resources, but rather as a pleasant outing, a pleasing reunion, a happy meeting, and genuine recreation.

At this anniversary meeting I cannot refrain from expressing my gratitude and feeling appreciation, for the kindness shown to me by the members of this Association, and for the honors repeatedly conferred upon me. I know my incompetency to fulfil your desires as a representative; I feel my inability to represent you as you deserve; but, be assured, I have acted conscientiously in my endeavors to fulfil the trust confided to me.

Out of the many well educated graduates now joining our ranks, a better qualified representative will no doubt be chosen for the future, that our rights will continue to be guarded and protected with increased energy and ability.

Officers were elected as follows: President, J. H. Parnell, Ottawa, re-elected; Vice-President, C. J. Brace, Brockville; Secretary-Treasurer, J. C. Bower, Ottawa.

Dr. Beacock read a paper on "Caries," which was discussed.

One feature of the meeting was to draft resolutions petitioning the Board of Directors to amend the Dental Act.

A number of papers are promised for next year's meeting.

Anticipating from the circular that a lively and important discussion would follow, we engaged two stenographic reporters, intending to give a complete report of the proceedings. As it was apparent that a good deal of misapprehension existed, and as the

discussion became chiefly personal, and ended mostly in smoke, it is, perhaps, as well that the stenographers were a failure. Neither head nor tail can be made out of their report.

#### British Columbia Dental Association.

The First Annual Meeting of the British Columbia Dental Association was held in Vancouver, on July 17th, and continued two days. There was in attendance nearly all of the practising dentists of the Province. The following is the programme of the proceedings, which, together with the discussions thereon, which were lively and instructive, tended to make the convention both pleasant and profitable: Opening address, T. J. Jones, L.D.S., President; "Caries and Necrosis," A J. Holmes, D.D.S.; Clinic, "Bridge-work," W. R. Spencer, D.D.S.; "Implantation," A. R. Baker, D.D.S.; The Relation of Food to the Teeth," G. A. B. Hall, D.D.S.; "Advanced Practice," R. F. Verrinder, M.D., D.D.S.; "Dental Treatment of our Juvenile Patients," J. M. McLaren, L.D.S.; "Pyorrhea Alveolaris," C. H. Gatewood, D.D.S.; "Anæsthesia," Lewis Hall, D.D.S.; "Incidents of Practice," C. E. C. Brown, L.D.S.; Clinic, "Casting Aluminum Base," J. M. McLaren, L.D.S.

The following officers were elected for the ensuing year: Dr. T. J. Jones, Victoria, President; Dr. C. A. Jackson, Vancouver, First Vice-President; Dr. G. A. B. Hall, Nanaimo, Second Vice-President; Dr. A. C. West, Victoria, Secretary-Treasurer; Executive Committee, Drs. Holmes, Richardson, and Verrinder.

The next meeting will be held in Victoria, on July 18th and 19th, 1892.

A. C. WEST, Sccretary.

# Correspondence.

## Our Defective Act of Incorporation.

SIR,—I wish to direct the attention of the Ontario Board, to a few facts anent the securing of protection for the dentists of the Galt district, against the disgraceful conduct of some licentiates, who have offices and who do business in this part of the Province.

On the 15th of November last, a party not having a license was up on three charges of practising illegally, upon two of which he was convicted, with costs amounting to \$48. He then inserted a letter in a local paper, to the effect that for the next thirty days he would extract teeth *without charge* and without pain, by the use of his new local anæsthetic. Many went to him, some of whom

left money at the house. At the same time he performed other operations, but the dentures were generally inserted by another party, who is an L.D.S. In January of this year he was again before the Courts, but we were defeated, on the grounds that the money was paid to his wife, on the door-step, as a gift! He also defeated us on three cases from the country, where he and the witnesses swore that they paid only for tooth powder! A student went to him; had two fillings inserted, and paid him \$1.50; laid the information and swore to the facts. The defendant swore that he was not paid, and as it was one man against another, he was acquitted. Others for whom he operated, after telling the detective the amounts they paid, swore that they had left nothing.

On the whole, this party was brought before a magistrate on thirteen different charges, three of which came up for a second hearing, and we have won only three, and those before he was as well acquainted with the Act as at present.

Our witnesses are adverse to swear against a man who tries to make the public believe that other dentists are persecuting him; and, unfortunately for public opinion, the public do not realize the injury that sympathy with such illegality can do to our profession, as well as to themselves. It is strange how otherwise intelligent communities, do not seem to appreciate our desire to enforce a law, which has as much reason to be respected as any other law. It is not strange why a few men should be so base as to willingly drag their profession through the mire. They make a few more dollars, and to them that is better than any code of ethics, or the respect of their confreres.

Is it not the duty of the Directors of the College to appoint a good detective and bear the expenses of earnest prosecution? What is happening here may happen in every other district of Ontario, and we do not ask for any favor from the Board to which we, like other licentiates, are not entitled.

Yours truly,

ONTARIO L.D.S.

[This is a very glaring case of wrong and injustice, and we understand that it will have the special attention of the Ontario Board.—ED.]

## Editorial.

#### Ontario and British Columbia Dental Associations.

The next issue will contain some of the papers read at these meetings. Essayists wishing extra copies should notify the publisher early next month.

#### Read the Advertisements.

The advertisements in a dental journal are an education. Unfortunately, some few dentists read nothing else! Some, perhaps, never look at them. Especially where they represent varied and competitive interests they are of value. It is the next best thing to walking through the depots. Our advertisers have a claim upon our readers.

#### Florida vs. New Brunswick.

Even Florida (May 25th, 1891) does not consider dental diplomas sufficient to entitle any one to practise dentistry in that. State. The constituted Board of Examiners grants certificates to all applicants "who have obtained a diploma from a reputable dental college, and who pass a satisfactory examination" before the State Board.

#### The Professional Outlaw.

Some men are so constituted that they can no more act honestly than they can fly. The very attempt makes them ill. Apart from their innate selfishness, their instincts as naturally run to knavery as the St. Lawrence runs to the sea. The Pythagoreans, who believed in the doctrine of metempsychosis, were, perhaps, right after all; for do we not see specimens of humanity, even in our own boasted age of civilization, into whose being seem to have been transmigrated the instincts of the serpent and the hog. It matters not into what occupation they enter, they are sure to do something dirty. They could not sweep a chimney, or clean a

drain, without disgracing even the self-respect that chimney-sweeps and the lowest laborers possess. They are made of the sort of clay that prefers to reach an aim by crooked means, rather than by scrupulous and honorable conduct, even if the latter were to give them half the trouble. One might despair of the profession were it not for the fact, that the vicious and unscrupulous are not peculiar to the healing of the body any more than to the healing of the soul. There are rascals in the very pulpit. We must expect them in medicine and dentistry.

There is always this consolation—that honesty and unselfishness come right in the long run. It pays to be a gentleman. spite of theatrical training, it is doubtful if ever a low-minded man could act the gentleman, no matter how much he tries. The cloven foot always appears under the mask of gentility. easier for a true gentleman to act the knave. We must remember this in dealing with the professional outlaw, who voluntarily puts himself outside the pale of professional respect by reason of his instinctive immorality. Let young men entering practice, pause and count the cost of playing the role of the advertising liar and fraud. However much the public may be humbugged, the profession know just how to measure transgressions of the code of ethics. A gentleman, however humble, may rise to the highest honors his confreres have to bestow. An advertising fraud, though he repent in sackcloth and ashes, can never regain the respect he deliberately ignored.

## "Waiting To Do Something Great."

Thousands of able writers never publish anything, because they are waiting for the time and opportunity to write something great. The result is, they are no nearer their ambition when they die, than when they were born. A quaint friend of ours has a hobby in the shape of an affection for the kangaroo. He owns a pair of them. He is a practical artist in prosthetic dentistry. If you visit his laboratory, you get many hints that would enrich the pages of any dental journal. But he has never published a line, either on the kangaroo or on dentistry, though he has over a hundred pages of original manuscript on the teeth of his pet Australian mammalia One day he demonstrated to several of us the beauti-

ful and curious extension of the pulp chamber in an incisor to the tip of the crown, and showed us how nature had given man greater protection than the kangaroo, in the thickness of the hard structures at this point. He intends "some day" publishing his manuscript, but he has kept it twenty years, and will likely destroy it or leave it for posterity. We know that "great minds run in circles," and if one has a new idea, and hopes to get credit for it, he must out with it in the rough, and not wait for the "divine afflatus," or for time to polish. Procrastination is the thief of ideas as well as of time. A claim to priority is only insured by prompt publication.

We imagine that most of us have ideals we can never reach. Most of our readers are reluctant to contribute, because they wish to do something elaborate. Our journals are filled with an immense amount of padding; ideas spread out over a dozen pages, when they could be embraced in as many lines. One of the best thinkers in the profession is a mighty sinner in this respect. Whatever subject he writes about, however practical or scientific, he always starts back at the time of the Deluge. He is engaged on a monograph on the teeth of Adam and Eve. It is all very well to have ideals and to strive to attain them. We have had an ideal of a dental journal for twenty years; but that did not block the birth of this bantling. Let us all do the little at our hand, and by-and-by the great may come. If it does not come, it is, at least, some satisfaction to feel that we have done something to make it possible for our successors.

## Post-graduate Courses.

With a practical zeal which characterizes our Western friends, the Chicago College of Dental Surgery, of which Dr. Truman Brophy is Dean, inaugurated the above course specially for busy practitioners who want to keep up with the times, and for graduates who realize that there is more to learn after than before graduation. We are glad to learn from several sources that quite a number of our Canadian dentists in Ontario will attend the session next spring. It will only last one month, and, while not intending, by any means, to take the place of the regular winter course, it will be of inestimable value to practitioners who cannot afford a prolonged absence from the office.

## What Is a "Quack?"

Occasionally, a dentist who has qualifications that might make him respectable, decides to wear the mask of the charlatan. Those who know him, are willing to admit that he is not a born rascal, however close he comes to being a born fool. No one asserts that he is an out-and-out impostor. Allowing for want of experience, no charitable confrere—and there is a vast amount of kindly feeling towards young beginners-would put a bar in the path of honorable ambition. Still, when one who has the golden opportunity of a respectable career before him resorts to public bombast, undue assumption of superiority, and other tricks of the ignorant pretender, he has, among all honorable practitioners and societies, been classified as a Quack. His geese may really be all swans, and with his much cry there may be much wool, but just as sure as a man apes the arts of a Quack, so will he eventually behave. The actor who always takes the villain's part in the play, insensibly degenerates in his morals. However skilful a dentist may be, if he plays the empiric he will glide into its regular practice. Exaggeration easily ends in unconscious, if not conscious, lying; and boasting is so kin to falsehood, that the professional boaster is always regarded, like Montaigne's page, as a man "whois never found guilty of telling the truth!"

A Quack, according to the dictionaries, is "one who boasts; who talks noisily and ostentatiously; who practises the arts of quackery." He may be "a boastful pretender to medical (or dental) skill he does not possess; an ignorant practitioner;" or he may be fairly able, and yet be quite as much of a Quack as the bona fide impostor. He resorts to lying when he declares that he can perform operations no one else can perform; that he possesses improved methods no one else can procure; that he can give ten dollars' worth for one, and generally perform miracles upon dead bones.

Just now there is a wave of quackery across the Dominion, and some *lie*-centiates are using the theatrical and circus arts of attracting attention, so well known to knaves who practise medicine and dentistry. We learn of several glaring cases in Ontario, of men whose decency no one would have impugned a year ago, descending to the most ignoble devices, to bring themselves before that

portion of the public, who stand with open mouths ready to be duped. A man may be a gold-medallist, but if he "practises the arts of quackery" he is a Quack. He may have apostolic benedictions poured upon him every hour, but if he says he alone can do operations which every ordinary dentist has been doing for ten years, he is a Liar—and he knows it. The public should know it too.

## Code of Ethics, Article II., Section 3.

"It is unprofessional to resort to public advertisements, cards, hand-bills, posters, or signs calling attention to peculiar styles of work, lowness of prices, special modes of operating, or to claim superiority over neighboring practitioners; to publish reports of cases or certificates in the public print; to go from house to house to solicit or perform operations; to circulate or recommend nostrums; or to perform any other similar acts."

Bearing upon the maintenance of professional character among practising dentists, this section of the code adopted by the American Dental Association in 1866, ought to meet with the approval of all right-minded men. We confess, however, that we do not quite sympathize with the use that has been made of it, in its application to the few who have risen above the ordinary run of dentists, as inventors and discoverers. The late Dr. McQuillen, then editor of the *Cosmos*, opposed the code at the above convention, as "unnecessary for gentleman, and its enforcement impracticable upon those who were not," and at a subsequent meeting of the Odontographic Society of Pennsylvania, a resolution was unanimously adopted, declining to accept it, upon the ground that it was an interference with the independence of local societies.

Circumstances may occur when it would, perhaps, be wiser to relax its stringency. For instance, a dentist, after years of investigation and the expenditure of thousands of dollars, unaided in any way by confreres or societies, perfects or invents a boon to the profession and the public. While rivals, it may be, in the same town, are reaping the reward of selfish devotion to practice and money-making investments outside of dentistry, he has impoverished himself and his family while in his researches. He does not propose to monopolize his discovery. His practice has been

seriously curtailed. He loses his patients while he is in his laboratory. To ask him to give away his discovery to men who neither helped nor appreciated him is unreasonable; it is uncharitable. A rival who invents a new mowing machine is perfectly "proper," though he may never contribute an idea or an implement to his profession. There are scores of petty "inventions" which have no merit, and whose authors cannot pretend to be placed side by side with a Barnum or a Land. But when a dentist devises or discovers something which is generally recognized as valuable, and which his confreres are glad to obtain; when societies ask him and pay him to give clinics, and, in spite of arrogant sneer, he demonstrates its value, his effort merits open and fair encouragement. If the framers of the code intended it otherwise, why was a resolution offered in 1867, to give a prize of \$5,000 to any experimenter who produced a permanent white plastic filling? In 1870, at the Nashville meeting, Prof. Buckingham offered an amendment to the constitution, as follows: "No person shall be a member of this Association who holds a dental patent, or is or shall be interested in one." The motion was lost. At the same meeting \$1,000 was voted to the late Dr. Barnum for his discovery of the rubber dam. Dr. Barnum died poor. If we are to expect our discoverers to spend their lives and money for our profit, we must devise some better way of remunerating them than paltry testimonials and votes of thanks. The story of Dr. Barnum is not an isolated one. Some of the most critical and arrogant disparagers of patentees never did an unselfish thing for the profession. When an inventor is solicited and paid to exhibit his new ideas, he should at least not be treated like a malefactor, whose genius we are hungry to use, but whose "methods" may not square with our convictions. If poverty is to be even the chance reward of genius, codes of ethics are tyrannical. Members of societies who depart from the code, have no right to complain if they are forced to conform to them, or forced to retire. But it seems to us, that an inventive genius merits some substantial reward for the labors of a lifetime. shall we encourage this, and yet keep such men in our societies?

# Abstracts from the Journals.

#### The Use of Air-Chambers.

Dr. William Wallace, of Glasgow, has an interesting article on the use of suction cells, in the February number of the Journal of the British Dental Association, which contains much important information on this subject. He starts off by pointing out that air-chambers are not really vacuum chambers, because the mucous membranes contain gases with which these cavities are always necessarily filled. If it were possible to make them vacuum chambers, the palate would have to withstand a force equal to that which would sustain a column of water thirty-two feet high, and in cross-section equal to the area of the air-chamber. struction of an upper denture the most important point, he claims, is to make the circumference, and not the centre of the plate, the part which rests firmly against the tissues. Air-chambers, while intended for a different purpose, bring about this result incidentally, and in constructing plates without them provision must be made for relieving the roof of the mouth from pressure. may be done either by reducing the height of the alveolar ridge in the model, or heightening the level of the palatal surface. Such a precaution is rendered necessary by the fact that there is a hard ridge in the median line of the palate, and that a plate made to fit an exact model of the roof of the mouth will always rock more or less, in proportion to the amount that the other tissues of the palate yield more readily than the hard median part. The growth of the palatal tissues into the cavity of an air-chamber, he attributes partly to the fact that at that particular point they are subject to no pressure from either the tongue or plate, but principally to the irritation due to accumulating mucous secretions and food debris. These set up an irritation which leads to chronic inflammation and hypertrophy. Such a growth should not be used in order to hold a plate in position, and to bring it about in order to prevent lateral motion, is to make the palate fit the plate instead of the plate fitting the palate. To retain an upper plate in position, he looks upon as a purely dynamical problem. Equilibrium having been obtained by having the circumference of the plate press hardest on the palate and alveolar ridge, a number of forces combine to hold it in position. It may obtain a mechanical grip of the upper jaw by catching over the outer margin of the alveolus —the stickiness of the saliva and capillary attraction also assist and if the extreme edges fit tightly to the gum, downward traction

is resisted chiefly by suction. To secure these forces at their best the plate should fit closely at the edges, and be free at the centre, but not so free as to permit the inclusion of any air when the piece is pressed home. That there should be no air between the palate and the plate anywhere, follows from the law that the volume of gases varies with the pressure. In the case of a suction plate, when we relieve the pressure of the atmosphere by dragging on the plate, the air in the cavity expands, bur offers no resistance. If, however, the cavity had been filled with glycerine, or had there been no air-chamber, the expansive force of the contained air would need to have been exerted to remove the plate.

#### Influence of Second Dentition.

In the International Dental Journal for June, Dr. Newton, of Montclair, N.J., treats of the physiology and pathology of the second dentition from the standpoint of a practising physician. The period of life from birth to the second dentition he divides into three periods of about seven years, viz., first, until the complete eruption of the first four permanent molars; second, until the complete eruption of the second four permanent molars; and third, until the complete eruption or the third four molars. The first period, i.e., from birth to seven years of age, from a physiological standpoint, is the most important period of human life. During this period the child masters the use of his senses, learns to reason, learns an elaborate and difficult language, and frequently has attained considerable proficiency at school. At its conclusion the brain has attained very nearly its growth, and its subsequent enlargement is very slow. During the second period the rudiments of education are secured, the character is largely formed and a fair indication is given of the way in which a child is likely to turn out physically and mentally. This second period is a critical one, and many of the maladies peculiar to it are due to the second dentition. What are known as "mucous diseases" are oftener due to second dentition than anything else. The child becomes emaciated and weak, the skin becomes sallow, dry and rough, and the pulse feeble. The emaciation and debility suggest tuberculosis and frequently cause much alarm. Although mucous disease is not dangerous in itself, it predisposes to other more fatal diseases. Diarrhœa is a constant attendant on second dentition, and usually arises in the spring or fall. The troubles commonly attributed to worms, the approach of puberty, malaria, etc., he believes in most cases can be traced directly to the eruption of the second teeth. Paralysis is frequently caused by teething, the recovery in some cases being rapid, while in others the limb atrophies, and cases are on record

where the disease has gone on to asthma and palpitation, ending in coma and death. In young girls the cruption of the second molars is often associated with hysterical symptoms, which are usually attributed to the approach of puberty. Indeed, the arrival at puberty itself may be retarded or rendered painful and difficult by interference with dentition. Hysteria, chorea, and even epilepsy are often cured by lancing the gums over erupting molars, and it is even held by some that difficult or retarded menstruation is frequently caused by difficult dentition. Dr. Mulveany says that he was frequently consulted by anxious young husbands because their youthful partners did not conceive. He always assured them that when their wives got through their teething they would have children, but that they were not likely to become mothers until quite over the infirmities of childhood. In closing his article, Dr. Newton urges that the development of the teeth be promoted by exercise in chewing. He believes that the teeth of our people are constantly growing better, and that when the signs of a feeble constitution are more easily read, and the laws of health are better understood, the Americans will become the finest race on the face of the earth.

## Resetting Teeth.

In the Ohio Journal of Dental Science for June, Dr. E. H. Raffensperger, of Marion, Ohio, outlines a very ingenious method of resetting the teeth of an old rubber plate on a new one, whereby much of the labor is saved, and the process made much less disagreeable than when performed in the ordinary way. In the case of a full upper denture of gum teeth, for instance, the articulation being correct, he takes an impression of the jaw and dismisses the patient, that being all that is required. He runs the cast in the usual way, and to it fits the outer rim of the plate, after having cut away the entire palatine portion with a fine saw, run along as near to the pins as possible. The rubber above the gums he also files away, leaving the teeth intact on a thin band of rubber, which fits the cast exactly as it fits the mouth. The waxing up and flasking is done as in an ordinary case, the plaster in the lower part of the flask being only allowed to run up to the gum sections, so that the teeth will all stay in the upper part. Before opening the flask is well heated, and, after the wax has been removed, the upper half is boiled for some time, when the old rubber will have become thoroughly softened, so that it can easily be removed with a pair of pliers, by taking hold of it at the heel. The case is then packed, vulcanized and finished in the usual way. The advantages of this method are that it requires less work than the usual plan adopted, that the articulation remains unaltered, that the pins come out nice and clean, and that there is no odor during the operation.