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Dominion Dental Journal

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No. 2.

Original Communications

PORCELAIN WORK.*

By Dr. F. J. Ross.

So great has been the demand for invisible dentistry in these modern times when our patients give so much attention to their dental organs, that a new interest in porcelain work has been forced upon the profession.

How numerous are the fair sex who are beautiful to gaze upon until they open their mouths and dazzle you by a dozen enormous gold fillings, or worse than that, stagger you with a full set of artificial teeth, arranged in a beautiful row.

Porcelain work has come to the rescue of such unfortunate people, and now broken down teeth can be restored to their former appearance to such a degree that imperfections can scarcely be detected, even by the professional eye.

Porcelain work, skilfully done, has no equal for durability and artistic effect, but when unskilfully done there is perhaps no class of work that is apparently more discreditable to the operator. Like every other branch of dentistry, it has its imperfections, and its uses are limited, but it has great possibilities and a brilliant future is in store for it.

While the number of dentists practising porcelain work is steadily on the increase, there are yet very many who are opposed to it, some of whom have experimented with it in an unskilful and careless manner, and had the inevitable disappointing results; and some, having seen the unskilful work of others, have said harsh things about it, emphatically denouncing it for all time. Yet this

^{*} Read at eighth annual meeting of Ontario Dental Society, Toronto, 1896.

opposition to porcelain work one cannot altogether condemn, for nothing is more deleterious to the best interests of dentistry than a too sudden acceptance of new ideas and methods, and their introduction into daily practice, before they have been thoroughly tested. The abuse of amalgam and crown-bridge work on their introduction may serve as examples.

Another cause of the revival of porcelain is the present degree of perfection in the manufacture of the various bodies and furnaces for their fusion. We have now eight or ten standard high fusing bodies which by mixing produce an infinite variety of shades,

For those who prefer low fusing bodies the Downey outfit

furnishes a wide range of shades.

The furnace which I have always used, and which has given entire satisfaction, is Dr. C. H. Land's "Midget" furnace, which consists of an open flame and platinum muffle. In this furnace a heat of 3,300° F. can be obtained within five minutes of the time of lighting. This furnace is very convenient for small work like

inlays, crowns and small bridges.

From the beginning of porcelain work the most conspicuous drawback has been the difficulty and uncertainty in the production of heat, and that is one reason why continuous gum work, particularly, has not been more popular with the average practitioner. For this class of work Dr. Land's "revelation" furnace is a wonder. It can be operated with crude petroleum, refined oil, gasoline, or ordinary illuminating gas, and requires no forced draft. In this furnace each baking in the continuous gum process requires but ten minutes, thereby reducing from hours to minutes the time required for this heretofore long and tedious process.

The latest and best of all is the electric furnace. Perhaps the most complete one in operation at present is that invented by Dr. Levitt E. Custer, of Dayton, Ohio. It is very small, scarcely larger than an ordinary vulcanizing flask, easy to operate, and its chief point of superiority over other furnaces is that being electrically heated it gives rise to no products of combustion, thereby avoiding absolutely what is known as "gassing." Then the heat is constant and easily regulated by means of a rheostat, and the furnace is free from noise and odor, and radiates but little heat about the

room.

The uses of porcelain are decidedly various, consisting of inlay work, crowns, bridges, continuous gum work, besides many forms of repairs and alterations, such as fusing pins into broken teeth or blocks, repairing gum sections, altering the contour of teeth and sections, making two or more blocks continuous, changing the shade of teeth with mineral stains, and painting gold fillings on artificial teeth and crowns.

Of the minor operations in porcelain work, the inlay is perhaps-

the most difficult, indeed, the insertion of a good inlay is one of

the most difficult operations in dentistry,

Success in the insertion of porcelain inlays depends not only upon the mechanical skill of the operator, but upon his judgment as to where they are indicated. They are especially indicated in labial cavities of incisors, cuspids and bicuspids, and large approximal cavities in incisors and cuspids, especially if the teeth are of inferior structure. Small approximal cavities are to be avoided, unless an unusual amount of access is obtained.

Some of the advantages of porcelain inlays are these:

1. They are inconspicuous.

2. Being set with cement, they add strength to frail teeth.

3. They are poor conductors of heat and cold.

4. They dispense with that inevitable nervous strain associated

with long continued gold operations.

The method of procedure is this: (In the absence of practical demonstrations it may be difficult to follow this, but I will try to be as clear as possible.) After reasonable access to the cavity is obtained it is excavated in the usual manner with no undercuts, and walls almost parallel. The margins of the cavity must not be bevelled, but with great care made sharp or perpendicular, i.e., at right angles to the floor of the cavity. The objection to bevelling the margins is that the edge of the filling will be too feathery and will lap all around, and if any after trimming is done, a gaping joint of cement will be exposed. Now with a matrix of thoroughly annealed platinum foil, gauge about 50, of sufficient size to more than cover the aperture, an exact impression of the cavity is taken by placing the foil flat over the entire cavity, holding it in position with the thumb and finger of the left hand, while with an ordinary steel burnisher it is pressed into the cavity with the right hand, great care being taken to avoid lapping the platinum at any point. Now remove this platinum impression with pliers, and with a fine sable brush half fill it with porcelain of proper shade, mixed with clean water, gently tapping the pliers to make the porcelain reach every corner of the matrix. The water which comes to the surface on tapping is then removed by placing the work on a cottonnapkin. Place this on a platinum tray covered with silex at the aperture of your furnace, until it is thoroughly dried, and any foreign matter, such as blood or saliva is burnt out, then place into the furnace until it is imperfectly fused or "biscuited.," After it has cooled replace the matrix into the cavity and carefully burnish down the edges again; and just here is where carelessness is most disastrous to your filling. The platinum must be perfectly burnished to the sharp edge, without any lapping, or your filling will be very imperfect. Now porcelain is again applied, making the desired contour, and the filling is baked until glossed. If, after. this second baking there are any evidences of shrinkage of the porcelain and platinum at the edges, again place the filling in the cavity and burnish down the platinum, and after adding porcelain

bake a third time. This is frequently necessary.

Now remove the matrix with a pair of fine pointed pliers, commencing at the edge and working to the middle to avoid chipping the edges. As a last step, with a diamond or rubber-and-corundum disc, cut a groove around the entire cavity portion of the filling, parallel with the edge. Now apply the rubber dam whenever possible, and with a good cement (Justi's preferable) mixed to a creamy consistency, carefully place the filling into position, and after about fifteen minutes protect the edges from moisture b, a thin coat of Gilbert's varnish and melted paraffin over that,

In very large cavities on the labial surface of incisors and cuspids, the shrinkage of the porcelain with the matrix after the first baking is sometimes so great that the filling will rock when placed into the cavity for the second burnishing. In a case like this simply break the porcelain in two in the centre and it can then

be pressed into position very readily.

Large tips and corners should have pins baked into them to extend (in the case of devitalized teeth) into the root canal, and in living teeth wherever your judgment allows you to drill without endangering the pulp. In the insertion of these pins I usually burnish the foil into the cavity as in ordinary cases and thrust the pin right through it into position in the retaining point drilled for it, then apply my porcelain to the matrix while the pin is in position, and after extracting the moisture carefully withdraw and bake.

The chief objection to all kinds of inlay work, i.e., the belief that the cement with which it is retained will wash out and leave an empty joint, is reduced to a minimum if skilful work is done and

joints are good.

The porcelain system has many advantages in the operation of crowning, and offers various means of overcoming difficult cases where "store" crowns are impracticable. Operators are few and far between who are skilful enough to fit a Logan crown to a root as perfectly as a porcelain crown can be made for the same case. Then the all-porcelain crown is exceedingly strong. The crowns that come back to us to be repaired are, in the great majority of cases, those with metallic backs which would appear on first thought to be the stronger of the two, but which are in reality very much weaker, because there is no perfect union between the metallic back and the facing, the porcelain being simply held in position by two small platinum pins. On the all-porcelain crown the backing and facing are perfectly fused together into one solid piece.

The most useful crowns made by this system are post crowns with and without bands, tube crowns and jazkets. Most of you are probably familiar with the method of making post crowns, but

the few brief points I give may be new to some.

The root is ground off flush with the gum mesio-distally and then made to recede beneath the gum on the labial and lingual sides, thus forming a sort of wedge. Now the root canal is reamed out and an iridio-platinum post fitted into it as far as possible, marking its length and allowing it to extend beyond the root about two or three lines. Cut out a matrix of platinum foil about twice as heavy as that used for inlays and a little larger than the exposed surface of the root, through its centre, force the post through to where it was previously marked, solder the two with a minimum amount of pure gold. Place the pin back into position and burnish the matrix perfectly to the root. Remove and bake around the extending pin a foundation of porcelain. Place back into position and again burnish the platinum to the edges of the root. Now select a vencer of proper shade, grind it to fit the gum and after adjusting to position with stiff body, remove the whole with pair of pliers, shape the crown as desired and then bake until glossed. Trim with sandpaper, disc where you think necessary, and cement into position with oxyphosphate or gutta percha. I usually leave the platinum on and scratch with a fine-pointed instrument for the adhesion of the cementing material. In cases where a band is desirable the root is trimmed off beneath the gum labially and left higher lingually, the same as in the Richmond banded crown, and the cap, of course, is made of pure platinum, all soldering being done with pure gold. The rest of the operation is similar to that already described.

The tube crown is easily and quickly made, and although it is perhaps not quite as strong as the one just described it has its own peculiar function. It is particularly indicated in cases where the root canal has become enlarged through caries or where the pin of a broken crown has been left in position in a root, and which you will all agree is not easy to remove. In the former case, the canal should be threaded and a gold or platinum screw dipped in thin cement turned into place, allowing it to extend about three or four lines beyond the root. While the cement is soft pack amalgam down between the screw and the enlarged root as far as possible, building up the root flush with the gum. When this has hardened you have a very strong foundation.

The first step in making the crown is to make a platinum tube to fit the projecting post by twisting platinum foil around it. Then cut out a matrix of heavier foil a trifle larger than the surface of the root, puncture it in the centre and slide it over the tube already on the post, withdraw tube and matrix and unite them with the

smallest possible quantity of pure gold. Now proceed as with a post crown. I can highly recommend this where a post of a broken crown has been left standing and the thought of taking out that

post gives you that proverbial tired feeling.

In the "jackets" we have the combined qualities of nearly all our reliable crowns and I think it scores more points of excellence than any that has yet been devised. Its use is indicated in restoring teeth that are ill-developed, irregular in form, misplaced or twisted in the socket, and in cases of badly decayed teeth where pulps have receded it can be used without destroying the pulp. In bicuspids it has all the advantages of a gold cap without its conspicuousness.

We prepare the tooth to receive the crown by grinding it to a conical shape, obliterating the cervical ridge and concaving the labial surface sufficiently to receive the porcelain facing used for the case. Fit to the cervical circumference a lap-jointed tube, gauge 30, slightly longer than the tooth and filled out mesially and distally to allow for the festoon of the gum. Grind out the lingual portion of the tube flush with the tooth with a lathe corundum wheel, to this portion fit a back of iridio-platinum plate of same gauge and solder with pure gold. Trim off the surplus of this plate and again fit to the tooth.

The next step is to grind off the labial surface, and if this is carefully done a thin film of platinum will remain which will prevent the body subsequently added from getting into the tube. Now this jacket is replaced upon the tooth and adapted to the surface of the stub by pressure with an old plugger and the cutting edge clipped off or turned up so that its length will be a little shorter than a veneer to be used. The veneer is then chosen, properly ground and placed in position on the face of the jacket, which has been covered with wet porcelain; after artistic relation with the other teeth have been noted, the jacket is seized with a pair of short tweezers and removed, great care being taken that the facing does not change position. It is then placed on the platinum tray on its side and baked, as often as is necessary, trimmed and cemented with oxyphosphate.

You will see another advantage of this in its being constructed so that in case of subsequent trouble easy access can be had to the

pulp in a direct line with the root canal.

For bicuspids the tube, of course, is not ground on the lingual surface but on the occlusal surface sufficiently to allow the soldering of an articulating cusp of iridio-platinum. The labial surface is ground as in other cases, the veneer placed in position and attached to the porcelain.

Time will not permit me to speak of bridge and continuous gum work, but I may say that the porcelain bridge has the advantage over gold from the hygienic standpoint. When small it is stronger

than gold work, but in cases where several teeth are to be restored the gold is stronger and much more preferable. It is particularly indicated where there is considerable absorption of process, when the lost tissue can be restored by the use of gum enamel.

In conclusion I will mention a few precautions that should be

taken by those who operate with this material.

1. Don't use too light a shade. This is a conspicuous error and shows up the operation to great disadvantage.

2. Remember that the color of the cement has conderable effect

on the shade of inlays.

- 3. Be careful not to overheat your work, as excess of heat destroys colors,
- 4. Don't use borax when soldering, but remember that pure gold and platinum are the noble metals and do not oxidize.
 - 5. Use fairly quick setting cement for inlays, and be sure and

mix it thin.

6. Absolute cleanliness must be strictly observed in all operations.

Above all, good judgment must be exercised as to where inlays should be used. Do not place them in cavities difficult of access and if gold or other materials can be used to better advantage by all means lay aside your porcelain for an appropriate case.

HOW I INDEX MY JOURNAL.

By A STUDENT, Toronto.

When my JOURNAL arrives, I take a full page of blank paper the same size, and make an alphabetical subject-index of each issue, precisely upon the plan used by the *Cosmos* and other journals. Indeed, I prefer to do it for myself, as it impresses the matter more firmly on my mind, and gives one practice in selection and discrimination. I inherited from my late father the complete issues of the Canada Journal of Dental Science and the DOMINION DENTAL JOURNAL, and I value them, as the history of the Canadian profession, as much as I value Dr. Kingsford's works, as the history of our Dominion. It is very interesting and instructive to take them down from their shelves, and go over the story of the organizations in the different Provinces, which are only recorded in our Canadian journal, and reflect upon the individual zeal of the laborers in our dental vineyards. However worthy other work may be, and all other work is worthy, that alone in black and white in our journals stands recorded. We cannot possess the lectures, and the actual work done for us as students by our painstaking

teachers, but in after years it is a grand thing to have something of our own, wherein some record of the work is placed within our reach. The field of the profession has its limits, but that of the JOURNAL has comparatively none. It is an educator and an inspiration in every office in every Province, and I urge my fellow-students to possess themselves of it.

SEVERE CASE OF HÆMORRHAGE,

By T. L. HALLETT, M.D.S., St. John's, Newfoundland.

Monday, September 21st, I extracted several teeth for a young man aged twenty; and having had severe hæmorrhage after previous extraction, I proceeded to at once pack the alveoli with cotton and tannin; the bleeding stopped at once and remained all right until the following Saturday morning, when one of the right superior bicuspids started bleeding; packed with cotton in tannin and antipyrin solution. In the evening bleeding occurred from the alveolus of the opposite tooth, and in spite of all I could do, with the help of the family physician, who administered the different hæmostatics and tonics, it bled excessively, with slight intermissions, for more than a fortnight. It left him very weak for some time, but otherwise no ill effects. A brother dentist had a similar time with the patient's brother last year.

SOME PECULIARITIES OF THE JAWS.

By L. P. HASKELL, D.D.S., Chicago, Ill.

There is in 95 per cent. of mouths more depression in the region of the left bicuspid than the right. The process is shorter on the left side than on the right, so that if the anterior teeth are arranged close to the gum they will be too short on the left when placed in the mouth.

In a majority of mouths the teeth on the left side of the lower jaw in the region of the cuspids are higher and more prominent than on the right. The left side of the lower jaw recedes farther from the median line than on the right.

Strange to say, I have found but few dentists who have observed these peculiarities. Who can tell the cause? I have a theory and so has Dr. Talbot, but would like the opinions of others.

Correspondence.

OUR CHICAGO LETTER,-No. 2.

By C. N. JOHNSON, L.D.S., D.D.S., Chicago,

To the Editor of Dominion Dental Journal!

Sir.—In considering the dental societies of Chicago the one which was named after the city must always assume prominence. The Chicago Dental Society is the oldest in the western metropolis, It passed the quarter century mark several years ago, and is strong in old associations and good work. It holds monthly meetings, except in July, August and September, and its proceedings are published regularly in the Dental Review. I recall vividly with what interest I used to read the discussions of this Society back in the early eighties before I came to Chicago, when they were published (I believe) in the Ohio Journal of Dental Science. They always seemed to me to have a freshness about them that distinguished them from the proceedings of any other society, and I have gone on to this day growing in admiration for the work done by this old pioneer body.

Since I have dropped so unsuspectedly into the use of the first personal pronoun in these letters, may I be pardoned a further breach by digressing sufficiently to say that the Chicago Dental Society holds an additional claim on my affections in being the first dental society I ever joined. It has honored me with the highest offices in its gift; it contains many of my closest personal friends, and the sum total of its benefits to me, let me hasten to add, can never be measured by anything that I, working never so faithfully for its best interests through the remainder of my professional life, can ever hope to accomplish for its advantage. Its traditions and membership are representative of the best elements in Chicago dentistry, and its influence for good has not been confined to its immediate environment, neither can it be computed by

its years of existence.

The Odontographic Society was organized in 1887 by some of the younger members of the profession who felt a natural hesitancy about taking part in the proceedings of the venerable old parent society. It was their ambition to have an organization where they might meet men of their own age, and freely discuss topics on which they did not feel capable of locking horns with the older war horses. It was organized by graduates of the Chicago College of Dental Surgery, and its membership was for a time confined to graduates of this school, but finally the meetings became so interesting that a request was made to admit others into the Society and enlarge its scope. This was done, and the Society now has the largest membership of any in the city. At the last annual report there were about two hundred active members. It is essentially a young men's society, and many a budding genius gets up there for the first time in public, and commences his career of swaying the future destinies of dentistry.

And let me pause to say, Mr. Editor, that the appearance of a young man on the floor in his initial effort before a society always holds for me a fascinating interest. My heart goes out to that young fellow, and I wish it were ordained unto me to be a power behind the throne to help him say the things he wants to say. course he is never able to express himself as he wishes in that first effort. He sees staring at him innumerable eyes, and he hears the thumping of a tremendous heart in his breast-in fact that precious heart of his suddenly takes on a series of the most extraordinary convulsions that carry it up and down, and back and forth, through the entire reign of his anatomy from the diaphragm to the anterior borders of the tonsils, so that the beautiful thoughts he had in his mind when he arose are scattered to the four winds of heaven. He is hardly able to breathe freely, let alone trying to speak. He says something, he scarce knows what, and then he sits down with his cheeks burning, his hands cold, and his lips He has two vivid impressions on his mind at that moment—the memory of how his knees knocked together while he was standing, and the conviction that he was a monumental ass for ever getting up. Then he begins to think of the things he might have said, and should have said, and the things he had intended saying. Let me hasten to assure him, if he chances to be reading this, that practice will remedy one feature of his failure —he will acquire the ability, after several attempts, to say the things he had intended saying. But let me in the same breath also warn him that he will never, no matter how old a warrior he may become in the battles of public speaking, be able to grapple with that greatest of all human bug-bears—the "might have been."

Ah, those things we should have said! How insignificant are all the things we have said to the few brilliant ideas we left unexpressed. I am probably, for my years, as old a sinner as most men in this habit of letting others hear my voice in dental societies, and yet I am prone to take the reader sufficiently into my confidence to confess that I seldom or never go away from a meeting where I have spoken without the haunting sense of humiliation and defeat on account of having overlooked the one

or two things needful to make my remarks worth the powder to blow them into the printed proceedings. I am often led to wonder if I shall ever succeed in curing myself of this infirmity, but the fact that I seem to grow worse instead of better makes me despair. The things I say seem so insipid beside the things I think when it is no longer possible to say them.

But to come back to the young man, and to indulge a little further along the line of personal impressions. I have said that I scarcely sympathize with a beginner in his maiden effort before a society, and I have always endeavored—and always shall—to encourage him under those trying conditions. It has fallen to my lot in my experence in society work to give and take some pretty hot shot in scientific discussions. Some of my best personal friends have been my most active opponents in these forensic skirmishes, and I have spared them not a whit when it came to the expression of a conviction on any debatable question. But never in all my experience as a speaker have I knowingly criticized a young man who had just appeared in his maiden effort. His ideas may be crude, his reasoning erroneous and his language halting, but his inexperience throws up a shield against which I cannot find it in my heart to battle. He is usually at such a time so sensitive of criticism, that it is little short of cruelty to weigh his ideas in the balance of debate. He is prone to take a well-meant expression of critical opinion in the light of a personal affront, and often retires from this first skirmish with feelings injured past the recovering point. We have not too many speakers and writers in our societies at best, and all encouragement should be given to the beginners. And yet in this connection let me whisper a word in the ear of these fledglings before closing. The first thing for a young man to learn in public discussions is that the mere questioning of his opinion on any scientific subject should never be construed into a personal attack. feeling is something apart from scientific opinion, and the beginner should early learn to distinguish them.

Enough for this time, Mr. Editor.

A GEM FROM A GENIUS.

To the Editor of DOMINION DENTAL JOURNAL:

SIR,—I consider you beneathe my notis, but in regard to your claim that if we put assistents on our patients thay wood be unfare to reglar students, and it wood be unfare to reglar lisentates, I guess you and me don't think alike. [Thank you for the compliment. Ed. D.D.J.]. You want just to show how it is unfare,

because what is a man to do who wants to run sum other show to make a doller, is he a going to shut up his door and take in his show-cases, and get no show, or is he a going to have sum assistents to put on his patients when hees out, and if he ain't, what is he a going to do. If ther were many more peple like you, and many who did like you, we wood have to turn stable boys.

Yours, ----

[And then you would be in the odor of your sanctified element. If there were many more dentists like you, or who "did" like you, it would be more professional and respectable to be a stable boy than a dentist. You would be more at home if you'd abandon your license to practise dentistry and get a job in a stable. Ed. D.D.J.].

WHAT ARE REPUTABLE MEN TO DO?

To the Editor of Dominion Dental Journal:

SIR,—During the present year (I am writing in December, 1895) you have given us repeatedly many good reasons why we should be more united as a profession. There is no better proof of the weakness of disunion than the condition of our profession to-day, dragged through the mud of quack methods by men who do not care for decency, for morals, or for anything but the dollar. Tell me what has brought about this state of affairs, not only in Toronto, but in almost every town of Ontario? And where is it to end? Do you suppose we will ever be able to raise our fees to the old standard again? And the question occurs, Are we to punish the public by giving them inferior services, or are we to punish ourselves and our families by being satisfied with inferior fees? As you very justly said, the more an advertiser lies, the more a portion of the public seem to like it. The public learn what they "know" from these advertisements. Are we to be forced by circumstances, to follow the lead of these advertising frauds? Tell us plainly, if a man has a family and himself to support, what is he to do, if he finds that quack methods are captivating his patients? He cannot live on air and ethics.

Yours,
PERPLEXITY.

[We expect a very interesting discussion, pro and con, on this subject.—ED.]

WHY NOT MAKE PROSTHETIC DENTISTRY A TRADE?

To the Editor of Dominion Dental Journal:

SIR,—Why not separate the "work" of making artificial sets of teeth from the science and skill required to save them, and let us have our laboratories, as we might have any other mechanical investment in which dentists can legitimately put their money, a distinct and recognized branch of a trade. The surgeon does not make wooden legs or trusses, but here is recognized a very necessary and respectable branch of manufacturing, in which trade prices and trade profits prevail. Unfortunately in our ranks we have a number of men, whose previous means of living brought them an income of from \$600 to \$800 a year, and who seem satisfied to do a peddling sort of practice, and work like slaves, in dentistry, for the same result! It is not necessary to write a treatise to show the futility of such practice. The man who does it ages before his time; he is

"Dipping buckets into empty wells, And growing old in drawing nothing up."

If we separate our mechanical from our operative department—leaving room for the exceptional cases which are highly profitable—if we receive patients who shop, and who have been educated by the methods of the departmental stores to expect bargains in teeth as they get bargains in boots, we can treat them on a different basis from patients who are profitable; we can "run" tooth shops and employ "assistants" at departmental store wages to take impressions and do the "work." If the public of Ontario and Quebec mean to take their education in dentistry from the quack advertisers of Toronto and Montreal; if they wish to be served in that way, why, let us accommodate them. We can treat our desirable patients otherwise.

IS THERE ANYTHING IN "CATAPHORESIS"?

To the Editor of DOMINION DENTAL JOURNAL:

SIR,—Any one familiar with the history of the many so-called "improvements" in dentistry for the last quarter of a century, cannot deny that while we have had improvements of a decidedly valuable character, we have also had some decidedly degenerate introductions quite as much in practice as in ethics. Most of us have only to recall the recollections of our past enthusiasm,

when, like the fools of the present time, we, also fools, rushed in where our wiser and cooler confreres stood smiling. Too many of us then, as now, thought that other people could do our thinking, and that inventors were infallible, and that the class of whom David spoke in his haste were all dead in spite of the French proverb, and so it made no matter. The fools rushed in to anæsthetics—occasionally killing somebody; they rushed into a lot of bases and bone fillings, and paraphernalia and fads, and it never occurred to them that they needed to improve their own minds and cultivate their own modesty. Oh, no! the bantams must crow, and crow they did and do.

Now I do not sneer at this class. They would be more admired by us if their motives were different, and if they had more caution. It is a foolishness to suppose that it is a merit to be early in the field with experiments. It is a suggestive fact that nitrous oxide was introduced into Canada by the leading quack; that the local anæsthetics, even vulcanite, etc., were brought into practice by quacks who knew nothing about them and cared for nothing, like our modern quacks, but their own selfish interest.

Cataphoresis is being handled just the same. The danger of too high voltage; the local effects upon the delicate tissues about the teeth; the risk of pulp death—that is nothing to the enterprising young man. He is one of the hereditary dentists who "never It is curious how men deceive themselves. It is not less curious why they deceive others. At the Chicago Dental Society meeting last October my friend, Dr. C. P. Pruyn, who is no mere composition of uneducated conceit and frantic faddism, denounced the boasts of "favorable results" which were being falsely cir-Dr. Pruyn has had every instrument, and has had culated. experience. While I freely acknowledge that there is "something good in cataphoresis," I wish to warn my confreres that there is, too, something highly dangerous in it, and that if it is a toy for careful men it is a traitor for fools. I will let Dr. Pruyn speak for himself.

Dr. C. P. Pruyn.—The subject of cataphoresis has been referred to this evening, and most of the reports of its use have been favorable. I think it is only just that we should report our unfavorable results as well as the favorable ones. I have had two or three different instruments in my office and have thoroughly tested them. All of them connected with the street current have given trouble, and whether it is the fault of the wire that goes to our building, I do not know. The manufacturers of the instruments have failed to solve the trouble. I desire to report a case where I filled a labial cavity in a superior central incisor, the cavity being only slightly under the gingival border, the clamp placed in position, nicely exposing the cavity. I applied the

electric current and the patient experienced some pain during its use. Upon the removal of the rubber dam I found that we had destroyed the gum tissue nearly half way up the root; we had burnt the peridental membrane, also leaving a portion of the alveolus exposed nearly one-quarter of an inch. Of course, this tissue sloughed after a little while, although we used the ordinary precautions to prevent it. I had the instrument-maker try and find out what the trouble was, but he has failed to offer a perfect solution of the difficulty.

In another instance I prepared a cavity in the mesial surface of a molar, adjusted the rubber dam, applied the solution in a similar manner to the case just reported, and we had the loss of a large amount of gum tissue. I report these unfavorable cases so as to give you the benefit of the mistakes I have made, or rather the failures I have had in the use of the cataphoretic obtunde. If any of you can enlighten me so that this trouble can be avoided, I shall be glad not only on account of myself, but for my patients.

Dr. Davis.—How high was the voltage?

Dr. Pruyn.—Not over fifteen volts.

Dr. Clifford.—What per cent. solution of cocaine did you employ?

Dr. Pruyn.—Ten per cent.

Dr. Clifford.—What kind of solution.

Dr. Pruyn.—Aqueous.

Dr. Wassall.—Did it cook or dry the tissue so that it appeared like a carbolic acid eschar?

Dr. Pruyn.—It had the appearance of a severe carbolic eschar.

Dr. Clifford.—Was the applicator attached to the clamp?

Dr. Pruyn.—No. There was a clamp on the tooth, however, and the applicator was held in the hand.

Dr. Clifford.—Do you think there was any possible chance of the current touching the clamp?

Dr. Pruyn.—It is barely possible, but I think not. The rubber holder came in contact with the steel clamp.

Dr. Wassall.—Where was the negative pole?

Dr. Pruyn.—The manufacturer has been trying to find out, but he was not sure. I have had the wire marked so I would know in taking it off and putting it on which was the positive and which was the negative pole.

A Member.—What instrument was used?

Dr. Pruyn.—The McIntosh. Then, too, Dr. Mawhinney has had several cases of electrical shock from the use of the cataphoretic current. Everything would be going along nicely, when the patient would suddenly receive a severe shock. He has tried to insulate every part which he thought would come in contact with the chair. It looks to me as though a cell battery would be

much more safe and reliable than to have the connection made with the street current. Several electricians say it is almost impossible to have the instrument connected with the street current and get satisfactory results. You know that our electric lights vary from time to time; they vary in intensity according to the amount of current used and turned off at some other points.

A Member.—Was it a case where the tooth was badly decayed? Dr. Pruyn.—No. It was only a small cavity on the labial surface of the central incisor, so that it was not necessary to reach up very high with the clamp.

DENTAL TRAVELLERS AND THE JOURNAL.

To the Editor of DOMINION DENTAL JOURNAL:

SIR,—I once remarked to Mr. S. A. Craige, the travelling representative of the S. S. White Co. in Canada, that I had known him for fifteen years; had met him in business in Canada repeatedly all that time, and that I had never once known him to "carry stories" from one dental office to another; to say even an unkind, much less a malicious thing, against either a dentist or a rival depot. I am free to say it has always been my experience of the representatives of the White and other American companies, however earnestly they push for business in Canada, that they confine themselves strictly to business principles. Mr. Craige might do you a service if he would instruct some of the travellers for one of our Canadian dental depots in the business of holding their slanderous tongues even as a matter of business tact, if not as a matter of morality. I have ceased to do business with men who make it their business, whenever they can, to depreciate and damage the only dental journal we have in Canada. I, for one, shall be very glad to testify in court, if you wish, and help to protect the publisher in his efforts to give Canadian dentists at least one Canadian journal. I do not object to the agents of this firm canvassing for a foreign journal. It is easily seen for what this is done. But the Canadian profession is not dependent in the smallest degree upon any one depot in Canada. We can get as good, and in fact better terms, from others. If a Canadian firm expect Canadian business they must not expect to get it by damaging a Canadian journal, either directly or indirectly. And I go so far as to maintain, as a legitimate and just matter of business, that Canadian dentists should not buy one dollar's worth from any dental firm in Canada or the United States which does not patronize the JOURNAL which it is our professional and business interest to maintain. This is perfectly consistent with journalistic

independence, and as for us, who are your readers and the patrons of the depots, we have a perfect right to make our purchases where and how we please. Each one of us is a co-partner in the JOURNAL. We directly share in the profits of its success. The more the advertisers do for it the more the publishers and editors can do for us. Why then should we not in this matter do justice to advertisers?

Yours,

Toronto.

LICENTIATE.

IS IT FAIR TO BOOM ADVERTISERS?

To the Editor of DOMINION DENTAL JOURNAL:

SIR,—Is it fair to ask your readers to confine their patronage to the dealers alone who advertise? It seems to me a very unreasonable proceeding.

Yours, * *

[You might as logically inquire if it is fair to try and make a Canadian journal pay expenses. You might as well say that to ensure the payment of our printer is "a very unreasonable proceeding." We have had numerous examples of the failure in Canada of literary and other journals which depended upon their readers for their existence. We have evidence of the immense success of such magazines as Harper's, The Century, Scribners' Monthly, and the great British weeklies, not to omit the British Medical Journal and other leading scientific papers since they got the large support of advertisers. What has been the result? scribers get the direct benefit in better periodicals. Each issue of this JOURNAL costs all the publisher gets for it from subscribers. It is the advertisements which give it a backbone. Do you suppose our advertisers give this patronage for the fun of spending their money? They do not object to rival firms advertising in the same issues. But they certainly expect to get a good deal more back in the way of business than their advertising costs. In asking our readers to give the preference to the dealers who advertise in this JOURNAL, we do so directly in the interest of

- I. The subscribers.
- 2. The advertisers.
- 3. The JOURNAL.

Why we should adopt any policy that would in any way benefit those who do not help us, and who do not help the profession to maintain the only Canadian dental journal we possess, would puzzle a Toronto lawyer to understand. To help those who help us is both "fair and reasonable."—Ed. D.D.J.].

New Inventions.

MASON'S DETACHABLE PORCELAINS.

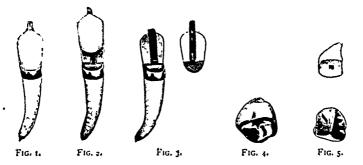
Mason's system of detachable porcelains does not in any way change the appearance of the perfectly made crown of to-day. About sixteen years ago, porcelain facings, soldered to gold bands, were put in general use, and closely after came the bridge work, very crude at that time, but advancing rapidly to the almost perfect construction of to-day.

Perfect but for one great fault, viz.: the uncertain condition of the porcelains after soldering and cementing in position. So long as the piece is in service, the porcelains are apt to separate from their backings. The profession has long seen the necessity of overcoming this annoyance, and there have been scores of efforts to produce detachable porcelains, but none have been invented, so that they could be manufactured and sold to the dentist for his immediate use.



Detachable porcelains are just as important to crown and bridge work as crown and bridge work is to dentistry. For a number of years Dr. Mason has been seeking a mode of constructing the porcelains so that they would be separate, but have a perfect contact with the backings, and be equal to the facings now in use. Through that effort he has produced a system of dovetail and groove to match, and a process of manufacturing whereby a porcelain is made independent of its backing. Any porcelain from one mould will fit any backing made for that mould, or universal in their use. A few illustrations will help you more readily to understand the process. Fig. 1 shows lower canine crowned and cemented to its root. Fig. 2 shows its porcelain sliding from its backing. Fig. 3 shows porcelain and backing separate. This illustrates the mode of constructing the anterior upper and lower six teeth. Fig. 3 also shows a metal dovetail fitted perfectly to the back of the porcelain, and extending a little beyond its cutting point; it also shows its solid backing with a groove to receive the

dovetail. The tooth with its dovetail and backing is fitted to the band by grinding out where necessary. Then the gold backing is waxed to the band, and after wax sets, the porcelain is removed from its backing by taking hold of extended portion of dovetail, and drawn from same. The crown is now ready to invest. First, the dovetail groove is filled with Mason's Groove Investment Material to keep out solder (which it will do perfectly), then the piece is invested as usual, letting the plaster come well over the cutting point of backing. The piece is now ready for soldering. Heat up and solder and cool off as quickly as you like. After removing from investment, see that the groove is thoroughly cleaned and dried; also dovetail on porcelain. Now take some chlorapercha, quite thick, fill groove, and press porcelain in position. Saw off (don't cut) the extended portion of metal dovetail, then finish as usual. Porcelain can also be cemented on with cement or sulphur.



For use as a dummy, articulate to position, remove and solder stop to neck of backing to prevent porcelain from slipping upward, replace on model, join parts with wax, then draw the porcelain and invest. The condition of the posterior teeth is changed semewhat. Fig. 4 shows a molar dummy, with its cusp and porcelain together, having the same general appearance of molar dummy in common use, with the exception that the porcelain takes up more space on its palatal portion, making a saving of gold.

Fig. 5 shows the dummy parted, giving view of the joining parts of the solid gold cusp, the upper buccal portions sloping upward and backward toward the ridge, and having on its face a square pin extending upward and forward. Fig. 5 also shows porcelain with square hole extending just above the cusp portion, upward and outward, to receive square pin fitted to cusp. After placing cusp and porcelain together, the dummy is ready to grind in position. Wax parts together, remove porcelain and solder. Cement porcelain to pin, and finish as usual.

The advantages to be gained by this method are many, and can only be appreciated by practice. The first advantage will be, that you don't have to place your teeth under the flame of the blow pipe. Second, you are not annoyed by the changing of color which takes place in soldering the old way. Third, you have a solid backing, without bubbles. Fourth, you can heat up your invested piece quickly and not have to take the usual care, and also cool off quickly. Fifth, the small amount of solder you have to use-just enough to join parts together. Sixth, saving your porcelain from being etched by borax. Seventh, you are able to fit a bridge, releasing the strain by cutting and resoldering, and not have the porcelain interfered with. Eighth, the most important of all, the amount of time saved to the busy dentist will equal about half the time spent in the old method, thereby saving time, temper and dollars. Repairing is but the matter of a few minutes. You put a tooth of mould No. 22 on, and if it should break, you may order an exact duplicate of same and slip it in position, keeping yourself in good humor and giving your patient the greatest amount of satisfaction.

The porcelains are of the S. S. White manufacture. Their moulds used for plate teeth are also used for our make of porcelains. We also supply bicuspid and molar veneers.

Proceedings of Dental Societies.

ONTARIO DENTAL SOCIETY.

The eighth annual meeting of the Ontario Dental Society met in the new College building, Toronto, on the afternoon of Wednesday, September 30th, 1896. The President, Dr. W. A. Leggo, occupied the chair. Dr. A. J. Marshall, Secretary, read the minutes of the 1895 meeting, which on motion were adopted. The President appointed Drs. Baird and Allen as auditors and Drs. Klotz, Kilmer and Frank as a Committee on Membership and Ethics.

The names of L. G. Campbell, Markdale; R. F. Morrow, of Peterboro'; and Chas. McKinley, Georgetown, having passed the Committee on Membership and Ethics, the Secretary was

instructed to cast a ballot for their election.

Dr. C P. Lennox, Treasurer, read his report, showing a balance on hand of \$59.25. On motion of Drs. C. E. Klotz and A. M. Clark, the Treasurer's report was received and placed on file.

The Secretary, Dr. Marshall, read a report of the work of the year with a communication from Dr. G. V. N. Relyea, regretting his inability to be present on account of illness in his family.

Moved by Dr. A. H. Allen and seconded by Dr. G. S. Martin, that the Secretary's report be received, and that an order be drawn on the Treasurer for the amount of the Secretary's expenses for the year, amounting to \$14.50. Carried.

On motion of Drs. Brownlee and Franks, the thanks of the Society were tendered Dr. Marshall for his efficient success as

Secretary during the year.

It was moved by Drs. Baird and Allen, that the Treasurer be instructed to try and induce all members to pay up their fees.

After some discussion this was laid on the table.

The election of officers resulted as follows:—President, Dr. W. A. Brownlee, Mount Forest; Vice-president, Dr. J. A. Marshall, Belleville; Secretary, Dr. G. S. Martin, Toronto Junction; Treasurer, Dr. C. P. Lennox, Toronto. Executive—District No. 1, Dr. R. E. Sparks, Kingston; 2, Dr. R. F. Morrow, Peterboro'; 3, Dr. J. F. Adams, Toronto; 4, Dr. C. E. Klotz, St. Catharines; 5, Dr. Ludworth, Ingersoll; 6, Dr. A. H. Allen, Paisley; 7, Dr. W. R. Hamilton, Stratford.

Dr. Brownlee gave notice that he would at the next session move to amend the constitution by adding section 7, "If any member neglects to pay his fee for two years his membership shall be void and his name struck from the roll."

It was moved by Drs. W. E. Willmott and J. F. Adams, that Dr. G. S. Martin be appointed to prepare a report of the meetings for the DOMINION DENTAL JOURNAL, and that the Secretary be instructed to employ a stenographer to take the proceedings of the Thursday evening meeting. Carried.

At the evening session Dr. Brownlee moved, seconded by Dr. Lennox, that the constitution be amended by adding section 7, "If any member omits to pay his fee for two years in succession his membership shall be declared void and his name struck from the

roll."

Moved in amendment by Drs. McLaughlin and Leggo, "That all members in arrears be notified by the Secretary that on payment of the present year's fee of one dollar they shall be considered in good standing." After an animated discussion the

amendment was put and carried.

An important discussion then took place on the proposal of the Board of Directors of the Royal College of Dental Surgeons to grant licenses to practise within a limited area to certain persons who have practised dentistry from ten to twenty-eight years without a license; these licenses to be granted in hope of putting an end to the demands for licenses to practise being made every year before the Private Bills Committee in the Legislative Assembly, and also that more ample powers respecting the penal clause of the Dental Act be granted to the Board by the Legislature.

After a spirited discussion, taken part in by Drs. H. T. Wood, J. B. Willmott, A. M. Clark, A. H. Allen, Smith, Brownlee, Leggo, Marshall, McLaughlin, Martin, Adams, and others, it was moved by Dr. Leggo, seconded by Dr. J. F. Adams, that this Society is in favor of the proposal of the Board of the Royal College of Dental Surgeons re legislation and the granting of limited licenses to certain persons. Carried unanimously.

The special business being at an end, Dr. F. J. Ross read his paper on "Porcelain Work." Dr. C. P. Lennox opened the discussion, which was taken up by Dr. Capon, who gave a description of anchoring large porcelain corners by means of a loop of platinum

instead of pins.

On Thursday morning, Dr. R. E. Sparks read his essay on "The Dental Perceptor," which proved to be timely and practical. Dr. Moyer, of Galt, followed, adding many points of value on this

important question.

The answers to the question, "Are compound fillings desirable? If so, give proper combination and utility," were read by Drs. Leggo and Moyer; Dr. Morrow being absent. The discussion was lively and interesting, and was taken part in by Drs. Sparks, Waldron, Marshall, Brownlee, and others.

Dr. Sparks advocated adding metal filings to cement fillings. These particles of metal would act as nucleii around which the cement would harden, and as cement fillings wear away as well as dissolve, the metal points, soon exposed, would greatly add to the resisting power of the filling. Builders add sand to lime for the purpose of increasing its density, and the metal filings would have the same effect. He also advocated amalgam in combination with gold as a filling. Never saw a case of anything like a deleterious electric action set up by the contact of these different metals. Would like to ask Dr. Moyer why tin and gold would keep out bacteria.

Dr. Leggo claimed that sand added to lime formed a chemical combination, while metal filings added to cement did not, so that the cases were not analogous. The metal, on the other hand, lessened the density and prevented setting, and the filling dissolved more readily. It was something like the case of the boy driving a cow, and when a lady asked him if the cow kicked, the boy said, "sometimes she doesn't." Sometimes cement fillings don't dissolve, even under seemingly adverse circumstances.

Dr. Moyer, in answer to Dr. Sparks, said that in case of tin and gold stannic acid was formed, and bacteria could not live in it. Respecting failure of cement fillings, in some cases it is caused by insufficient cutting away of decayed dentine.

Dr. Waldron said that not only will cement dissolve rapidly in one mouth and not in another, but in the same mouth of teeth filled

at the same sitting, under apparently the same circumstances, one filling will dissolve out in a few months, and the other will remain perfect for years. As to whether it was acid or alkaline fluids in the mouth that acted on fillings of oxyphosphate of zinc, he thought that it was sometimes one and sometimes the other. This is due to the materials not being well proportioned in mixing. If too much of the fluid is added alkaline fluids will attack; if too much powder, then acid fluids are more destructive than alkaline.

Dr. Marshall advised an exchlorate lining for a cavity as a better antiseptic than exyphosphate. Had used a combination of

gold and amalgam for years with good satisfaction.

Dr. Brownlee thought that cements are not equally mixed, and thus disintegration may be caused in some parts of cavity. We may often find fillings softened in parts by food fermentation. The use of amalgam at a cervical border before using cement is often

advisable. Subject passed.

Dr. Waldron's paper on "Cataphoresis" was followed by a clinic by Dr. G. Adams Swann, of Toronto, excavating a sensitive cavity in the mouth of Dr. Davison. Not having connection with street current Dr. Swann was not able to use his volt selector, using instead dry cell battery, furnished for the occasion by Dr. J. F. Adams, and the new ball-bearing engine presented to the Dental College by the S. S. White Company. The clinic was very successful in obtunding the dentine so that it was prepared with comfort for filling. An instructive discussion on cataphoresis was introduced by Dr. F. J. Brown, of Port Hope, who began by objecting to speaking of electricity as the anæsthetic. It is only the force used to drive in the anaesthetic agent, which in this case was cocaine. He questioned the advisability of using so high per centages of cocaine, and read a short paper enumerating the advantages of eucaine and cocaine. Dr. F. Capon followed with several cases in practice showing usefulness of cataphoresis. Patients now ask for it and will not submit to pain without suggesting use of battery. Often, if busy, the patient may be left to turn on current while he sees another patient in another chair or goes to lunch. Had great success in treatment of periostitis by driving in iodine and aconite. Subject passed.

The meeting then adjourned to attend the formal opening of the new building of the Royal College of Bental Surgeons of Ontario by His Honor the Lieutenant-Governor of Ontario.

At the evening session Dr. Leggo, retiring President, delivered a brilliant address calling for loyal support of the Ontario Society by the profession of the Province and referring to the advantages of professional intercourse.

The address of the evening was delivered by Dr. Thomas Fillebrown, Dean of the Dental Department of Harvard University,

on the "Common Sense of Hypnosis" [the following is an abstract of the address], which the speaker said has ever been a sort of wonder to the uneducated mind. To them there is something uncanny about the hypnotist. It is, however, really a common faculty, such as is the faculty for acquiring mathematics. Daniel Webster, who astounded the world by the brilliancy of his intellect, could not whittle out a bowkey.

The principal thing I wish to show is that hypnosis has a common sense, practical, useful side. First let us take a glance at its history. It is old as the human race, having been practised in India by the priests and fakirs. It was introduced to Europe about 1700, and to England in 1843. Mesmer, in the beginning of eighteenth century, put it into a sort of scientific form and called it mesmerism. Grimes, of Louisiana, called it electrobiology. Dr. Braid, London, proved it to be a subjective condition—a susceptible condition of patient. Dr. Leabault, of France, discovered what Dr. Braid had not, that suggestion is the active force, 1850-60. Quimby, in Maine, called it wisdom and used it for its healing power.

Suggestion is the active force in all the curative isms of to-day, whether known as Christian Science or mental healing. Hypnotism is simply a suggestible condition, easy to many. Some are so constructed as to be easily influenced by suggestion. Dr. Myers recognizes two distinct layers or parts in the mind. We know we have two kinds of powers, voluntary and involuntary.

You all have some habit of thought you can't control, even though you may be ashamed of it. You may for example be unable to enter a dark room without a feeling of dread. You have a class of thoughts you can't get rid of, a layer of thought uncontrollable as organic functions.

A lady came to me who had been to a fortune teller, and had been told that some terrible calamity would befall her husband. She paid little attention to it at first, but gradually the thought became an uncontrollable fear and she was positively unable to pass a day without assuring herself that her husband was safe. This fear was banished by the suggestion that it would do so, and

the normal feeling that he was safe took its place.

A thought settles down often into the subconscious layer beyond our immediate control, but it may be brought to the surface again by some circumstance. One mind must be a strong one, the other a good listener. It is produced by thought transference. We may speak of the mental action as a vibration going out from one mind to another. By putting the subconscious layer asleep we have a non-resistent condition—a condition of rest. A restful operator makes a restful patient. Fear is our greatest enemy, mentally and physically. Nine-tenths of the heart palpitation and

dyspepsia is produced by fear. Some sudden disaster, fire, loss of property will turn a man's hair white and make him prematurely aged in a night, showing the tremendous effects of fear on the physical powers. The pain we suffer is nine-tenths fear. Granting this, the practical side of hypnosis, as applied to dentistry, is recognizable. We take a patient trembling with apprehension and in a confident quiet tone we advise restfulness, an easy, relaxed posture in the chair. A few long, deep, reposeful breaths, then an assurance that the operation will not hurt, and if the patient is one who can be influenced at all by suggestion there will be an absence of pain in operating.

A perusal of a little book entitled, "Power through Repose," by Miss Call, published by Roberts Bros., Boston, will repay its

readers many times over.

In the use of therapeutic obtundents suggestion is the chief power. It is essential to the effect of all ordinary medicines.

Are there dangers in the use of hypnosis? Undoubtedly. But are we not to use anything that may be turned to a bad purpose? Take personal influence. A man goes down the street in this susceptible or suggestible mood and is invited by a friend into a saloon where he becomes drunk or is led into other sin. Had he been met by another stamp of friend he might have gone into the Y.M.C.A. and had his soul saved. Is personal influence not to be exerted because it may be bad? I would not insult this audience by any warning against the dangers of hypnosis. It is the power of all homeopathic remedies. It is sure to come into general use in dental practice and to be acknowledged the most essential element in therapeutics.

Dr. Fillebrown recited a number of cases in practice, both dental and medical, of the successful use of suggestion such as curing rubber sore mouth, sore throat, sensitive dentine, after which he demonstrated its usefulness in excavating sensitive dentine for two dentists present who had sensitive buccal cavities.

Dr. J. B. Willmott opened the discussion by complimenting the lecturer of the evening on the extremely lucid explanation given on this hitherto mysterious subject. Never before had he heard any lecturer on hypnotism who succeeded in so completely clearing away the mists surrounding it. In concluding his remarks Dr. Willmott desired to emphasize the advice given particularly to young practitioners, "get perfect control of yourself."

Prof. J. Mackenzie then read his paper on "Fermentation and its Relation to Dental Caries," illustrating his remarks by showing

a number of experiments.

Dr. Willmott referred to the subject of the essay as the interesting problem in dentistry. The acid biproduct of the bacteria is the destructive agent. There is need that we urge upon our patients the need of cleanliness. This should be taught early, so that it may become a habit. The use of the toothpick, although considered to be bad form in polite society, he believed to be one of the most useful agencies in the conservation of the cleanliness and health of the dental organs.

Dr. Sparks wished to inquire if there was any connection between the organic acids and the acids formed in the mouth—lactic acid.

The Membership and Ethics Committee brought in a favorable report on the names of the following additional candidates for membership: W. R. Hamilton, Stratford; G. P. Allen, Mount Forest; F. J. Ross, Toronto; F. Capon, Toronto; Harold Clark, Toronto; Wm. Wunder, Toronto; Geo. Cæsar, Toronto; C. E. Pearson, Toronto; H. E. Eaton, Toronto; E. D. Washington, Barrie; L. Clements, Kingston; D. Hansell, Kingston; F. F. Burgess, Colborne; A. M. Clark, Woodstock; J. A. Smith, Windsor.

On motion of Drs. Klotz and Frank, the Secretary cast a favorable ballot for their election, and there being no objections they were declared members.

FRIDAY MORNING, OCTOBER 2ND.

Dr. D. Bairds read his paper on "Silver Nitrate."

Dr. Sparks mentioned the use of silver nitrate in cases of aphthous sores in the mouth.

Drs. Allen, Marshall and Brownlee entered into the discussion.

INCIDENTS OF OFFICE PRACTICE.

Dr. Adams, of Whitby, described a case of anchylosis of maxillæ. A patient had suffered exceedingly and had applied to several sources for relief with no success. Reduced by appliances exhibited by placing between bicuspids one on each side held in position by strap over head. The description was well received and some discussion followed.

Third question on programme was answered by Dr. A. H.

Allen, Paisley.

Dr. Abbott, of London, said he practised pulp capping just as the essayist had described, and never devitalized unless for crowns, treating and curing even partially destroyed pulps, and filling over them, making them quite comfortable for a time.

Dr. Capon, Toronto, also practised pulp capping, never having a failure. He used Gilbert's varnish for first coating and then the lining pressed carefully over that. The lining he used was a fluid combination of creasote, cassia and cloves mixed with the powder oxyphosphate.

Dr. Burgess, although only in practice a short time, was so far satisfied with pulp capping carefully done.

Dr. Erdt, Stratford, did not believe in capping at all. Had no

success where he was.

Dr. Marshall, Belleville, considered that of the favorable cases about seventy-five per cent. might be saved, but he did not believe

in capping badly exposed pulps.

Dr. Adams, Whitby, thought in many cases, such as exposures in lateral incisors. there would not be room for the lining and capping described by the essayist, but Dr. Allen and Dr. Capon claimed to be successful with even these.

Dr. Baird, Uxbridge, did not believe in capping when badly

exposed.

Dr. Brownlee, Mount Forest, believed in capping so long as there was not too great an exposure and no pain at night. Get accurate history from patient if possible, and if the tooth ached at night do not cap, as capping use cement powder with creasote.

Dr. Webster urged great caution in selecting cases for capping and distinguished between pulps exposed by decay and aching and pulps freshly exposed by the excavator. Wished light on what to do with teeth that had ached two or three hours, one or two days or one night.

two days, or one night.

Dr. Allen, in closing discussion, cited a case in his own mouth filled by a Toronto dentist, where an exposed pulp had been covered with oxyphosphate of zinc, and was still living and well.

This ending the programme, it was moved by J. A. Marshall, seconded by C. P. Lennox, that the matter of the place of meeting

for 1897 be left with the Executive. Carried.

Moved by R. E. Sparks, seconded by A. H. Allen, that W. A. Brownlee, G. S. Martin and J. Frank Adams be a special committee to attend New York State Dental Convention in May, 1897, to convey greetings of the Ontario Society, this to be at expense of committee. Carried.

Moved and seconded, that we adjourn to meet at time and place decided on by the Executive. G. S. MARTIN, Secretary.

ROYAL COLLEGE OF DENTAL SURGEONS OF ONTARIO.—ELECTION OF OFFICERS.

The biennial election of a Board of Directors of the Royal College of Dental Surgeons took place on December 9, 1896, resulting in the re-election by acclamation of Dr. G. E. Hanna, Ottawa, District No. 1; Dr. H. T. Wood, Toronto, District No. 3; Dr. A. M. Clark, Woodstock, District No. 5; Dr. W. A. Brownlee, Mount Forest, District No. 6. In District No. 2, Dr. J. A.

Marshall, Belleville, was re-elected in a contest with Dr. Fred J. Brown, Port Hope, by a vote of twenty to eleven. In District No. 4, Dr. R. J. Husband, Hamilton, was re-elected in a contest with Dr. J. E. Overholt, Hamilton, by a vote of twenty-seven to fourteen. In District No. 7, Dr. G. C. Davis, London, defeated the late member, Dr. J. A. Smith, Windsor, by a vote of twenty to ten. Dr. J. B. Willmott was re-elected by the Faculty as their representative. In the three districts in which there were contests, 122 ballots were tendered, of which twenty were rejected for non-conformity to the requirements of the statute and by-law. In no case would these votes have changed the result.

J. B. WILLMOTT, Secretary.

Abstracts.

Edited by G. S. MARTIN, D.D.S., L.D.S., Toronto Junction.

ALCOHOL AS AN ANTIDOTE TO CARBOLIC ACID.—Dr. B. J. Cigrand uses alcohol on burns caused by carbolic acid. Immediate relief is given and the eschar soon disappears.

CLEANING THE HANDS.—J. H. Drexter, in *Dental Office and Laboratory*, advises use of spirits of turpentine. Rub well all over the dirt, wipe with a dry cloth; then use soap and water. After drying, use vaseline or glycerine.

THERE is no profession, I believe, which is paid less for the enormous amount of energy, physical, psychical, and moral forces that are spent every day in our labor, than dentistry, and if there is any profession that should not be practised for God's sake, it is dentistry.—Dr. Hofheinz in Cosmos.

GUTTA PERCHA.—Professor Gray uses in a cavity before filling with gutta percha, common resin cut in chloroform. The heated gutta percha is pressed in and adheres to the walls like cement. In the mouths of his own children he has had an opportunity of watching it closely, and finds it entirely satisfactory.—Dental Register.

DENTAL INSPECTORS FOR SCHOOLS.—The Ontario Board of Health recently adopted the following resolution: "That dental inspectors be appointed by local boards of school trustees to periodically visit schools and examine children's teeth, and that a dental hospital be started in Toronto for the benefit of the poor children; and these recommendations be urged upon the attention of the Minister of Education."—Medical Mirror.

To prevent rust on instruments the *Lancet Clinic* advises dipping steel, iron, nickel or copper instruments in five grammes alcohol containing some alkali, such as one or two grammes of borate, carbonate, bicarbonate or benzoate of soda.

REMOVING STAINS.—A solution of hyposulphite of sodium in water will remove iodine stains from linen, cloth, skin, and, in fact, from anything, almost instantly. The fresher the spots the quicker the action of the hyposulphite.—J. C. Emmerling in Dental Office and Laboratory.

TOXEMIA DURING COCAINE CATAPHORESIS.—Dr. Henry J. Moore, Frankfort, Germany, records in the January *Items of Interest* a case of toxic effects during the application of cocaine to a pulp by means of the electric current. He subsequently found the foramen to be abnormally large, thus allowing the cocaine and the current to pass readily.

LINING ROOT CANALS.—Dr. L. P. Bethel, Kent, Ohio, contributes an article in the *Ohio Dental Journal*, describing his methods of using nitrate of silver as a lining for root canals. The silver nitrate is placed in the pulp chamber and driven by cataphoresis into the tubuli; after which the nitric acid developed is neutralized by the use of dilute ammonia.

DR. FRANK C. PAGUE gave a clinic before the Stomatological Club of California, a report of which appears in the *Stomatological Gazette*. The roots of a first superior bicuspid were filled with salol and paraffine, equal parts by capillary attraction. A Donaldson broach was introduced into canal, and by means of the Evans' root canal dryer the salol and paraffine are flowed to the apex, following the broach to the most minute point. The broach is then withdrawn, and a gutta percha cone inserted.

"THERE are a few things," says Dr. F. A. Metcalf, in the Pacific Stomatological Gazette, "we have all noticed in our private practice." First, We are more cheerful in our work when we are sure of our cash, notwithstanding all charitable talk to the contrary. Second, That most people are willing to pay for not being hurt. Third, That the last tooth excavated was the most painful; that is also liable to be the case with the last extraction. Fourth, That some people are so full of suggestions to the operator that we wonder how they could have mistaken their calling. Fifth, How beautiful some people's teeth were (to hear them tell it) before they were lost. Sixth, That bills presented promptly are liable to be paid more cheerfully. Seventh, That people who speak of \$50 as a trifle are generally a little short and slow pay. Eighth, We have

all noticed with a big "A" that plates fit better after they have been paid for. Lastly, Most of us will admit that there are times when we are wofully deficient in backbone.

A NEW FILLING MATERIAL—The combination of silex, oxide of zinc and gutta percha, was found to be good to resist mastication, but the silex being so gritty the burnisher left a black mark on the surface of the filling. Many other combinations were tried but did not meet with satisfactory results until I tried the combination of

White gutta percha	8 parts.
Aluminum filings	5 parts.
Oxide of zinc	ı part.
Whiting	⅓ part.

This admixture I have been very much pleased with, and have named it "Aluminized gutta percha." It is easily manipulated, and holds its position in the cavity when firmly packed. I have not noticed any bulging, which is so common in the pink gutta percha.—Dr. F. W. Bliss, in Pacific Stomatological Gazette.

DR. J. F. FRIBLEY, in the *Dental Digest*, advises concerning taking impressions of lower cases where all teeth are out and the ridge hardly perceptible, the muscular attachment being so near together on the top of the ridge that there is hardly a line of space where the plate can rest undisturbed by the action of the muscles in the movements of the jaw in mastication. He uses plaster pretty thin, inserting the cup just as soon as it can be inverted. without the plaster dropping out, requesting the patient to move the jaw as in the process of mastication, being careful to hold the cup firmly in place. This is kept up until the plaster is of a puttylike consistency. Then the jaw can come to rest, as there can be nothing gained by keeping up the movement. Upon removing the impression from the mouth there are to be seen small grooves, depressions and elevations which correspond exactly to the muscles. depressions and elevations of the ridge of the jaw, and when the plate is made it will fit perfectly and not be displaced during the process of mastication or in other movements of the jaw.

SAYS Dr. J. F. Crawford, in the *Cosmos:* I want to commend the recent developments in swaging metal plates over a plaster die; it can accomplish results that are perfectly marvellous. Nothing can approximate a lower plate of aluminum swaged over a plaster die, with rubber attachment. It goes in like a wafer, and there will be no ulcerative absorption in the lower jaw. If the teeth are imperfectly occluded the lower plate moves and slips about and

hits the mucous membrane here and there till the tissue becomes hypertrophied, and finally there remains only a soft bed for the plate to rest on. But there is less absorption under an aluminum plate swaged between two metal surfaces and driven home on a plaster die; it fits so beautifully you can bring out the rugæ in an upper plate. You have all seen those soft mushy jaws where all the anterior part is like a second tongue; but you will have no more of that if you will adopt the swaged aluminum. I earnestly recommend to you the process of swaging metal plates over the plaster die, and assure you you need not break the model.

WOODEN TOOTHPICKS.—Dr. H. R. Neeper writes the *Dental* Digest, condemning the use of cheap wooden toothpicks, such as are found in restaurants. He has had numerous cases presenting such symptoms that at first glance it appeared as if an abscess was forming, but, on close examination, found pieces of toothpick broken off in space. In other cases the constant use of toothpicks has caused the crowding away of the festoon of the gum, and the consequent exposure of the neck of the tooth to sensitiveness, heat, cold, touch, and also making it very liable to decay. His first treatment in this class of cases is to give the patient a lecture on the use and abuse of the toothpick. Then he thoroughly cleanses and removes all foreign matter, touching the sensitive points with carbolic acid. If a second treatment is necessary, he touches with nitrate of silver. The patient is directed to put a small pledget of cotton in the space before meals, and after eating to brush and rinse the teeth thoroughly, and then to remove the cotton and rinse again. As a rule, the annoyance ceases, and the gum fills the space in a few days.

SHOCK AND STRAIN RESULTING FROM DENTAL OPERA-TIONS.—Speaking of the disastrous results sometimes following the performance of severe dental operations upon delicate patients, the editor of the Dental Record says: "It is no rare thing to have patients refer to some past time when they were having their teeth put in order, as an experience they would never again repeat, and which had made them feel nervous and worn out for months. quiry usually elicits the fact that they had sat in the chair for hours consecutively, and had attended, day after day. Well may we ask, Is this a desired result? Is there no simpler way, no less wearing method of treating the teeth of such delicate, highly strung patients? Is it wise practice to attempt elaborate work, lasting for a few years, at the risk of letting the teeth be neglected for many years? Has not the practitioner rather overlooked the fact that he is not dealing with an inanimate object, and that it is as important to read correctly the character and endurance of his patient as it is to aim at mechanical perfection."

Medical Department.

Edited by A. H. BEERS, M.D., C.M., D.D.S, L.D.S., Cookshire, Que.

TIC DOULOUREUX.—This complaint is often attributed to decayed teeth, and not infrequently these are extracted one after another without any improvement resulting, for the simple reason that the neuralgia is not dependent upon this cause at all.—Roberts' "Practice of Medicine," page 862.

LOCKJAW CAUSED BY A TOOTH.—An unusual case of lockjaw which persisted for four years and baffled the skill of several physicians is reported by Sachse, who upon examination found that the right upper wisdom tooth projected externally in a horizontal direction and so pressed against the internal pterygoid muscle that it was impossible for the patient to open his mouth. The removal of the tooth improved the condition at once, and in eight weeks the jaw could be opened normally.—American Medical-Surgical Bulletin.

JOHN W. TEALE, M.A.Oxon., F.R.C.S., in a presidential address entitled "A few practical hints to medical men on the preservation of their own health," *British Medical Journal*, December 19th, 1896, says, "No medical man should ever have a bad tooth in his head. He is courting disaster if he does so. To avoid this I would suggest that he be regularly inspected by his dentist before going for his holiday. It is a simple matter to brush the teeth after every meal, and by rinsing with cold water you get an early intimation of danger."

HEREDITY AND TOOTH EXTRACTION.— The question whether the extraction of teeth through many generations has an effect upon present-day teeth is one which is open to argument. On one side it may be said that a tooth is not part of an organ—like the tip of a finger—but is a separate organ produced in a special manner, and if that whole organ is destroyed through several generations it will have the effect of mortifying the type and affecting its integrity. On the other hand in comparing mutilations such as continuous docking of horses, dehorning of cattle, and circumcision, we find no appreciable difference in the type, though of course these are instances of removal of a part, not the whole. But, as Sir James Crichton Browne once remarked, when nature removes an organ it is because that organ is no longer wanted, and the removal takes place by a kindly gradual suppression, not by a foul and painful disease like dental caries or pyorrhœa alveolaris.—British Journal of Dental Science.

THE British Medical Journal, December 12th, 1896, referring to the erection of the new Dental Hospital of London, says, "Of the usefulness of the charity it can hardly be necessary to say much. Tootnache is one of those minor curses of civilized humanity which makes all the world akin, but we may say that it would be difficult to exaggerate the importance of good dentistry for the poorer classes, among whom, and especially among the women, much ill health is to be traced to deranged digestion consequent on imperfect mastication due to bad teeth."

RELATION OF TUBERCULOUS GLANDS IN THE NECK TO DEN-TAL CARIES.—Dr. Starck, from observations upon 113 children, has established a distinct relationship between lymphadenoma and dental caries in forty-one per cent. of cases. In two cases he succeeded in discovering the presence of tubercle bacillus in the tissues situated between the roots of a molar in direct contact with diseased glands. He considers it most important in treating these cases to extract all carious teeth, and in every way to place the oral cavity in a perfectly healthy condition.—British Journal of Dental Science.

S. L. GOLDSMITH, International Dental Journal, January, 1897, reports a case of calculus in sublingual gland. The patient, a young woman aged about twenty-one years, complained of pain in right lower central incisor. This tooth did not respond to application of methyl chloride. Pulp in a dying condition. Abscess of right sublingual gland pointing towards median line. The abscess was incised and pus evacuated but nothing could be discovered in the gland by probing. The wound was packed with guage which on being removed that evening revealed a calculus the size of a cherry pit. The next morning another smaller calculus was removed. "Now the question which arises is, was the fact that the gland abscess and the pulpitis took place about the same time (as in my opinion) merely a coincidence, or did the suppuration ensue in consequence of the invasion of micrococci from the tooth? Dr. Cohn held the opinion that while of course the calculi must have been present for a long time, there would have been no pus formation until the infection took place."

CHARLES E. SOLOMON, Liverpool, mentions an instance of recovery from chloroform syncope in *British Medical Journal*, January 2nd, 1897. He administered chloroform to a young man aged twenty years for the extraction of teeth. Four days previously he had examined him and pronounced him in a fit condition to take the anæsthetic. It was administered on lint, the patient being in a recumbent position. After about 2½ drachms were given breathing became spasmodic, deathly leaden pallor

appeared with profound dilatation and fixity of pupils and feeble attempts at respiration which was jerky. Simultaneous arrest of pulse. Chloroform was stopped and he was lifted to the floor, artificial respiration and subcutaneous injection of ether in xxx. Breathing improved in four minutes, pulse become perceptible, color returned to face. There was a disposition to relapse so artificial respiration was kept up. Consciousness returned. Brandy was given. Patient was kept in recumbent position for ten or fifteen minutes, when he was lifted to the chair. This was a case of cardiac failure due to the chloroform, and Mr. Solomon holds that the recovery was due to the prompt and unceasing efforts used for the restoration of the circulation.

Reviews.

Artificial Anasthesia.—A manual of anasthetic agents and their employment in the treatment of disease. By LAURENCE TURNBULL, M.D., Ph.G. Fourth edition, revised and enlarged. Illustrated. Pp. 550. Philadelphia: P. Blakiston, Son & Co., 1012 Walnut Street.

It is a happy coincidence that the fourth edition of this comprehensive work should be issued on the fiftieth aniversary of the discovery and introduction of ether. The author very justly pins his faith to ether as the most available and the most free from danger of all known anæsthetics. Part 1 is devoted to the history of anæsthetics; Part 2 to a very complete resume of nitrous oxide, of special value to dentists; Part 3 to alcohol, ether, chloroform, and various mixtures; Parts 5 and 6 to local anaesthetics; Part 7 gives very full and valuable advice as to modes of administration, precautions, etc. The work is unquestionably of great scientific, historical and practical value, embracing the very latest investigations in the most recently recommended anæsthetics. The dental fools who rush in with the use of dangerous anæsthetics where the most scientific experts are cautious, do not, as a rule, read or profit by such works as this one under review. But to the wise practitioner and the student preparing for his examination, the practical value of this work is very great. In our last issue Dr. Klotz referred to the use of eucaine in dentistry. The author quotes a number of authorities in its favor.

Dominion Dental Journal

I ROTIO

W. GEORGE BEERS, L.D.S., D.D.S., - - 47 Union Avc., MONTREAL, Que. To whom all Editorial Matter, Eschanges, Books for Reviews, etc., must be addressed.

GERMAN EDITOR: CATI E. KIOLZ, L.D.S., ST. CATHARINES, ONT.

ABSTRACT EDITOR:

O. S. Martin, D.D.S., L.D.S.,
TORONTO JUNCTION, ONT.

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MONTREAL, QUE

EDITOR OF MEDICAL DEPARTMENT:

A. H. Becer, M.D., C.M., D.D.S., L.D.S.,
COOKENIRE, QUE.

torresponding editor:
W. R. Patton, D.D.S.,
Cologne, Gernany.

EDITOR OF ORAL SURGERY DEPARTMENT:

O. Lenox Curtis, M.D.,

30 WEST 59TH STREET, NEW YORK CITY.

All Communications relating to the Business Department of the Journal must be addressed to Dominion Dental Journal, Room 97, Confederation Life Building, Toronto, Canada.

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UNCONSCIOUS MISCHIEF.

It is one of the mortifying conditions of professional life, that even men who are mindful of the amenities, and with whom ethical men have no quarrel, sometimes voluntarily isolate themselves so much from their brethren, that quite unconsciously they aid and abet the quacks, and those who resort to quack methods. We have frequently drawn attention to the fact, that men who want to do mischief, the iconoclasts of educational and legislative reform, show great zeal in their unity. Birds of a feather flock together, and the quacks, and those who use quack methods, have so much in common, that they become, like Juno's swans, "coupled and inseparable." It is, of course, easy to imagine why the energy of those who do mischief should succeed, in face of the divided and feeble efforts of those who do well. There is no evading this fact; and it should have its influence in moving gentlemen who have heretofore shown indifference, to co-operate, with the efforts of those who are doing their best to make things better.

However, selfishness is ingrained in the most of us; some of it contemptible, some of it perfectly just. The question occurs as to the distinction between these two forms of one of the common characteristics of humanity. Somebody has to put a shoulder to the wheel in any effort for reform. Somebody has to make sacrifices and endure suspicion, criticism and abuse. Nobody

would have the temerity to declare that anybody could steer through hidden and sometimes treacherous obstacles without a disaster; yet, it must be conceded, that, taking it for all in all, the dental reform movement in Canada has been exceptionally successful. If we have had failures, to whom are they due? Ouite as much to the timid as to the traitor. If we have had remarkable successes, to whom are they due? Surely not to the critics, whose selfishness was concentrated in their own personal gain; but to men who made personal and professional sacrifices, who cut off even social enjoyments and necessary relaxation, that they might serve their brethren. Gentlemen who seek office and notoricty, and who use it for their own commercial profit, and who are even willing to expose their unfitness before their confreres for the collateral advantage the notoriety may give them before the public, are happily few and far between. But as a general rule, it is these very parties who have grievances, and who are envious of the honors of office which fall to faithful and competent Put them into the positions for which they hunger, and they make themselves ridiculous, unless they have the rare faculty of evading discussion, or the tactful trick of silence.

In Ontario and Quebec the profession has had difficulties to a meet of the most provoking and unreasonable character. disturbers of peace and prosperity, without a single exception, have been distinguished for pure and unadulterated selfishness of the meanest sort. They have never co-operated with the disinterested labors of others, but they have displayed jealousy, and occasionally knavery, in their bitterness. They have not the manliness to accuse or attack to their faces those whom they dislike. If they have not the imprudence to slander them to their patients, and as discreetly as they can to their confreres, their very cunning, like curses and chickens, "comes home to roost," and they are forced to swallow their own spleen. It is a miserable spirit to carry about The men who have labored for the profession do not care two figs for the friendship of the tag-rag and bob-tail riff-raff, but they have a right to expect at least some magnanimity, if not actual help, from those who are not included in this category. Many of our best men have no love for office. Circumstances of poor health, natural preference for privacy; perhaps the wiser idea, even if a bit mercenary, that to take care of number one is more profitable than caring for all the rest of creation; these influence them to avoid official responsibility. As a matter of justice, they should remember that the men who labor in office enable them to care more for their own interests, by doing duties which are just as incumbent upon the retiring, as upon those who pull the oars. If they do nothing, in face of those who are always aiming to undo what has been done, they might almost as well do mischief openly.

DENTISTS WHO BREAK THE SABBATH.

We have no sort of sympathy with inconsistent Christians who on Sunday drive to church in their carriages, yet who want to deprive poorer people of the privilege of the street-cars. The selfish clerical hypocrites, who want to dictate to the Almighty by what denominational door sinners are to be admitted to salvation, and who, while demanding the strict observance of the Sabbath from their parishioners, are having their servants busy in the kitchen, cooking for them the hottest and heaviest dinner of the seven days, are object lessons for all honest men to avoid.

In these days of keen competition, more than the quacks are resorting to the custom of working at night, and on the Sabbath. The former, as a rule is not always just to the patient, and is injurious to the eyes of the practitioner, and is a "penny-wise, pound-foolish" policy. The practice on Sunday cannot always be avoided. It is our duty, on any day, and at all hours, to relieve pain, but it is not incumbent on the dentist, like the physician, to subject himself to professional visits on the Sabbath from the class of people who have no respect for the sacredness of the day, and who would sooner play poker on Sunday than go to church. The several grades of Sabbath-breakers have each their excuse; but there is none for the regular practice of dentistry on that day. Such practice is the thin end of the wedge, which opens a temptation to positive immorality. If busy practitioners of dentistry know so much more of theology than educated professors of theology, and if they have, out of their ignorance or conceit, constructed a present code of morals, and a future life for themselves. which contemns the Ten Commandments, they would, at least, be healthier and happier to make the Sabbath really a day of rest, whether in the open air or the quietude of their own homes.

AN OFFICIAL COUNTERBLAST.

It would not be half such hard work to "educate the public" in Canada about quack dentists and quack methods, if every dentist who is anxious for that reformation, would do the share that justly lies at his own door and in his own office. It has been said that the exposures made by this journal do not reach the public; that no one but the dentists read and know the facts as to the lying and imposture of the quack advertisers. It is something gained to know, that at least quite a number of young men have been dissuaded from using quack methods by what has been written in the JOURNAL. But whose fault is it if the public do not read and

know that such advertisers as disgrace the papers in Toronto and Montreal are frauds, and in some cases knaves? It is easier for our subscribers than for us to convey these facts in a proper way through their local press and to medical men. But we reiterate our belief that the most effective method is official standing advertisements in the press, giving succinct facts. To avoid invidious suspicion that these advertisements would be used for the personal advantage of officials, they should be made purely official and impersonal.

A COMPLIMENT TO THE QUEBEC LEGISLATURE.

It was a very suggestive "compliment" that one of our Quebec dentists recently paid to the Local Legislature. "You get any law for any ting, if you like spen' de monie. /e connais, me smash dental bill joost same, but me not want cut me troat, me joost want have assistant so can drive me horse, and see de gal, and play de poker, and de assistant he do de work in office. Me no 'fraid; me go Quebec, bien, many member dey poor, like devil, and you buy dem joost you like; some you geeve diner, and de champagne and de cagar, and some you joost say 'Me' fren', me no make bribe, you too honorable man for dat, but me ax you geeve time like beeseness for me amendment, and you joost put dis in your poche, "beeseness is beeseness," and if you get me bill tru, me pay you well. Not de bribe, you know, Oh! non, you too honorable man for dat; me too. But me ax you geeve more time for me, and, of course, me no ax you work like dat only for de pay you get as member.' Bien, me go Quebec; me send bottles wine and de cagar, mon compliments, to de members in dere room private: me leeve ma carte, me engage de lawyer for talk, talk, talk, me all right. Many de member dey no pranceeple; dey vote to-morrow for what dey condemn to-day eef it pay dem. You tink dat de way to get bill is be honest, and tell de trut? Non! De bank bill more strong argument. Dat is de ting to get what you want in Quebec. You no dare geeve dat to man like Dr. Marcil or Mr. Stephen, or oder man like dat. Dey smash your face eef you ax dem do ting like dat. But you find some beeg men, you surprise, dey take de bribe on de sly. But you no call dat 'bribe,' you call dat 'beeseness.' I know man, he one time was beeg man in de Assemble and he go committee, and he rage and he talk de nonsense for me, for I joost ax him he work for me, I pay him like lawyer in hees office, not like member in de parliamen. Dieu! he make meeself laugh de way he joomp around for dat pay. You tink dat he gran' man of pranceeple? I get me bill, he get his money. He tink me fool. I know he rascal."

TWO GOOD BOOKS.

In the two last issues we reviewed two splendid works which every student and practitioner should buy. We refer to the "American Text Book of Prosthetic Dentistry," edited by Dr. Chas. J. Essig, and published by Lea Brothers, of Philadelphia and New York. The other work is the fourth edition of Dr. Clifford Mitchell's "Dental Chemistry and Metallurgy," published by the W. T. Keener Co., 96 Washington Street, Chicago. They are both invaluable.

EDITORIAL NOTES.

DENTISTS who resort to quack-methods should breed ducks. When the ducks met their owners, their language would, however be somewhat too personal.

THE many friends of Dr. J. Ed. Line, of Rochester, N.Y., editor of the *Otontographic Journal*, will sympathize with him in the loss he has sustained, by the death of his wife, which occurred last month.

DR. CARL HEITZMAN died in Rome, Italy, last December, from hypertrophy of the heart. Dr. G. Alden Mills, one of his former pupils, gives a very interesting sketch of the doctor's career, in the January *Digest*.

A QUACK would rather be reviled by his colleagues than respected. He is more ashamed of a crease in his pants than a crook in his character. He will blush for a misfitting coat, and brave proof of his rascality.

MEN who use quack-methods do not do anything that the very poorest man in the profession cannot do. Anyone can boast and lie. It does not hurt the quack to see that in the meanest sort of quack advertising he is permitted a monopoly. He can bear the contempt of the wise, if he gets the money of the fool.

Do not lose the advertisements. Some dentists have them bound with the reading matter. Several have them bound separately. Dr. Beacock gave us the simple idea of fastening them together with wire nails. It is interesting and suggestive to compare the advertisements of to-day with those of ten or twenty years ago.

DR. WELCH, of the *Monthly*, puts the busy profession to great strain in expecting its members to worry themselves over his spelling fad. It is not likely that he will revolutionize the orthography of the English language. When he reforms his fad, and stops this nonsense, we will begin to read his journal; but not until then. It is about as vile as bad oysters.

THE injury the departmental stores have done to legitimate business in Toronto and Montreal, illustrates the damage that can be done to legitimate practice by boasting and falsified advertising. But while the former method of doing business can be made to pay, and can even be conducted honestly, that of the "cheap" advertising dentist cannot be made to pay in the long run, and cannot possibly be conducted without deliberate fraud, falsehood and quackery. Our duty and interest is to make this apparent to the public,

IF public opinion once turns towards the classification of dentistry as a trade, rather than as a profession, all the legislation in the Provinces, and all the ethics of our Associations, will not easily turn it back. The gutter-dentists can be excused for their deliberate self-abasement; you may put a golden dish of summer fruit before a hog, but it will pass it by for the dirty trough of rotten corn; but do respectable practitioners see no better way to deal with public ignorance and professional baseness, than by imitation of the conduct they condemn?

In the Educational Review (St. John, N.B.) we find a selection from the Western Teacher (U.S.), which goes to show that the proposal to introduce instruction to the pupils, about the care and value of the teeth, might be extended to the teachers. The pupils were instructed to copy sentences, "filling blanks properly":

- builds houses.
- 2. A ——— cultivates soil.
- A ——— cures diseases.
 A ——— doctors horses.
 An ——— treats diseases.
- 6. A ——— extracts teeth!

This is bad enough for the intelligence of the Quebec Legislature.