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EDITORIAL NOTES ON PRACTICAL SUBJECTS.

TAKING IMPRESSIONS FOR PARTIAL SETS OF TEETH.

BY C. S. CHITTENDEN.

In inserting partial sets of teeth, I always *wish* to do so with pressure plates. Of course I am sometimes compelled to resort to clasps, as it is, from the circumstances of an occasional case, impossible to make a pressure plate adhere with sufficient force to be satisfactory to myself or the patient. But, there need be but few such cases, if we could get a *perfect* impression of the parts. Usually, I am able to succeed with wax, but now and then a case is presented in which I find it necessary to adopt some other method of taking the impression, on account of the difficulty of removing the wax from the mouth, without changing the form of it. The following is the plan which I adopted some years ago; and which I have found to be the most successful, as well as the simplest method of any that I have tried. I first take an impression in wax and draw a cast from it. Then I take a piece of sheet lead and fit it to the cast as nearly as possible, by rubbing down with burnishers, something like a trial plate, leaving it a little higher on the edges than a plate which is to be worn, would bear to be. I use this lead pattern or trial plate, or whatever any one may choose to call it, for an impression cup, but as it would not be stiff enough to answer that purpose of itself, I punch some small holes through the lead, and pour plaster of Paris over the whole of the lingual surface, letting it run through the small holes in the lead, so as to bind the plaster firmly to it, in the same way

that mortar is bound to the lath on walls and ceilings. When the plaster has set I cut away all that will be in the way, and having prepared the plaster for the impression, I pour it into this made-up cup and putting it into the mouth I press it home in the usual way. I should say, however, that the plaster for the impression should be rather thin, so as to flow into all the spaces between the teeth. I allow it to set thoroughly before attempting to remove it, as it is less likely to break in doing so. Being far less thick and clumsy than the ordinary impression cup, almost any one can bear it in the mouth for ten or twelve minutes without much inconvenience, thus enabling me to take my own time in the removing of it from the mouth. In doing so, I first cut away, with a sharp pointed knife *all* the plaster from about the teeth, that I think will be likely to break away, and then, with some small instrument, very gently pry it away from the teeth, until it can be removed from the mouth without difficulty. From this impression I draw a cast and make the plate in the usual way, but of course, the teeth must be arranged in the *mouth*, as this is only an impression of the palate and lingual surfaces of the teeth.

PREMATURE DECAY OF THE TEETH.

BY R. TROTTER.

[Continued from page 292.]

In my last paper under this caption, I endeavoured to impress upon the reader the importance of viewing it in connection with physiological and pathological laws, in order to commence at first principles in the discussion of this important subject. From this position I shall try to point out wherein those laws have been violated, and the result of such infraction, in so far as the dental organization is concerned. The cause of the premature decay of the teeth dates from a period far remote from the time it is seen or felt. In what is usually called the better and middle classes of the people of this continent, the little misses, who are to be the future mothers, instead of getting plenty of out-door play, exercise and air, are put by their parents to their books and school, years before they ought to leave the nursery or play grounds, with the idea of making prodigies of them. And teachers with an ambition to get a reputation and please the parents, over-tax both mind and body at school, and send them home at night,

with an armful of text books, consisting of Dictionary (a nice substitute for play,) Arithmetic, Grammar, Geography, History, Astronomy, French, German, Italian, &c., &c.; (Physiology excluded as that is only fit for medical students,) out of which tasks must be learned for the next day. Then, the ambitious mother, and the music teacher, peradventure, have *their* rack ready in the shape of a piano forte, on which the poor, mentally and physically worn out child must be put, for at least an hour. Under such circumstances appetite for simple and proper food is lost, and the arts of cookery are called in to supply it with dainties. The above is not an exaggerated picture of the manner in which thousands of young ladies have been brought up, and a sad spectacle they are, many of them, before they get out of their teens. These have been, and are the mothers of the present generation. Under such circumstances, with the aggravation of social customs and fashions, how can it be that a vigorous constitution, or normal dental tissue can be imparted to the offspring? It is impossible. Then we have the errors of nursing and dieting added to the inheritance of a feeble constitution. Fashionable mothers at the present day appear to think it beneath the dignity of a lady to see after their offspring, many of whom are left under the care of unfit and heartless servants, who instead of waiting on them and attending to their wants, frequently dispose of them for the time with doses of paregoric, Mrs. Winslow, &c.

And as to diet, instead of its being regulated to suit their feeble constitutions and tender years, it is too frequently more like a ploughman's. It has not been an unusual practice to bring children to the table as soon as they are able to sit on a chair, and give them fare in common with adults. After partaking of the stronger kinds, more than nature requires, they have all the courses of "tongue ticklers" to bear up under, and frequently go from the table literally stuffed—an ordeal sufficient to overtax the most vigorous digestion. The consequences of which are defective nutrition and assimilation, and the production of agents which act destructively on the already imperfect dental tissues. The custom of not using such food as contain the elements that are required to constitute normal tooth structure, and depriving one of the chief articles of food, flour, of its bone making qualities, in the separation of the bran and shorts must not be lost sight of, as being among the fruitful causes of defective teeth.

The above remarks refer to the constitutional causes of the prema-

ture decay of the teeth, the other causes, such as destructive agents coming in contact with them, the want of regular and proper cleansing, &c., will be sufficiently obvious without any consideration from me.

I have given in an imperfect manner what I believe to be some of the main causes of the premature decay of the teeth. I will now as an addition to my paper, give an authority which differs somewhat from the theory I have advanced. A perambulating dentist called at my office not long since. After "taking stock of him," I remonstrated on the impropriety of going about the country, tinker like, as an impostor, pretending to practice dentistry, and advised him, being a young man, and possessing fair abilities, to go some where and study the profession scientifically. But he ignored the idea of science having anything to do with dentistry, and said it was purely a mechanical calling. After confounding him in several ways, I asked him what he would say if a parent brought a daughter to him who had just commenced her teens, and asked him, to be informed as to the cause of the early decay of her teeth? Well, he said, I would tell her that it was biological causes. I said that was rather a big word for many patrons. I suppose you mean that the mothers mental impressions during the gestation and infancy of the child determine the structure of the teeth. Yes, he said—I caved in.

PROCEEDINGS OF SOCIETIES.

REPORT OF DISCUSSIONS AT THE TWENTY-FOURTH ANNUAL MEETING OF THE MISSISSIPPI VALLEY DENTAL ASSOCIATION, MARCH 4, 5 AND 6, 1869.

The first subject presented for consideration was "What are the best methods of controlling flow of saliva during the operation of filling teeth?"

Dr. Goddard remarked that inability to control the saliva in the mouths of his patients, he had found one of his greatest difficulties in filling teeth. Has found it impossible in many cases to keep the mouth dry by any of the ordinary methods. He had been for a few days using the rubber dam, in connection with the saliva pump, and thinks it has, in some cases, advantages over any other method.

Dr. James Taylor finds very great difficulty in keeping the mouth dry while operating; it sometimes seems as though the saliva flows in great quantity through all the ducts, into the mouth, and to pre-

vent flooding is next to impossible. The breath is oftentimes so loaded as to completely moisten the filling when it is permitted to come in contact with it.

Dr. Berry thinks by heating and keeping the gold slightly warmer than the mouth, during the introduction of the filling, the moisture from the breath will be obviated; employs the ordinary means for the exclusion of the saliva.

Dr. McClelland has discarded the use of saliva pumps; thinks they are useless for keeping away saliva; relies upon a good supply of napkins, properly employed, and in connection with them uses "Hawes Tongue Holder;" especially is this arrangement applicable for the inferior molars of the left side, and in addition to this, while operating, inclines the head of the patient to the right; for the inferior molars of the right side, holds the napkins in proper position about the teeth with the fingers, inclining the head to the left side; removes the saliva often from the mouth, by wiping out with the napkin; has found that sensitiveness of the dentine increases the flow of the saliva; hence, endeavors to obtund that before filling, and for this purpose usually employs creosote; success depends very much upon having all things in readiness, and a good assistant is almost invaluable.

Dr. Taylor expressed a desire to know more about the rubber dam; has used the tongue holder twenty-five years; much depends upon the ability of the patient to retain the instrument in its proper position, so it will best secure the parts in the desired position, and not impede the work of the operator.

Dr. Taft: In deciding upon the method of controlling the saliva in the mouth during an operation, there are several conditions and circumstances that must be taken into account, such as the location of the point to be operated upon, the condition of the dentine and the tooth as a whole, the extent of the decay, the amount of saliva, and its character, the point from which it most freely flows, and the ability of the patient to keep the parts quiet.

The variations attending these conditions indicate to us very clearly that no single method will in all cases, or even in many cases, accomplish the desired object. Sometimes a small amount of saliva, owing to its peculiar condition, will be far more difficult to control than a far greater quantity of a different character. A constant movement of the muscles of the mouth and throat add very greatly

to the difficulty of excluding saliva from an operation. Has used almost every method and appliance that has ever been suggested or brought to the notice of the profession, and finds something, and usually much, to commend in almost every one of them; uses napkins much in the manner suggested by Dr. McClelland, more than any other single appliance, but very frequently, and usually quite efficiently, employs bibulous and blotting paper, the rubber dam, and two or three forms of saliva pumps, together with the various tongue compressors; but least efficient of any of these, is the old fashioned tongue-holder or speculum, held by the patient, for there is not more than one patient in fifty that will retain them properly in place, but when a little fatigued will relax the hold and then all is lost; regards the rubber dam as a very great acquisition, and one by which some cases that have hitherto proved almost uncontrollable, are by it completely manageable. To Dr. Barnum is due the lasting obligation of the profession for the introduction of this material.

Dr. Morgan has used and relied very much upon blotting paper and napkins of fine linen, about eight inches square; folds into the proper shape and packs them in about the teeth, so as to make pressure upon the mouth of the salivary ducts; never permits the instrument to touch the lips.

Dr. Hays described a little appliance in the form of little round pads, made of porous clay and properly biscuited, for closing the mouths of salivary ducts; they are made plano convex and double convex, from one-half to three-fourths of an inch in diameter; others are made crescent shape. The form and size should be governed by the locality they are to occupy; they are the invention of Dr. Southwick, of Buffalo.

Prof. Cutler read an essay on development of the teeth, in which the idea was advanced that the roots of the teeth, and especially the molars, are not fully formed till a period much later than is generally supposed; that at the time the crowns of these teeth seem to be fully developed, the roots have very commonly large cone-shaped openings at their ends, in which, the destruction of the pulps becomes a serious consideration. The removal of pulps from teeth, the roots of which are in this condition, will be liable to occasion very serious injury to the living parts beyond. The careless or inexperienced operator is very liable to pass entirely through the canals. The roots

of the teeth are not in many cases completely developed before the age of eighteen or twenty years.

Dr. Watt feels a very great interest in this subject; he would suggest that there is very great variation in different persons in the period of the complete development of the teeth. He has extracted the first permanent molars at the age of six years, and found the roots perfectly formed, and others at ten years imperfect. This difference depends upon variation of the nutritive function and the developing power. Great care should always be exercised in applying arsenious acid in young persons. He referred to a case in which a girl had an incisor broken off, and upon the root wore a pivot tooth nine years, after which the tooth was removed, and the root found incomplete at its end, never having been completely formed, but it has sustained the artificial tooth well during the time, demonstrating the ability and endurance of even these imperfectly formed roots. There would not be as much liability to injury in the use of the mallet for filling such teeth, as by the clumsy, awkward hand pressure that is so frequently employed. He discussed at some length the theory of mallet pressure, as compared with the hand pressure.

Dr. Cutler: It is almost impossible to fill the canals of roots before their completion, without doing great violence to the living parts beyond. Usually the roots of the teeth are not perfect till the tenth year.

Dr. Oldham differs from both Drs. Cutler and Watt; he believes that the canals of imperfectly formed roots, even though they be somewhat conical as described, may be well filled and better with the mallet than by any other method. He claims that greater precision in the introduction and consolidation of gold is obtained by the use of the mallet.

Dr. H. A. Smith read an essay upon the action of arsenious acid, when applied to the pulps of the teeth.

Dr. Morgan, in remarks upon the essay, says that arsenious acid will induce sloughing of soft tissues.

Dr. Watt has been accustomed to use arsenious acid for producing sloughing.

Dr. Taft: This result is not produced without the agent being taken into the tissue thus affected.

Dr. H. A. Smith suggests that gentlemen may be mistaken in their preconceived opinions.

Dr. J. Taylor: How is there sensitiveness if their nerve is dead or the circulation suspended? He prefers the plan of leaving the teeth for two or three weeks after the application of arsenic before filling, that the pulp may slough away and all sensitiveness be destroyed.

Dr. Cutler has had extensive experience in the use of arsenic in medical practice. It will produce extensive sloughing. It is taken into the system and breaks down the red globules of the blood, combining with the iron, thus depriving the blood, so far as this process is accomplished, of one of its necessary elements. The argument to sustain this theory was in part based upon the fact that the hydrated sesqui-oxide of iron, combines with and precipitates arsenic with such facility as to constitute the best known antidote, to its poisonous influence.

I have studied the nature and action of arsenious acid with a considerable degree of thoroughness. Do not think that any of the toxicologists have given the correct theory of the action of arsenic. It produces no change in the general structure of the tooth pulp, when applied for its devitalization, but the red blood corpuscles are broken up and destroyed; this is accomplished by the combination of the arsenic with the iron in the blood. The coloring matter of the blood consists in part, at least, of a sesqui-oxide of iron and the arsenic uniting with it forms an arsenuret of iron. It may also have a catalytic influence upon some of the other constituents of the blood. Arsenic is far more liable to be taken up by dentine before the teeth have arrived at matur development, and mischief is far more liable to occur. We know but little of the definite action of poisons.

Dr. McClelland asks if there is not, consequent upon the devitalization and decomposition of tooth pulp, a gas formed that acts as an irritant upon the living parts.

Dr. Cutler replied: There will not be gas formed to any appreciable extent, though by the breaking down of the red corpuscles carbonic acid gas may be formed to a slight extent. When the vessels at the point of a root are cut off, the blood that flowed into the pulp will be diverted to some other channel.

Dr. Morgan is very positive that arsenic by osmotic action does pass through the dentine. The enamel is organic structure and possesses vitality, as is shown by the fact that enamel not sustained by living dentine becomes friable and easily broken down.

Dr. Taft remarked that in many cases in which arsenic is used for devitalization of the pulps of the teeth the periosteum becomes more or less affected. This may occur either from the direct influence of the agent upon the tissue, or in part by this, and in part by the congestion consequent upon the sudden stoppage of the blood in its natural course through the vessels of the pulp, and its diversion into other channels, or the difficulty may occur entirely from this latter condition. The blood usually, perhaps upon being turned back, finds its way into the veins by anastomosis, but it will sometimes fail in this and then it passes into the cellular tissue through the ruptured or enfeebled walls of the vessels, when irritation ensues.

SECOND DAY—EVENING SESSION.

(By special request the first hour of the session was occupied by Dr. Watt, in the delivery of a lecture upon nitrous oxide as an anæsthetic, a synopsis of which we endeavor to give in this connection.—REP.)

MR. PRESIDENT AND GENTLEMEN: As most of you are more or less familiar with my recent personal history, I make no apology for appearing before this, the oldest Dental Association in the world, without a written communication.

In compliance with request, I propose a converse, for a while, on the preparation and use of protoxyd of nitrogen, or nitrous oxyd, as an anæsthetic. This is a subject of great practical importance to the Dental profession, inasmuch as we are called upon to inflict pain more frequently than general surgeons, and our operations, though fearfully painful, are of such brief duration that it would be almost warrantable to conclude that this anæsthetic was designed for our special use.

Protoxyd of nitrogen, as its name imports, is composed of one equivalent of nitrogen, united with one of oxygen. The proportions, numerically, are about 14 of the former, and 16 of the latter. It will be noticed that these are the chief elements which constitute our atmosphere, the substance under consideration being about twice as rich in oxygen as atmospheric air; and here these elements are chemically combined, while in the atmosphere they are mechanically mixed.

Nitrous oxyd is a gas about fifty per cent heavier than atmospheric air, is colorless, and has a peculiar sweetish taste and odor. Its volume is the same as that of the nitrogen it contains; hence, by loss

of oxygen from any cause, is not reduced in bulk. This is practically worthy of notice. In this gas the elements are held together by a very feeble affinity. Its oxygen is, therefore, very easily separated from it. On this principle it supports combustion almost as readily and well as free oxygen. The oxygen is thus furnished in its nascent state, and is as active as ozone. It is quite probable that it supports respiration on the same principle. There is a popular error among writers that it may be well to notice. It is generally stated about thus: "Sir Humphrey Davy discovered * * * that it supports respiration for a few minutes. He breathed 9 quarts of it, contained in a silk bag, for 3 minutes, and 12 quarts for rather more than 4; but no quantity could enable him to bear the privation of atmospheric air for a longer period." Now does any one suppose that 12 quarts of *atmospheric air* used in the same way would support respiration more than 4 minutes? If he does, let him try it; and if it fails him, let him be consistent by writing and printing that "no quantity" of atmospheric air will sustain respiration for a longer period. The ox bladder and silk bag experiments of the older chemists amount to little in determining the support to respiration derivable from this gas. They were mainly ascertaining how long a man can breathe his own breath.

It must not be inferred that this protoxyd is a substitute for atmospheric air, far less that it is a better supporter of respiration, as I have often heard claimed by its over-zealous friends. But that it is capable of supporting respiration far beyond what is indicated by the experiments of Davy is now clearly demonstrated by experiment. I have known it to be breathed for an hour, with less than twenty inspirations of atmospheric air during the time. I have many times seen it breathed twenty minutes, without the admission of any air, the quiet state of the patients, their natural complexions, and their after statements proving that they suffered no inconvenience at the time; and, when the gas is pure and properly administered, even for these long periods, the condition of the patient is as unlike asphyxia as can be well imagined. These experiments were not made with regular patients, but were legitimately conducted, from a feeling that we must know far more about this agent, or abandon its use.

This gas is usually obtained by decomposing nitrate of ammonia by heat. It may be preserved over water, as there will be but little waste after this liquid is once saturated. Several precautions are to

be observed in its preparation. It is much easier to prepare pure ether or chloroform than pure nitrous oxyd. It is sometimes difficult to obtain pure nitrate of ammonia. Here are two specimens, neither fit to be used as ordinarily directed. The gas prepared from this, by the ordinary process, produces a sense of suffocation, and tonic spasm of the muscles of the throat, and sometimes of the respiratory muscles—these symptoms continuing with greater or less severity, in some cases for several days. The salt contains a soluble chloride. The other specimen which I show you does not contain a chloride, but when ordinarily used, yields a gas but little less suffocating than the former. The muscular spasm of the throat is not so continuous as in the former case, but quite as prolonged. Of course the experiments with such agents have been but few. The latter specimen yields pure nitrous oxyd, after about one-fourth of it has evaporated. (It is less difficult to obtain the pure salt now.—W)

But the use of a pure salt, by no means insures a pure gas. To obtain such a result, several conditions are to be observed. The nitrate is to be decomposed at the proper temperature; and this implies some reliable method of *regulating* the heat. In short, the apparatus should be automatic; for no one can regulate the heat properly on the basis of observation.

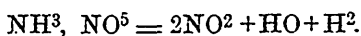
The thing to be aimed at is to decompose the nitrate so as to obtain only protoxyd of nitrogen and water, as indicated in this equation:



It is difficult, and perhaps impracticable, to obtain exactly this result, as below the the proper temperature the order of decomposition is not wholly as indicated by the equation, and of course, in reaching the proper degree of heat, this lower temperature has to be passed. For this reason, the heat should be rapidly raised from the melting point of the salt to the degree of proper decomposition.

By decomposing the nitrate at about 470 ° Fahrenheit, I have obtained the most satisfactory results; and any temperature between 465 ° and 480 ° will afford good gas, if proper care is taken in other respects.

By running the heat too high, a part of the nitrate is decomposed so as to yield binoxyd of nitrogen, sometimes called nitric oxyd, as indicated thus:



As nitrous oxyd is formed at the same time, it and the free hydrogen

form an explosive mixture, and a series of infinitesimal explosions result, agitating the liquid differently from ebullition or effervescence. This condition is readily detected by the practiced eye.

The nitric oxyd, thus formed, is a very poisonous gas, and is very rapidly converted into nitrous acid, which as rapidly passes into nitric acid, by increase of oxydation. This is a much lighter gas than nitrous oxyd, and is far less soluble in water; consequently contrary to the popular opinion and the statements of some writers on the subject, it can not be removed from nitrous oxyd by washing, or passing the mixture through water. A mixture of these two gases becomes more and more unfit for use, by repeated and prolonged washings.

In administering the nitrous oxyd, the patient must not be smothered. This is an important, yet much neglected point, in the use of any anæsthetic. The apparatus ought to be so arranged that respiration is not in the least obstructed. This inhaler is defective. The expiration is considerably retarded, which is a very serious fault. A tube of sufficient diameter, with proper valves, without wings or flanges is the best "inhaler." The patient should be seated in a *very* comfortable position; for with a few inhalations of the gas sensation is so much exalted that trivial inconveniences become painful and very annoying. When the patient has taken the inhaler into his mouth, hold open the valve, and have him make a few full inhalations of air, for the purpose of removing *all* carbonic acid from the air cells. This is practically of very great importance. The first full inspiration of nitrous oxyd seems almost to overwhelm the lungs. The rush of carbonic acid into the air cells is very great. Hence it is nearly always best, after a single inspiration, to open the valve, and let the patient take one or two breaths of air; and through the whole process of administration, whenever, by flushed features or otherwise, there is the least indication of suffocation, admit air freely till relief is afforded. After a little time the rush of carbonic acid abates, and the admission of air is not called for. There should be nothing like forcing the patient to take the gas, such as holding the lips, etc.; for when the gas is pure he *wants to take it*. And when pure and properly administered, it produces neither delirium nor darkening of the complexion. I have sometimes used it regularly for months, without seeing either of these symptoms. Both are caused by the presence of carbonic acid in the air-cells, and not by nitrous oxyd.

Respiration is rendered much slower by the inhalation of nitrous oxyd, being often reduced to six or seven, and even to three or four inspirations to the minute, and this usually without any sense of suffocation or approaching asphyxia. The retarded respiration sometimes continues a considerable time after the operation, causing the patient to feel a sense of prostration; but this is not commonly the case. When a second operation is necessary, it is best to wait till respiration has been re-established.

FILLING TEETH.

Dr. Taft suggested that perhaps one of the most common faults in practice in filling teeth, is a want of thoroughness in manipulation; too many points are passed over without sufficient attention. How often does the thought occur to all of us, "Oh, well that will do," and especially when we are hurried and fatigued. Failure will often enough ensue, when the highest skill exercises the greatest care. Let all things be done in the most thorough manner possible. I would not intimate that there is but one good way or efficient method of performing this operation in our practice, there will be differences here, as well as everywhere else. I will for a moment consider the operation of filling proximal cavities of the teeth, and will direct attention to but one feature of this, viz: the separation. This in the molars and bicuspidis is usually effected by cutting and filing from the proximal surfaces in which the cavity is situated, till a V shaped space is formed, cutting in this manner till ample space is secured through which to operate, and firm borders of the lateral walls obtained, and then filling the cavity only flush with its borders.

While in some cases this perhaps is the best method, there are others in which we think a different one preferable; for instance, when there are but small or medium sized cavities, the lateral walls thick and firm; it is better to make only separation enough between the teeth to make a good finish upon the proximal surface of the filling; space enough to receive a thin finishing file and tape will be sufficient, and this in the majority of cases, can be obtained by wedging. An entrance into the cavity for the introduction of the filling, should be made by cutting down through the masticating surface of the tooth, into the decayed cavity. This cutting should usually be made as far toward the center of the crown as the decay extends.

By this method the natural form of the tooth is restored, and the ability to masticate is not impaired, and the difficulties arising from

a large V shaped space are obviated, and the facility of performing an operation in this manner is equal to, if not greater than other methods.

Dr. Driggs, It is one thing to know how to perform, but quite another to do it. I still adhere to the old method of preparing cavities, have selected the old masters as my copies. There is a disposition in the profession to avoid extremes—to refuse to operate upon teeth that can not be saved with certainty. My practice is to cut down all thin, friable walls or edges, except perhaps upon the incisors; in the molars always cut away the thin edges or walls, and do not make much protrusion of the gold; do not attempt to make contour fillings. I do not believe they will ultimately prove permanent; in a small proximal cavity of a molar, do not think the best method of effecting an entrance into the cavity is by cutting down from the masticating surface of the crown, but obtain an entrance by a separation of the teeth, making as little cutting of the tooth as possible, to secure a good entrance into the cavity. I am in favor of conservative filling; do not extract all badly decayed teeth, nor do I always cut down a large portion of the tooth; but aim to have strong walls, and fill flush with their edges, and in favorable cases, build out somewhat so as to make a convex surface to the filling.

Dr H. A. Smith, I regard the principles announced by Dr. Driggs, in the main correct; there are, however, various methods of making very good operations.

I desire further information in regard to the new preparations of gold for filling. I am somewhat in doubt as to the advantages claimed for them; and shall be glad to know that they are all right.

Dr. Goddard, I have used about two ounces of "Morgan's Plastic Gold," and chiefly in connection with soft foil; but am not yet fully satisfied with the tests I have made. I fear from some things I have seen, that it may fail; but, as with many other things, so with this, time will decide.

About eighteen months ago, I operated upon a superior central incisor, a large cavity upon its anterior surface; after properly forming the cavity, I fitted into it as neatly as I could a piece of natural tooth; this I set in the cavity with os-artificial, it is yet worn without any apparent change. Can not operations of this kind be frequently made?

Dr. Watt, I have in three instances performed operations in the

same manner as described by Dr. Goddard ; all were very satisfactory.

Dr. DeCamp, This is a subject of great importance to all, and especially to the younger members of the profession

Gold is doubtless the best material known for filling teeth ; but there may be a diversity of opinion as to the form or condition. I have used it in every form in which it has been presented ; foil, crystal, sponge and shred. Some of these, I have observed, discolor after being in use for a time. I have attained better success, made more reliable fillings with soft gold foil, than with anything else. In superficial and difficult cavities, I usually prefer adhesive gold. The form, size, and location of the cavity to be filled, will to some extent determine the kind of gold ; I fill extensively with blocks or cylinders.

Dr. Watt, There is a great want of uniformity in all the preparations of gold. This arises from two sources, viz. : the mechanical and chemical manipulation.

Much of our failure to secure good results with new materials and new forms, arises from a want of the proper knowledge to direct their use. Gold perfectly crystalized is, I think, the best form in which it has yet been used. The production of this requires a high degree of chemical knowledge. Crystal gold can not be made as cheaply as foil. Far greater rapidity of execution in filling is attained with crystal gold than with gold foil.

Dr. Arrington, I am not exclusive in my practice, nor in my teaching. I used "Lamb's Gold" for a time, I then thought it good ; but have found several samples of it very imperfect, which illustrates what Prof. Watt has said upon that point. I regard "Watt's Sponge Gold" as better than any kindred preparation that I have used ; but I have my fears that it sometimes clogs, and does not conform to all inequalities. I use perhaps non-adhesive foil more than anything else ; use nothing for filling but gold and os-artificial. Have put in these fillings in the manner described by Dr. Goddard ; I used porcelain, but I now think the natural tooth would be better. I have always condemned the use of amalgam for filling teeth, because it is not reliable, and because of its pernicious influence upon the profession. I do not use "Hill's Stopping," because "os-artificial" is better. In many cases the latter makes excellent fillings, and under no circumstances can it result in injury.

Dr. G. W. Field, By permission, I would ask, if there is any efficient treatment for Dental exostosis, and if so, what it is ?

Dr. Watt, This affection is easily treated; it is simply a hypertrophy of the cementum. By this growth, pressure is made upon the surrounding parts, these are absorbed, and the growth goes on and oftentimes branches of nerves are impinged upon, and neuralgia occurs. I have found nothing better for treatment of this affection, than iodide of potassium. This agent acts especially upon abnormal growths, breaking down and destroying them. Healthy tissue resists the action of this agent correspondent to the vigor of the vitality, while abnormal tissue is acted upon in almost any case. Iodide of potassium may be taken in from 10 to 30 grain doses three times daily.

There are cases of exostosis, doubtless, in which extraction of the affected tooth or teeth is the only remedy.

Dr. J. Taylor, I have found patients who could not tolerate iodide of potassium.

Dr. Watt, Bromide of potassium may be substituted for the iodide. It may be taken in 20 to 30 grain doses twice daily.—*Dental Register*.

SELECTED ARTICLES.

ALVEOLAR ABSCESS.

BY DR. W. H. SHADOAN.

[Continued from page 307.]

IODINE AND ITS TINCTURES.

Iodine is an elementary non-metallic substance, having some resemblance to chlorine. It was discovered in 1812, by a soda manufacturer of Paris. Sometime after this its therapeutic properties were discovered, since which it has gradually come into general use, so that at the present time it is universally a standard remedy. It is found chiefly to exist in the kelp of sea weeds, in the animal, and mineral kingdom. It is also found as an iodide of sodium in several mineral springs of the United States, and in some minerals in other parts of the country. As a therapeutic agent, iodine is used as an absorbent—it excites absorption in the alveolus, and in erysipelalous affections. In glandular enlargements and malignant growths, its use is more beneficial than most other stimulants, in bronchocele and other affections of the throat, and thyroid glands iodine is considered invaluable. As the Dentist is not expected to treat such diseases,

the further consideration of the agent in this connection will be discontinued. It has only been thus spoken of to show its efficacy in such cases.

Iodine is less used by the Dentist than the tincture ; as an internal remedy it is seldom used, the iodide of potassa being considered far superior. Iodine may be useful in the local treatment of chronic inflammation or induration of the salivary glands, in dental periostitis, in alveolar abscess, in some morbid states of the antrum, in thickening of the mucus membrane, in tumors of the mouth, and in absorption of the gums and alveolar processes. The officinal tincture will answer very well for periostitis, thickening of the membrane, and sometimes for abscess. For chronic catarrh, or inflammation of the lining membrane of the antrum, the compound tincture very much diluted is a good injection. For destroying the sac in alveolar abscess, a solution of iodine and creosote is a sovereign agent, and when not too concentrated, the same is an admirable application to the margins of the gums and alveolar processes, after the removal of all irritating and dead substances ; but care must be taken that it is not applied too frequently. It is an escharotic, and as a general rule it is well to let the slough separate before a second application. To use externally I prefer a colorless solution of iodine, prepared by combining equal quantities of compound tincture of iodine and pure aqua ammonia. As combination takes place, the mixture becomes transparent and will not then color the skin. I do not think of any condition which will require the Dentist to prescribe iodine internally. When its constitutional action is indicated as in scrofulous or syphilitic diseases of the mouth more benefit will be derived from the use of iodide of potassium.¹

IODIDE OF POTASSIUM.

Omitting its history, we will pass immediately to its physiological effects and uses.

“Locally, this salt is an irritant, but is not near so energetic in its action as free iodine. On this account it may be given internally, in larger doses and for a longer period, than iodine. Indeed, iodine can be introduced into the system much faster by the use of the iodide, than when given uncombined. A solution of albumen, fibrin, or gelatin, is not obviously changed by the addition of this salt, and as these are the most abundant organic constituents of the body, we

1. Watt's Dental Materia Medica.

may infer that the chemical action of iodide on the living tissue is but slight. To obtain a clear view of the action of this salt, as a remedial agent, it is necessary to bear in mind its peculiar properties. It is very soluble, and is, therefore, readily absorbed. It passes rapidly into the circulation, and may be detected in all the tissues and secretions. It is composed of two elements, both of which are characterized by strong affinities for other substances, and for some of them stronger than that by which they are held together.

If the salt is decomposed, the potassium takes oxygen and becomes potash, which is a general solvent of the animal tissues. At the same time the iodine is set free, and is thus able to exert its affinities. And as all chemical agents are peculiarly active in the nascent condition, the iodine and potash are both more energetic than if carried in their free state, to the point of action. Each one, as it were, holds the other quiet till the proper point is reached, and then lets it go, to accomplish its work. Each element by neutralizing the other prevents its local, *irritant* action, and each is liberated, atom by atom, in obedience to stronger affinities, each particle being promptly saturated, by the gratification of the affinity which liberates it. And this explains how it is that such large doses of this salt, can be taken for a long time, without local, or constitutional disturbance. The affinities of iodine and potassa are sufficient to account for all the phenomena, observed in the remedial action of the salt. Highly soluble compounds, are the natural results, and these are naturally carried out by the various excretories. Let us suppose that the iodide is administered for the arrest or removal of morbid growths, or to relieve tertiary syphilis. The latter is often spoken of as a disease of the bones. But does that expression convey the whole truth? Is there not a disease of the formative fluids from which bony tissue is deposited? Now, if these morbid particles are arrested, by the affinities of the elements of the salt, held in solution, and carried out through the various secretions, it is evident they will not further build up the morbid development. And as the particles of morbid structure, like those of normal tissues, perform their functions and pass away, unless new ones are furnished in their places, the abnormal solid is carried off little by little. The diseased growth is literally starved to death, and carried out by the scavengers of the system. It is this action of the remedy which has induced some writers to call it a resolvent, or liquefacient. In some of the above remarks, I

have sacrificed technicality, to a desire to be understood by beginners, and those whose opportunities have not been such as they desired. They are not written for the critic, though of course, he may use his pleasure in regard to them. It should be given in solution, and usually, immediately after eating. It may be taken in sweetened water, or almost any way the patient may fancy. The average dose is from 4 to 10 grains. Many use much larger doses, but I have not found it best to do so. For an adult, I frequently prescribe a solution of a drachm of the salt to an ounce of water, and direct the patient to take a teaspoonful three times a day."

BROMINE.

Bromine is a volatile liquid of a dark red color, when viewed in substance. Its taste is very caustic, and its smell very disagreeable, somewhat resembling chlorine. It evaporates rapidly, and is sparingly soluble in water, more so in alcohol, and still more in ether. It is valuable for its bleaching properties, and may be used for bleaching teeth, not so well, however, as chlorine, or chlorate of zinc. Bromine is intermediate in its effects between iodine and chlorine. It stimulates the sympathetic system, promotes absorption, and is supposed to be more energetic than iodine or bromide of mercury. It is recommended where iodine has been tried, and does not act with sufficient energy, or has lost its efficacy by habit. I am of opinion that bromine, like iodine, is not as efficacious as bromide of potassium. In case the patient has any syphilitic taint, bromine and bromide of potassium may advantageously be used. They may be used constitutionally or locally, either or both if thought best, for local treatment, make a saturated solution of bromide of potassium, then add 40 drops of bromine to each ounce of the solution, and apply to the affected part, always cleansing the part well before making the application. Apply this remedy in the same manner as creosote. For internal treatment take of bromide of potassium one scruple, distilled water one ounce, misce, and add bromine one scruple. Take a teaspoonful three times a day, one hour before or after each meal. This treatment is only to be used in cases of syphilitic taint.

When local treatment is applied through the canal, it should first be cleansed of all impurities, such as nerve membrane, or any foreign substance contained therein, and the root opened freely to allow a free use of the injection. In case the discharge be fetid, a solution of chloride of sodium should be injected into the cavity, to correct

this condition. After this, an injection of any of the above agents, may be used to break down the sac. The directions for the use of which see CREOSOTE.

Here let me remark, that the young and inexperienced may be easily deceived in their cure. Either of the local remedies used will soon impart a very healthy appearance, and often cause the external opening to heal almost immediately, causing the operator to think he has cured the disease, when really he has hardly checked it. It is frequently the case that the therapeutic treatment alone will not affect a cure, but surgical aid is required. In the treatment of abscess in the inferior Maxilla, there are serious difficulties, which are not met with in the superior. One is, the situation being at the bottom, instead of at the top of the socket, the secretions rest on the diseased parts, while in the superior it is drained off. The presence of this matter is a serious obstacle in the treatment of abscess unless it can be drained off and kept free. Again, the size and shape of the jaw, is such that an opening through the gums can not be well made. Therapeutic treatment, in cases of this kind, is not very efficient unless it be vigorous. The treatment of abscess in the inferior jaw is not generally so successful as that of the superior.

(TO BE CONTINUED.)

NOTES FROM DENTAL PRACTICE.

FILLING TEETH.—Cavity in the grinding surface of a superior molar. Nature of Case.—Cavity crucial in form, the decay extending from a central cavity along the crown fissures very nearly to the approximal surfaces on the one hand, and to the buccal and palatine surfaces on the other—very thin walls remained between the decayed fissures, which terminated in acute angles, and at the surfaces named.

Preparation of Cavity.—By means of a cone-shaped drill the central cavity, from which the fissure cavities in the first place proceeded, was enlarged, and the sharp, irregular projections of enamel forming angles at the points of union, together with the overhanging portions, partly removed.

By means of enamel chisels, the fissure cavities were then enlarged for some distance from the central cavity towards their extremities.

When this was accomplished, a flat file, cut upon both sides, was applied by means of a file-carrier, first to the fissure extending very

nearly to the buccal surface, and the thin wall intervening wholly cut away, opening out this fissure cavity on the buccal surface to a depth corresponding to that of the portion of the same cavity near to the central cavity, and giving to it a width of about one and a-half lines. The opposite fissure, extending from the central cavity towards the palatine surface, was then enlarged in the same manner by means of the file, both as regards length, breadth and depth.

The file not being applicable to the fissures extending from the central cavity towards the approximal surfaces, on account of the presence of the adjoining teeth, enamel chisels were used to enlarge these fissure cavities to the same extent as were the fissure cavities extending towards the buccal and palatine surfaces, all the fissure cavities having, when prepared, perfectly parallel walls.

Filling the Cavity.—After carefully drying the cavity and protecting it from moisture by means of bibulous paper and napkins, the next step in the operation was the introduction of the gold—adhesive gold foil being used. Sheets and half sheets of the foil were formed into ropes from which pellets of different lengths were cut, and each pellet annealed previous to its introduction into the cavity. The first pellet, one of the largest size, was carried to the bottom of the fissure cavity extending towards the buccal surface, at its point of union with the central cavity. This pellet, owing to its size, when carried to the position named with the introducing plyers, and thoroughly condensed by means of mallet force, extended across the bottom of the fissure cavity and remained securely in place. Other pellets were then added to this and the bottom of the entire fissure covered, as far as the buccal surface of the tooth, the gold being built out a little beyond this surface for the purpose of properly finishing it. When this fissure was partly filled, the succeeding pellets were carried across the bottom of the central cavity, and from this cavity to the palatine fissure, which was partly filled in the same manner as the buccal fissure and central cavity. The gold was then introduced into the two approximal fissure cavities, anterior and posterior, and when these were partly filled, the operation of building towards the grinding surface was commenced and carried on until a sufficient quantity was introduced to completely fill the entire cavity, and restore the original form of the tooth.

Treatment of Exposed Pulps.—Nature of case.—The cavity of decay on the anterior approximal surface of the superior

second bicuspid tooth, the removal of the decomposed dentine exposing the pulp which was found to be in a perfectly healthy condition.

Treatment.—After carefully removing the carious portion and giving a proper form to the cavity for the retention of the filling, the next step in the operation was the protection of the pulp. For this purpose recourse was had to the oxy-chloride of zinc, which was prepared by combining the powdered oxide with the liquid chloride in the form of a thick paste.

These preparations of zinc should be of the best quality, and thoroughly mixed together, so as to form a paste which does not present a watery appearance upon the surface; care must also be observed that the paste does not commence to solidify before it is introduced.

In order that no time might be lost after the mixing of this paste to the proper consistency (as it rapidly hardens), the cavity was first dried, and then carefully protected from moisture by requesting the patient to keep the napkin in place about it with his fingers. The paste as soon as prepared was applied directly over the exposed pulp on a small piece of soft linen of a size corresponding to the bottom of the cavity, both surfaces of this piece of linen being coated with it.

After the introduction of the piece of linen, the cavity over it was completely filled with the paste, and this temporary filling protected from moisture for about twenty minutes, this time being necessary for the proper hardening of the material. The surface of the filling was then made smooth with a burnisher, and to protect it for a still longer time from moisture, was painted over with a coating of sandarach varnish. Collodion also answers a good purpose for thus protecting the surface; these directions applying more especially to temporary fillings of these preparations of zinc, which are intended to remain in the teeth for some months.

An engagement was then made with the patient for the following week at which time it was determined to permanently fill the tooth should no untoward symptoms arise.

The tooth remaining perfectly quiet from the time the temporary filling was introduced, until that of the second engagement, the method pursued was as follows: All of the temporary filling, composed of the oxy-chloride of zinc was removed, except that portion of it covering the bottom of the cavity, and immediately over the pulp, care being taken not to cut through this or in any way to injure it. When this was accomplished a gold filling was introduced by hand-pressure (as

it was deemed inadvisable to use mallet-force in this instance), and the cavity thus permanently secured.

The application of the paste to the exposed surface of the pulp at the time of the introduction of the temporary filling, was followed by some pain, which, however, soon subsided.

This treatment of and exposed pulp, only promises success in cases where the organ is in a perfectly healthy condition, free from inflammation, or injury occurring in removing the decay. Where the proposed pulp is in a state of irritation palliative treatment should first be resorted to, and that above described be pursued when the former has proved successful.—*American Journal of Dental Science.*

C O R R E S P O N D E N C E .

To the Editor of the Canada Journal of Dental Science.

SIR,—I am informed that a short time ago, a brother practitioner was subpoenaed in a Division Court to give professional evidence. Having the interest of the profession at heart, he claimed to be entitled to the same witness fee of four dollars as every other professional man. He stated that by an act of Parliament dentistry was acknowledged as a profession, and that dentists were simply specialists. The judge said he could find no authority for allowing a professional witness fee, and as for the specialty, a whitewasher was a specialist also.

Those who live and come in contact only with such of our professional brethren, as strive to elevate it in public esteem, will be both surprised and indignant at the remarks of the judge, that dentists and whitewashers should be put on a par. But those who live in localities where *Doctors*, being compelled to take in their show cases resort to the following mode of advertisement, in order to attract public attention, cannot wonder that dentists do not hold that professional position to which so many of them are justly entitled.

The advertisement is after the style of the hot-meals-at-all-hours notices, which one sometimes sees outside the huckster shops in country towns, and is thus constituted:—Take a large packing-case, place it on the outside of the sidewalk, on it place a moveable triangle, made of a wooden frame, size 36x30, covered with three posters of the same dimensions, on which posters the public are informed that the *Doctor*, opposite whose office door the attractive advertisement stands, “is

prepared to extract teeth without pain every day by the administration of nitrous oxide gas." The *Doctor* who resorts to this mode of advertising, is the same individual to whom I referred in a communication which appeared in the Canada Journal of Dental Science, March last.

Can nothing be done to compel those who are among us, but not of us, to behave in their professional capacity in a manner becoming a professional man and a gentleman? Can the Union Dental Association of Ontario (of which he is a member,) not adopt some resolution excluding from membership any one who resorts to any other than respectable professional advertisement, namely, newspaper advertisement, circulars and business cards?

Trusting that you will pardon me for encroaching so much on your space,

I remain truly yours,

C. C.

DENTAL EDUCATION.

Mr. Editor:

In the May number of "The Canada Journal of Dental Science" is published an article under the head of "The Proposed Dental College," which is calculated to retard advancement, and forces me to ask wheather *we*, as dentists, wish to grope along in the dark—not even having learned the rudiments of our calling? Or are we determined to become an educated body, worthy to be called a profession, ranking in importance with other specialties of the healing art?

If the former, by all means let us pursue our present course; but if we aspire to the latter, let us unite as a band of brothers, determined to further every object tending to place it in the coveted ranks. After receiving replies to a number of communications, I feel convinced that the great majority are dissatisfied with the present status of dentistry, which necessitates our considering the necessary steps to ensure its elevation.

We already have two of the most important means of education, viz: a "Dental Journal" and a Dental Association, but they do not obviate the necessity of a Dental School; where practitioners and students can be grounded in the rudiments of a profession, elevating them at once above the "Dentist's Trade." But it is said that those who have obtained licenses to practice will not seek further instruction, which is in reality not a serious objection, because a few educa-

ted students will soon force incompetent practitioners either into a respectable position, or out of the profession, which will be a God-send to the patients upon whom they were destined to elaborate their ignorance; but says another there are already too many in the *business*, which is certainly true, but as soon as it becomes a respectable profession there will be room and to spare. The most common objection is lack of funds to carry out a collegiate course of instructions, a difficulty with which it is probable every dental college in America has had to contend, which obstruction can be overcome by associated effort; then let us go to work unitedly, and a school can be organized and carried out successfully; although it may not be equal to some of its predecessors on this continent, yet vastly superior to our present system of "apprenticeship." Then let us rally round a common standard, having "progress" for our watchword, willing to throw *aside party* prejudices, and consider personal animosities errors of the past.

I do not suppose a corps of professors can be found in the dental ranks qualified to fill all positions required in a college, but there are medical schools where it is probable instructions in Anatomy, Physiology, Chemistry &c., can be obtained, leaving only the branches more intimately connected with our specialty to be taught, and if there cannot be any better means devised by which to supply such instructions, let all practitioners interested meet together and make arrangements to each give a certain amount of instructions, so arranged as to fill up the course, and cover the field of *our* specialty, when it could be ascertained who are qualified to give instructions; for teachers are born not artificially prepared.

It has been remarked that eight or ten years hence will be soon enough to think of establishing a college, by which time many of us will have ceased from our earthly toils, no longer permitted to disgrace a respectable calling; then let us not dodge our responsibility, but work while it is to-day and our efforts will be crowned with success, so that when sooner or later our Maker bids us lay aside our mortal bodies, we shall be enabled to transfer our drills and excavators, to hands guided by intelligence *equal* if not *superior* to our own.

Cobourg, July, 1869.

THOS. ROWE

THE PROPOSED DENTAL COLLEGE.

Mr. Editor.—Having perused Dr. Nelles' letter on the above subject, in the May number of the Journal, I am induced to correct an

impression which seems to be current, to the effect that the promoters of the college are desirous of bringing a great number of young men into the profession to the injury of practitioners. As far as my knowledge on the point goes, this is not the case. Previous to the last examination there were probably three unlicensed to one licensed practitioner.

The legislature is extremely liberal towards young practitioners, whose opportunities have been limited. It was only by the greatest effort that the provision requiring an examination, could be made to bear upon any in practice at the time of the passing of the Act. In the several States that have secured legislation on the subject, all in practice are allowed to continue. In this respect our Act is in advance of any yet passed. In order to get the clause passed, the committee of the Legislature were referred to the clauses providing for the instruction of any who were not already qualified to pass their examination, and given to understand that the licensed practitioners would be only too glad to assist in establishing a school of instruction for their benefit.

Another obstacle in the way seems to be that many seem to think if instruction is afforded in a college, students will not be so likely to remain in the office of practitioners. The Bill requires that students shall remain two years articulated, and the By-Laws of the Board provide that they shall devote their *whole time* to acquiring a knowledge of the profession, before they shall be eligible for examination, and must be certified by their preceptors as to their having faithfully performed their part of the contract. In the office, the preceptor has but little time to instruct, except in the practical portions of the art. The *Science* of Dentistry must be learned from text books and other sources. The advantage of lectures upon Chemistry, Anatomy, Materia Medica including Botany, Surgery, and Medicine, can be secured without any expense to the Board. Dr. Geo. L. Elliot who was formerly a student of the Toronto School of Medicine, requested the writer to call with him upon Dr. Aitkins, Dean of the Faculty of that institution, when we were told that the facilities of that school would be at our disposal. Through the influence of Prof. Berryman, students were placed upon the same footing as those of Medicine in the Medical Department of Victoria University. The allusion to the Board's having "been pleased to recognise the *present* qualifications of the class of persons alluded to" is not correct. The gentlemen who

passed at the last examination, exhibited a fair knowledge of the profession and many of them have seen more years in the profession than either Dr. Nelles or the writer. In one instance a man of fifteen years practice was examined, because he had not happened to live the last five years in Canada.

Over a hundred practising Dentists yet remain in Ontario, without license. It is fair to suppose that the better qualified presented themselves first, this balance have yet to be qualified or rejected. No one thinks of "*Manufacturing Dentists Wholesale*." Provision should be made to qualify those in the profession practically although now not recognised. Some may think the estimate of one hundred too high, but the writer has compiled his list not from directories but from other sources.

With regard to three indispensable requisites for a Dental College Laboratory, Infirmary and Dissecting Room, the first should be established as soon as possible. In the mean time it can be supplied principally by Dentists practising in Toronto, to which donations would be contributed by manufacturers. The Dissecting rooms of the Medical schools are already secured.

An infirmary can be established in connection with the city dispensary or the Hospital, as in England. The Infirmary patients are poor and would pay nothing to an established office. A little management can prevent any injustice to city practitioners.

The writer is not on the committee referred to, but has had the privilege of visiting more than one Dental College and is fully satisfied that if the profession will sustain the resident practitioners of Toronto by their influence, an institution can be reared there, that will be of service and a credit to the profession, not for "*Manufacturing Dentists Wholesale*" but for the purpose of assisting Licentiates in raising the standard of qualification.

Very few of the unlicensed practitioners are able to attend lectures in any of the American Colleges. It will be better to assist them to qualify than to have them to pursue their practice unlawfully to the great injury of licensed and established practitioners.

J. S. SCOTT.

EDITORIAL.

VOLUME ONE.—NUMBER TWELVE.

The pleasure with which the editors of this Journal survey the

completion of the first volume, is one in which any laborer can share, who has commenced a labor of difficulty but one of love, and brought it to a successful end. When the "*Canada Journal of Dental Science*" was started, there were prophecies of failure as well as promises of success; cold water thrown upon it as well as genuine sympathy bestowed. Some whose encouragement would have given it a great lift, feared to associate themselves with a possible bubble that might burst; many feared to subscribe lest they might lose their money; and out of the first numbers sent gratis to every Dentist in Canada, the reasons for not subscribing were the most frequent returns, and even congratulations were more numerous than remittances. This was expected, and therefore we were not disappointed. A great deal of heart and some money had been put into the enterprise, and come weal or woe, we were fully determined that the Journal should not die until it expired in its twelfth number. There was no desire for gain; no axe to grind; no other wish than to give the profession a Journal. No one was asked to invest a cent. Confidence was gradually established; and "certain circumstances" leading us to believe that a transfer to the upper Province would be the best introduction to the Dentists of that Province, we sent it westward in direct opposition to our most cherished desires, for, not to mince the matter, we enjoyed the work. The result of the transfer, and the new editorial partnership has *made* the Journal, and we believe that entire confidence in it is now established, and that our friends would not willingly let it die.

The beginning of the Dental literature of Canada dates from this Journal. The history of the Dental movement is written in its pages. Where could we point to the literature of the Canadian profession until its establishment? When one had a communication to make, or when the proceedings of Dental meetings had to be published, the only means of communication were special pamphlets, which were no inconsiderable cost, or the pages of a Foreign Journal. There was no fair opportunity to develop our home talent; and though appreciating the liberality of the American Dental Journals, it was not to be expected that they could lend their pages largely to the interest of the Canadian profession. We can point with pleasure to the good, direct and indirect, already accomplished in Canada through the agency of this Journal; we see it in our cities, towns and villages; in a higher tone and dignity; in the abolishment of some quackery, and

the certainty of constant warfare against the various disreputable means of gaining a practice. Moreover, it is seen in the interchange of thought, and the increased liberality and generosity of mind, which hides not its talents under a bushel, but freely gives and freely receives.

We appeal to the profession at large in Canada for their renewed support. Nothing is more encouraging than the promptitude which remits without delay, and the thoughtfulness which contributes its quota in the way of contributions. We appeal to the Profession to rally round the nucleus of our Canadian Dental literature.

W. G. B.

IMPORTANT BUSINESS BEFORE THE BOARD AND ASSOCIATION.

On Tuesday next, the 20th inst., the Board of Directors and Examiners of the Royal College of Dental Surgeons is to meet for the purpose of granting licenses to a number of dentists under the "five years" clause of the Act, and of examining quite a large class of young practitioners who have signified their intention of coming before the Board for that purpose. As some little feeling has been manifested by members of the profession outside of the Board, because certain parties obtained licenses, when they did not think that their qualifications were sufficiently high to entitle them to a license, we understand that it is the unanimous decision of the members of the Board, that the examinations shall be much more rigid at this, than at any previous session. The matter of opening a Dental School will be brought under the consideration of the Board, but, we hope that there will be no *final decision* in the matter until after the meeting of the Association on the 27th. The Board is empowered by the Act to open such a school, but, that body is composed of but twelve of the two hundred or more members of the profession in Ontario, and is, moreover, liable to be changed entirely, at the election on the 2nd of June next, for which reason we think that some plan should be adopted, by which the question can be discussed by *all* the members at Belleville. We have received a good many private letters on the subject both for and against the college, and one from Dr. Nelles in opposition to it, which we published in the May number, and one each from Drs. Scott and Rowe, for which we most cheerfully make room in this number. We hope they will be

read with careful attention by all, as it is of the utmost importance that the matter should be thoroughly understood.

We have purposely abstained from expressing any opinion on the subject, hoping that sufficient interest would be felt by those outside the Board, to give the matter a thorough "ventilation." As we said before the Association is to meet on the 27th, and as there are several matters of very great importance to the interests of each and every dentist in the Province, we hope that as many as can possibly do so, will be present.

C. S. C.

PROSPECTUS FOR VOLUME NO. 2.

As the next issue of this Journal will be the commencement of the second Volume, we deem it desirable to review its past career, as well as future prospects, and renew our vows as editorial guardians of the interests of the profession in the Dominion of Canada; and to ask the sympathy of our brethren, not merely by wishing us well, but by giving us substantial aid in contributions, in individual effort to increase the circulation of the Journal, and above all in supplying us with the *needful*, by paying subscription fees promptly. From the time that an associated effort was made to elevate the profession in Canada, it has been felt that a native Journal, devoted to the various interests of the profession was needed. With a laudable ambition and enterprise, which the profession ought ever to hold in grateful remembrance, the publication of the Canada Journal of Dental Science was commenced in the city of Montreal, the first number of which made its appearance in June, 1868. The difficulties the pioneer had to encounter were not trifling. It was something new in this country, some threw cold water on the attempt, others openly doubted its success, it entailed a considerable amount of labor and expense on the proprietor, and above all the dissatisfaction that prevailed in Ontario at the publication of a journal out of the Province from which it received its greatest support. These with some other causes led to its suspension for a few numbers. At the Convention in Toronto last winter, the profession cordially came forward and promised the present proprietors their support, if they would continue the publication of the Journal. They have done so and filled the contract of the original proprietor, by completing the first Volume. We have spent both time and money, and endeavoured to carry out our programme as laid down in a former article of the Journal, under

the head of "Our Mission." We have reason to believe that we have not failed in our undertaking, having had many kind expressions of approval from the profession and press both here and in the United States.

Our work has been a labor of love. As we expected, we have made no money, but have the satisfaction of believing that in the circulation of the Journal monthly, we have been the means of imparting some useful practical knowledge, as well as elevating the professional sentiment of the dentists of this country. Our motto will be as it has been, the weal of the profession. With more extended connections, and a large augmentation to our stock of dental literature, we expect to be in a position to give our readers the benefit of all the new and best ideas that may be promulgated in the dental world. Having done all that was in our power to provide the profession with a useful native Journal, and being still determined to continue our efforts, we think that we have a strong claim for the sympathy and co-operation of every member of the profession. We feel that we have not received that literary assistance from our brethren that we might reasonably have expected. We have had but very few communications from Canadian practitioners, many of whom are efficient and experienced. This is hardly fair to us, or patriotic, and is not as it shou^l be. Whatever effort we may make to provide useful and interesting matter for the Journal, the writing of only two or three, will, to a greater or less extent become monotonous. We require productions from every member of the profession who can give anything new or reliable.

We have decided to reduce the price of subscription to \$2.00, which will make this one of the cheapest, if not the cheapest Dental Journal published, consequently none need refuse to subscribe on the grounds of expense.

EDITORS AND PROPRIETORS.

HOW OUR DRILL SERGEANT DREW A KAFFIR'S TOOTH

At the time of the Fenian raid in 1866, we were thirsting for Fenian blood in the Victoria Rifles, on the Huntingdon Frontier P. Q.; and among our reminiscences of that campaign we will always keep green in our memory the inexhaustible story teller, Sergeant Fitzpatrick, the attached drill sergeant of our corps, an old soldier of

H. M., foot. Fitz was in his glory with "a wee drop of the crathur" before him, and an attentive audience around; and if the "Vics" in any tent were cross and grumpy because the rain would'n't stop, or what disappointed them most of all, because the Finnegan's would'n't come, Fitz was on hand with an appropriate story to dissipate their blues. One day we were lying in our tent, when in came Fitz and among a string of stories he told one which may be of interest to the readers of the Journal.

When Fitz's regiment was in Africa, he one day came across a Kaffir suffering with an agonizing tooth ache; a lower bicuspid; nerve exposed. Fitz had before extracted upper teeth on the principle of fastening a string to a door, or bed post, and then pushing a hot poker in the face of the waiting patient, who, jumping back in alarm, would extract his own tooth; but he was in a puzzle how to draw this lower bicuspid without breaking it off. The Kaffir was averse to a fair pull; so our sergeant persuaded him to mount a tree; tied a strong string around the tooth, and from the tooth around a projecting branch of the tree. He then made the native sit on the branch, and when all was ready, he gave the poor beggar a push, and as the Kaffir went down, the tooth came up. The complete success of the operation was only prevented by the string, which dreadfully lacerated the mouth and face, as the Kaffir fell forward. Fitz was court-martialed for his ingenuity, and got three days close confinement.

W. G. B.

See the advertisement of Chandler's Canadian Dental Depot, on the second page of the cover of this number.

VERY BENEVOLENT.—The following is an advertisement of a quack Dentist in the Western States. "Dr. P——, dentist, having once more opened an office in B—— will perform all operations on the teeth at greatly reduced prices. A beautiful silver cup will be presented to the person having the greatest number of teeth extracted, and a splendid gold watch and charms to the one having the first set of artificial teeth inserted. Teeth extracted for a dollar a dozen." How degrading is such an advertisement to the profession? Gentlemen, do for pity's sake spare egotism and quackery in advertisements as well as practice.