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DR. G. V. N. RELYEA,

OSWEGO, N.Y.

Dominion Dental Journal

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Original Communications

REMINISCENCES OF DR. G. V. N. RELYEA, OSWEGO, N.Y.

(Formerly of Belleville, Ont.)

I remember you once intimating that you would like to know something of my antecedents. Well, verily. Briefly, I was born in Guilderland near Albany; worked on a farm until twenty. My education was what all farmers' sons get—three months' schooling in the winter, and not infrequently taught by a drunken Irishman. Not content to be a farmer I went to an academy for three months, worked again during the summer and then taught school for three months. Next I took a situation in a grocery, did not like that, and then found an opening for a clerk in a dry goods store; worked six months for my board and another six months at $250 a year. After one year's experience as clerk I had the presumption to go into business. Bought out an establishment, $4,000 stock; hired a clerk and for one year pushed it with my usual vim. At the end of the year took stock and found myself minus several hundred dollars, and in three days more was out of business again and looking for pastures green. Got a situation in a publisher's office as secretary, cashier and proof-reader. While holding this situation, a young medical student came to the city (Albany) to attend lectures at the Albany College. He was preparing to become a dentist and urged me to join him. I was open for almost anything that offered. Having leisure as a clerk I commenced to study, and when opportunity occurred, went with my friend to the college; had access to the dissecting department.

There was only one dental college at that time, the Baltimore College, and that was only two years old. I had no money; and the cost of travelling, my board, fees, etc., etc., etc., put it out of my power to go, so I went with J. S. Wood, M.D., Dentist. Attended

lectures at any opportunity, and found myself evenings in the dissecting room with a lot of rude, profane, yes, dissipated medical students. My friend Dr. Root was a Christian, an honest man. He died about thirty years since. After graduating he married; went to New York and commenced practice on Bond Street, where I always found a home when I went to the city. His influence over me at that time of life was most salutary. How many of the students then in that college went to bad; indeed, in looking over my life, how many of my former friends in the profession are alive? Indeed, few of *my* students are living. Few have escaped the snares of the tempter. I can count them by the score with whom I was so intimately connected, besides others who were young, bright, and with whom I had such friendly intercourse, who felt conscious of their strength to overcome temptations, and who used to laugh at my temperance principles; indeed, used to tell me that I did not know how to enjoy myself, that I was a fanatic, yes, a fool. Perhaps I was, but I was rewarded for the stand I took, and elected to the highest gift of the temperance people in Canada, viz., Grand Worthy Chief of the Good Templars of Canada, while my wiser friends, many, many of them are filling dishonored graves. I prefer being a temperance fool rather than a drunken one. But it was the mark of a "gentleman" to get drunk, and the standard of comparison was "drunk as a lord."

Profane swearing was fashionable. Even "ladies" (?) were allowed to sprinkle their conversation with oaths. All these customs are rapidly changing, not by the development of culture, however, but by the triumphant march of the spirit of Christ Jesus. Alas, alas, where am I wandering?

In one year I came out a full-fledged dentist; and with a fair outfit, a book of gold foil and of tin foil, a few teeth and colossal cheek, I started out. My objective point was St. Louis, Mo. First I had to make some money, and meeting a newly-made M.D., with whom I had spent many hours at the college that winter, he prevailed upon me to stop off at Rome, N.Y. There I made some money, and was invited into the country about twelve miles, to a place called Remson, the birthplace of President Cleveland, where I had a glorious time for three months; made about $100; was rich.

I went from town to village, and finally brought up at Watertown, and next move was to Kingston, and finally to Belleville, where I met my first wife, and became engaged to get married. I then started to look for a location. I went to Kingston, Prescott, Ottawa, Cornwall and finally to Montreal, where I spent a week. It was in February. I found the cold too much for me and went back west. I went to Toronto, Buffalo, Detroit, Chatham, London and back to Belleville.

In the spring of 1844 I went to Ogdensburg, or rather Dr. Ambler, of that city, wrote offering to sell out to me. I went down and bought him out, but he did not want to give up possession until July 1st. In the meantime I went to Albany to visit my parents, and the 1st of July I went to Belleville, and there found a letter from Dr. Ambler wishing to cancel his engagement as he did not want to leave Ogdensburg. I lost about two and a half months and $200, but there was no remedy, I had to submit. On my return to Belleville I soon found all I could do, and determined to remain there, and in the fall of 1844 married, and remained there over thirty years. When I left I settled up a thirty years' business, and had difficulty with only one man, and he came and paid up and we were friends. I worked up a large practice, and the last year that we worked gold, my business was $5,300. When I first located there Belleville had 2,500 inhabitants.

Now, about my experience in the line of base for plates. First that I attempted was that Prince of humbugs, cheoplastic, of Dr. Blandy, of Washington. I went to New York and secured the right for Canada, and made about $500 on that work. Sent circulars throughout the Canadas, but in less than five months it began to come back on me. Not disheartened when the vulcanite came in, only about six months after, I again went to the city and got control for the Dominion. My first vulcanizer cost me $80. An improvement was soon made and they sold them to me for $50. I used to sell a vulcanizer and give instruction for $110. Day, Callender, of Cobourg; Gilbert, of Picton, Clements, etc. I found it called me away from my office and my practice was suffering, hence I gave it up and Dr. Chandler took it in hand. I had through it acquired a provincial reputation. Was called to Hamilton to make a set. I put them up, and while they went to my office to be made I went to Buffalo. I had some acquaintance with Dr. Harvey; he had a partner from Kingston. I think his name was Beard, you may remember him. It was just about a year from the time I began to work rubber. I had made about $900 out of it, and to my astonishment Dr. Harvey had just commenced. It so happened that I had some fine specimens mounted with gold. When I called on Dr. Harvey he was engaged, and evidently did not care to be bothered with me, so I inquired for his partner whom I knew very well, and he called me up to their laboratory. I showed him a plate in my mouth, and he at once stepped to the head of the stairs and called Harvey. Harvey came up immediately, went down stairs again and discharged his patient, and was back with us. He said to his partner, "Is it not fortunate that he has come just now?" I then learned that Harvey's son had just returned from Philadelphia, and brought home a vulcanizer like a small parlor stove. He had made a plate for his

mother and vulcanized it six hours. I said to the partner that I had some specimens at the hotel; would he go over and see them. Harvey said he also wanted to see them, and asked the partner go over and bring them. They were mounted with gold, and were very fine. Harvey was exceedingly interested, and said to me, "Come down stairs, Mrs. Harvey is interested in dentistry." We found Mrs. H. reclining in her fine rocker, and he, the doctor, placed a chair for me close to her, and putting my specimens in her hands actually fell upon his knees and said to Mrs. H., "Are they not beauties? Now show him your plate." I had to dine with them. Indeed they monopolized me until train time, and the partner saw me safe out of the city. They were the first to work it in that city.

I was called to Cornwall, then to Toronto, and finally to your city. I met Mrs. Benjamin, of your city, at Toronto, and soon had a telegram from her husband wishing to send Mrs. B. up for a set of teeth. She came with her little daughter Maud, and remained at my house three days. Immediately after Mr. B. went to England, and from there to see a cousin somewhere who was a dentist. He was so much interested in her plate that Mr. B. wished me to correspond with him. Wrote to me about it on her return to Montreal, and at the same time asked me down to your city to make her a duplicate plate, as the family had determined to go to Manchester to reside, their son having engaged in business there, and they would go with them. I went to Montreal, attended to Mrs. B., was absent three days, and charged her $15 a day.

When I left Canada in 1874, I invented a plate retainer, which I perfected during my stay in the west, and when I returned to this city I commenced to make them, and the year I was engaged at it I sold $2,300 worth; but I could not find an article that was permanent, and was obliged to abandon it.

The late H. M. Bowker and I were competitors at Kingston. The Government was removed, and I went to Belleville. I cannot remember whether Sutton, or Day succeeded Bowker. I had made some reputation during my six months' practice, and the Hon. John Hamilton sent for me to come and attend to his family. This placed me at once in a good position. I put in a set of teeth for the late Mrs. Williamson, also her sister, Miss Macdonald, both sisters of Sir John A. I also attended the family of the Lieut.-Governor of Ontario, the Hon. G. A. Kirkpatrick.

This annoyed Day. He said, "Relyea, I know you have got *the* practice, but I don't want them—the others pay best." I do not know of having lost one dollar during my practice there. I had rooms at the British-American, took my servant-man (who

was also my assistant), and put on style, which pleased the aristocrats.

There was a young man at Picton who had never put in an entire set. He extracted, but they would come to Belleville for their new teeth. He was jealous, and was bound to leave. I, fearing a better man would get the place, went down, put up a vulcanizer for him, and gave him a new start; but the Quakers would go to the best man. Gilbert got wrathy, and said they were like a d— set of sheep—where one went the rest would follow. After six months I heard he was leaving; went down and gobbled him up. Put a man there to extract, make appointments etc., etc., and I went down every other week for two days, took impressions, etc., and the plates were all made at my office at Belleville. Also, every other week for two days I was at Kingston. Hence I had the three offices on hand. Thus I was master of the situation, from Cobourg on the west, Prince Edward County on the south, and Kingston on the east, and all the north.

This brings me to a little incident at Kingston. Two brothers (the Clements) came to Kingston. They wanted a vulcanizer, but thought my terms too steep. We had a pretty warm time at my rooms at the British-American one evening, and the eldest Clement lost his temper, and turned to me, clenching his fist, and said, "Relyea, you want to be a small Napoleon among us." I speak of this to show how completely I held the situation.

Now for the dark side of the picture. Napoleon had his downfall, so had I. My official position as Grand Worthy Chief involved an enormous correspondence, which, combined with my constant work excavating (that was before the dental engine came to our relief), brought on what the doctors said was pen paralysis, but the excavating had its part in it. I lost the use of my arm for fully a year, and was obliged to go to New York for relief.

It was not the want of practice that caused me to leave Belleville. I left in the fall of 1894, ostensibly to take a vacation; rented my office, or rather took in two young men to run my business for six months, intending to return. While at Chicago, in the spring of 1895, Mrs. Relyea's mother died in this house suddenly, which brought us here, and business relations compelled us to leave and come to this city. We are residing in the old family homestead. An invalid, a niece of Mrs. Relyea, of whom we have had the care for over twenty years, is still with us. I have a nice farm just outside of the city, where I seldom go, however, except in summer, to look over it. It is rented.

This has been written at intervals between calls, hence is not very connected. You can read the whole in less than fifteen minutes, and if there is anything you want more, let me know. I may not be here long—am now living on borrowed time.

GOOD OF THE ORDER.*

By C. H. Gerrish, D.D.S., Exeter, N.H.

The subject is wide and deep, and I shall only touch upon a few factors that impress me as being highly important, and somewhat overlooked in our discussions.

One and all approve of the extended time required of students in their preparatory studies, and the higher standards in examination, which tend to make the results desirable and satisfactory, for a man to practise dentistry to-day cannot be too well informed.

There is one element or characteristic in a man's make-up, or fitness to practise dentistry, that is overlooked, or not given the prominence due, viz., his mechanical skill, or ability to work with tools, and obtain good results, serviceable as well as artistic.

In the days of old, every operator possessed this qualification, in fact he could not practise without it; it was the keystone to the dental arch, without which the temple was incomplete. It was his stock-in-trade, speaking after the manner of men.

As the higher education of dentists advanced, less stress has been put upon this qualification, and the results are apparent to us all.

Diplomas are obtained by the graduates of our dental colleges for high standing in all the studies required in the course, and many graduates are better prepared to teach than to practise.

How many are first-class mechanics in the art of dentistry? No fault of the instructors, none of the graduates themselves. A wide difference always exists between theory and practice. Look over the field and note the number of inefficient operators in practice to-day, whose influence and work is lowering the high standard of our noble art, by advertising bargains, warranting their work (and God knows, it needs it), plugging teeth at fifty cents a cavity, and earning five dollars or better per hour.

What a drag, aye, disgrace, is this! And yet they display their diplomas and are therefore entitled to a living. As a rule they only lack one thing. They do not possess mechanical skill, they never did, and worse still, they never will.

I think the practice of one or more dentists in every town and city will justify my statements. What is the remedy? To my thinking there is only one. Let all the dental schools throughout the land take students on probation. Give them a good opportunity during their first term to test their possibilities as mechanics, and failing in this vital qualification, let them step down and out,

* Read before Vermont State Dental Society, March 19.

to make possibly a grand success in some other calling or profession. As a lawyer, farmer or minister even, they may attain to eminence, but as dentists they are not a success.

Now, as to the practice of dentistry to-day, one is forced to the conclusion that the time has come for special work and training in some one department. Life is too short for any man to cover all the ground. As in medicine the treatment of diseases has been divided, and we now go to a specialist, so in dental practice, it is high time that we follow the same methods. Only in this way may we hope to reach great attainments.

Possessed of mechanical skill and well read in the higher education and some special branch to work at, one quality more is needed, which is greater than any, and that is love, devotion, enthusiasm, unselfishness. This, gentlemen, is the key-note to all high and noble attainments. It is our salvation—in politics, religion, business and professions. As it applies to us, will speak briefly.

As dentists we should view each case presented to us, as to the best possible results to be obtained, considered from the artist's standpoint, and then labor with the single purpose to accomplish the same. Give to your patients the highest results of your skill as a mechanic, professional studies and research, your individual interest, which amounts to enthusiasm, even devotion; impress them with the idea that you are kind, noble, skilful, humane—in fact, the best operator in your town or city; and there is only one way under heaven to create that impression, and that is, simply to be such.

Right here is where many of us fail. We are indifferent, independent. One cannot hope for great results without compelling the attention, confidence, aye, the devotion of his patients, and these are secured only as we give to them the same in our work.

Such a giving out of yourselves to your patients, without any silliness, not only commands a good fee, but secures you for life in their patronage, and it is deserved, too, for you have paid the highest price possible.

The world to-day is looking for just such service, in church, state, trade, and the professions. Money does not always buy it, but it will always command the same.

Again, as to making your work a truly religious one in its best sense, our great Master lays down the law of highest service as love to God and man. The two are not separate, they are one, and in our daily work, in the most arduous of all the professions, we are carrying out, or failing to do, this great law.

We can make our service in the best sense a high and noble one, by making our ideals high. First, a clean body, for that is next to godliness; clean hands, and that is before it; heart, soul

and mind devoted to the highest and best, and what possibilities lie before us! Not only towards our patients, but in our relations with one another, what a mantle of charity we may be able to throw over some mistake of our brother's. What just praise and commendation may we not offer one, looking over some of his handiwork. And if superior in our own attainments, how gladly should we bestow praise where it is due, and thus encourage those who are struggling to a higher standard.

A kind word of praise goes a long way to help a worthy brother. The giving of it does not impoverish us, and maketh our brother rich in the desire to do better.

In this way, my brothers, may we exemplify the higher law of love to God and man, and bring our profession and its members up to the highest standard, where it rightly belongs.

It is the brotherhood of the craft which I would emphasize. Our object and purpose is to do good, and united in our brotherly ties this object is more readily secured. Church, country, state—nothing should stand between us in the accomplishment of this purpose.

With this aim in view our duty is always plain and our lives noble. To this end God grant we may attain.

LOCAL ANÆSTHETICS.*

By A. J. PARKER, D.D.S., Bellows Falls, Vt.

The progressive spirit, which is the spirit of the present day, forces professional men, dependent upon public patronage, to possess all the latest and most improved methods, appliances and remedies for the shortening of operations and the alleviation of human suffering.

The sympathy felt by practitioners of surgery, both general and special, for the victims of disease who have come under their care and treatment is most fittingly illustrated in their untiring and persistent labors in the field of medicine with a determination to avail themselves of something that might help to lessen the otherwise necessary suffering attendant upon surgical operations.

The results have thus far been very gratifying, yet the progressive spirit is still forcing men to study, to analyze and experiment, to add to or take from as seems most fitting until the most complete remedy is found. I shall confine my thoughts and experiences at this time to local anæsthetics, their application and physiological action.

* Read before the Vermont Dental Society in Montreal, P.Q., March 18th, 1896.

A local anæsthetic, as I understand it, is a something that destroys the sense of feeling and renders operations upon the human system painless, and acts only and directly upon the part or parts to which it may be applied.

This is a most wonderful age, and one of the most wonderful things about it is that so many men should have happened to be experimenting at the same time and for so many years along beside each other to finally discover each in his turn (and that not distant from each other) the greatest and only perfect-working local anæsthetic of the day. Yes, these preparations have flooded the market until you can scarcely give away the best of them. Painless dentistry is the talk of the day. The people demand that a local obtundent be used by the dentist when performing surgical operations in the mouth. Cocain is a very useful drug, one that has the properties of a local anæsthetic. Other drugs have been found to possess to a limited degree this anæsthetic property. No doubt cocain is the active principle of nearly all the numerous preparations for local anæsthesia which are in the market. Many overdrawn statements have been set forth regarding the virtues of these nostrums above mentioned. People have been shamefully imposed upon by the use of them, and I wonder that they have faith to have anything used to-day. Cocain is a powerful drug either for good or for bad according as it may be handled. Ill results are not only reported but observed and noted daily by members of our profession, where cocain has been indiscriminately used. One thing is certain, cocain must be properly combined and not alone with other drugs—a grain of brains tempers most wonderfully the otherwise dangerous drug. The knowledge that ill effects have been experienced through the employment of cocain as a local anæsthetic need not debar us from making use of all that is good in it. Scientific research has already proven that cocain is, when properly combined with other drugs, the most effectual local obtundent we possess at the present day. It seems surely a step in advance to use a local anæsthetic for nearly all dental surgery, while in the old order of things general anæsthesia was universally resorted to and the various vapors were forced into the whole system through the blood until all consciousness was destroyed, and to such an extent that the operator could only tell by the closest observation whether his patient would ever awake to behold the sunshine of earth again or not. Under this spell the patient was totally helpless, while with the local anæsthetic they are not only conscious of what is being done but can in many instances render the operator valuable assistance and yet suffer little or no pain. It is claimed by some that a five per cent. solution of carbolic acid and water injected into the tissues on either side of a tooth to be extracted is very effectual, if not equal

to the preparations of cocain as a local anæsthetic. Others think cold water combined with sugar and salt makes a good local anæsthetic. It acts only mechanically through high pressure and low temperature; the tissues are thus deprived of their supply of blood and a temporary paralysis of the nerves results. The action of cocain is purely chemical. Even a two per cent. solution of cocain when employed alone and uncombined with other medical agents would in my mind be unsafe to inject submucously, while in my practice I have frequently used a solution a little stronger than eight per cent. cocain when combined with antipyrin, menthol, oil of cloves, ether, glycerine and water without bad results.

My attention has been drawn with much interest to an article under the heading of "Hints" in the January (1896) number of *Items of Interest.* Perhaps not all of you have chanced to see it; however, please bear with me for one moment only while I draw attention to a new method of local anæsthesia by which the operator performs capital operations. This was most wonderfully demonstrated at the Philadelphia County Medical Society of November 13th, by Theophilus Parvin.

This method was developed by Professor Schleich, of Germany. The method consists of the injection deep into the tissues of a solution made up of one-quarter part morphine, one part cocain, two parts common salt and one thousand parts pure water. Professor Schleich removes tumors and performs amputations by the use of this local anæsthetic alone. Parvin himself allowed his arm to be deeply cut and sewed up as a demonstration of the wonderful things that are possible by the use of only a local anæsthetic, and his illustration is a splendid one. I believe local anæsthetics have come to stay, notwithstanding the variation in their stages of development. I also believe there are greater possibilities than have ever yet been demonstrated to the world through the application of the local anæsthetic, and the field of experiment is open to the competition of the world, the best and most efficient to win. I can but bid every man of progress to take a hand in this great and grand opportunity, it being possible for the humblest of us to attain greatness. Nitrous oxide, ether and chloroform are fast taking the rear seat and giving place to the latest and most improved, the local anæsthetic.

In using local anæsthetics containing cocain, care must be taken not to inject into the deep tissues. Second, not to inject too large a quantity at once. Third, not to drop any into the mouth. In my own experience about the only toxic effects I have ever observed was when I happened to drop a little of the anæsthetic in the mouth. All who have seen a patient under such circumstances, I think, will agree with me that it is much pleasanter, at least, both

for patient and operator in all such cases to guard against rather than have to remedy carelessness. Cocain seems to have a stimulating tendency upon the nervous system, and when large doses are employed it has a depressing action on the respiration and heart. The tendency to excitement and the difficulty with the respiratory organs is said to be the most important complications we have to meet, for the reason that they are likely to occur when we least expect them, the size of the dose not controlling, while the depressing effects on the heart are likely to proceed from weak conditions of that organ, or after the respiratory difficulties, or the use of large doses. Cocain, I think, would be classed as a powerful poison, and our experiments with it should be characterized accordingly. A combination of trinitrin with cocain and distilled water asserts a right of recognition as a successful local anæsthetic. The trinitrin is used to prevent anemia of the brain. About the only time we have trouble in getting the anæsthetic effect with local remedies is where inflammation exists to a greater or less degree.

The following preparation is highly recommended by Dr. Geo. Staples in such cases: "Thoroughly dissolve twenty grains of cocain in one ounce of ether (concentrated), and add one ounce of pure oil of peppermint; shake well before using." This, when applied from six to twelve minutes, gives excellent results. I have seen the theory advanced that the application of a ten per cent. emulsion of cocain applied externally upon the gum under pressure would empty the tissues of the blood and make them more susceptible to the action of cocain, this being thought the safest way to apply a local anæsthetic containing cocain. A great deal can be said for and against the use of local anæsthetics, yet not all the disrepute of the local anæsthetic comes through any inherent fault of itself. More blame should attach to the users of the medicine for the noted lack of care and good judgment than to the anæsthetic alone. Men of common understanding know that they must handle fire carefully or run the risk of being burned. The properties of cocain were not as well known at its first appearance as at the present day, and like the unknown power lurking in the fire many got burned in its indiscriminate use. But this is in the natural order of things in this life; the impatient, restless disposition of man makes it necessary for him to have to burn his fingers in order to teach him to be cautious.

Care should always be taken in obtaining cocain to get the pure article. The practitioner should be on his guard and demand a cocain that is free from secondary alkaloids, also from such inorganic substances as sodium, calcium, etc., that are necessarily employed in the process of manufacture.

There is much more that might be said about local anæsthetics,

but time and space forbid at this convention. Suffice it to say, at least, I hope I may have hinted at a few points of interest to those of my own profession, while I earnestly desire it may help to spur onward the already moving train of thought and action in the hearts and hands of the dentists of America.

ORAL ACIDITY, LOCAL AND SYSTEMIC.*

By W. H. MILLIKEN, M.D., Boston, Mass.

In asking your attention to the treatment of oral acidity, local and systemic, I am fully conscious that the limits of a paper are quite inadequate for more than a general consideration of the subject, but its great importance to dentists and the fact of so little attention being given it by the medical profession is my only excuse for choosing it as a subject, and if, in the limits of this period, so generously allowed me, I may be able to offer any suggestions that will lead to discussion, or any after-investigation, the object of this paper will have been accomplished.

As a consequence of certain nutritional disturbances, abnormal systemic conditions, functional perversion of the gastro-intestinal tract, or from local causes, the oral fluids of a large percentage of persons applying for dental treatment present an acid reaction usually so pronounced that the integrity of the tooth structure and associate parts are threatened, or there already exists evidence of positive injury. The epicure, the dyspeptic and the habitual partaker of sweets, sour wines, or sweet for that matter, and of milk or fruits, at or between meals, exhibit hyperacidity of the oral fluids. In the patient during severe illness, or when tr. chloride of iron or the mineral acids are administered, in the gouty and rheumatic and as is well known during pregnancy, the reaction of the saliva is not unfrequently acid.

In patients of the so-called gouty diathesis, you often, no doubt, have observed the decalcification or chemical erosion—a molecular breaking down of the tooth substance marked by a roughening of the enamel and rendering the tooth painfully sensitive alike to touch and exposure to sudden thermal changes, or the extreme sensitiveness from eating various fruits, grapes in particular, evidencing a systemic acidity.

This condition has an especial tendency to undermine and partially destroy fillings which extend to the gum (showing a hyperacidity of the saliva), and in chronic inflammation of the gum margins, whether resulting in erosion of the teeth or not.

* Read before Vermont State Dental Society, March 19.

Such results of oral and systemic acidity have always been discouragingly difficult to treat.

Of the cause of such acid conditions, I shall not further elaborate upon, leaving it for discussion, if anyone takes exception to the causes named.

I shall now have something to say regarding the several methods of dealing therewith:

A patient comes to your office, complaining of excessively sensitive teeth. You examine the mouth, and find one or more of several things. There may be an erosion of the enamel, or a recession of the gums, or unmistakable evidence of food particles undergoing fermentation, or again you may see teeth with or without cavities, but extremely sensitive. So the question arises, How are we to know positively that the saliva is of acid reaction?

In this work the chemist uses litmus paper to indicate the presence of acids in solution and the dentist must do likewise; and here I must emphasize: the application of a strip of litmus paper will often solve an otherwise very knotty problem. Of course, if we have an erosion we know there is acid present, and that we have to deal with acid sodium phosphate.

To combat and minimize the ravages of this acidity, the use of some *non-corrosive* alkali is naturally suggested, and chalk, calcined magnesia, bicarbonate of soda, lime water, etc., have been employed, but always with indifferent results. Their acid-neutralizing action is only transient and all have other objectionable features—the chalk and calcined magnesia being gritty and insoluble, while the soda bicarb. and lime water, though without grit, are even more transient in action, besides anything but pleasant to the taste.

In looking over the chemical field, among non-corrosive alkalies, our attention is attracted to magnesium hydrate, which is an exceedingly powerful antacid, but almost tasteless. Every progressive and conscientious practitioner is interested in anything possessing superior advantages and offering greater certainty of results than methods hitherto employed.

A careful examination, chemically, shows it to be pure Mg. $H_2 O_2$ odorless, tasteless, barring the slightest astringency, in fluid form, and absolutely free from grit. A microscopic examination under 500 diameters shows a perfectly homogeneous field. It is not subject to precipitation, but maintains a milk-like consistency, and contains neither gum, starch, glycerine or other suspending or emulsifying agent; it is not even a chemical by-product, but simply and solely water and magnesia, representing 24 grains of the hydro-oxide of magnesium in each fluid ounce of distilled water. Inasmuch as there is present no odor, no grit and no unpleasant taste, the patient can not only use it without inconvenience, but,

we are positively assured, it will not nauseate or disgust the most fastidious.

Regarding its strength as an antacid, it is found to neutralize an equal volume of fresh lemon juice, and like all other hydrates, has the greatest possible chemical affinity for acids. A teaspoonful taken into the mouth and allowed to float around over the teeth, will not only thoroughly neutralize any acids present, but, owing to its peculiar clinging semi-gelatinous nature, there is left on the teeth a slight alkaline film which is sufficiently adherent to protect the tooth surface from acid action for a considerable time; in fact, I have tested the reaction of the saliva with litmus four hours, and during sleep six hours, subsequent to the application, invariably finding it still markedly alkaline.

Lime water will retain an alkalinity of the mouth ordinarily about fifteen minutes, bicarbonate of soda less than twice as long, chalk somewhat longer; but a gritty powder is naturally so very objectionable to an already sensitive mouth that it is not to be compared with a tasteless fluid, besides any crystalline form is poorly applied by the ordinary patient, while the fluid magnesia taken in the mouth and held for a minute coats every part and particle of the teeth without any care necessary on the part of the patient. As an antiseptic I will quote from an article by Professor Thornbury, Demonstrator of Bacteriology in the Medical and Dental Departments of the University of Buffalo. His tests extended over a period of ten days. Numerous cultures of the following micro-organisms were made: Bacillus pyocyaneous (bacillus of green pus), bacillus prodigiosus, lactic acid bacillus, mixed cultures of bacteria from decayed dentine, etc., employing in all some fifty tubes of media. These cultures were exposed to milk of magnesia, undiluted, after the organisms had been growing ten hours, and found that in tube and plate cultures of the pus-forming and other organisms, no new growth occurred under an area covered with milk of magnesia for from twelve to twenty-four hours, as tried, and that even after the milk of magnesia was poured off from the top of the culture, the slight film which remained was sufficient to restrain indefinitely further bacteriological growth. In those zones in the plate cultures to which milk of magnesia was *not* applied, characteristic colonies of the organisms under observation promptly developed. In summing up he says, "I believe, therefore, that this agent must prove most valuable in restricting the ravages of bacteria upon the teeth and serviceable in infections of the gastro-intestinal canal."

Individual cases will govern, but it is probably sufficient to prescribe its use subsequent to cleansing the teeth, three times daily, always upon retiring, or should certainly be employed at night and morning; and so employed one or two weeks prior to

operating on teeth of poor structure (which are usually extremely sensitive) it renders this ordeal less painful. Internally it will always prove of great value as a systemic antacid in conjunction with its local use when oral hyperacidity is due to continued eating of acid fruits or the habitual taking of wines at meals, exaggerating a pre-existing tendency in this direction or tending to prevent the normal slightly alkaline reaction of the saliva. (I will say to you professionally that in that form of dyspepsia characterized by a sour taste in the mouth, red tongue, acid eructations and pyrosis, and aggravated by foods containing too much fat, as well as ordinary cases of gout, rheumatism and gravel arising from an excess of lactic, lithic or uric acid, a dessert to a tablespoonful taken in an equal quantity of water three or four times a day will be attended with the most immediate and satisfactory results.)

In treatments where you are called upon to use acids of different kinds about the mouth, and desire to limit or counteract their action, it is prompt and most agreeable, notably with aromatic sulphuric acid subsequent to the treatment of pyorrhœa alveolaris by this agent. Many persons, dentists as well as others, are in the habit of taking a glass of milk, naturally or artificially prepared, and here its local employment is invaluable in preventing lactic fermentation induced by the heat of the mouth, which, if continued, frequently results in excessively sensitive teeth. The importance of the care of the teeth during pregnancy cannot be overlooked or lightly considered. That superacidity so provoking and distressing to the patient and so frequently the prime cause of decay when the teeth are kept constantly bathed with an acid saliva, and frequently flooded with acid regurgitations from the stomach, locally and internally employed in these cases the magnesium hydrate has proven promptly effective and agreeable.

It has been asked, "What is the film which is seen to coat the teeth after an application of magnesium hydrate?" The answer is very simple inasmuch as the magnesium exists in the form of a hydrate and is a fluid; so being in the best possible form both physically and chemically for forming new compounds, it is considered that after the excess of acid present has been neutralized the remaining portion of the magnesium hydrate combines in a somewhat loose chemical way with the mucoid or albuminoid constituents of the saliva (which as a rule already coats the teeth), giving us an indefinite compound which may be called, for convenience, magnesium albuminate. Now, this being loosely combined, as soon as more acid is poured out from the glands enough of the alkali is liberated from the albuminous compound by reason of its greater affinity for the acid (which is usually acid sodium phosphate) to neutralize the acid present, such process going on until all the magnesium present is used, which requires several hours as above mentioned.

Dr. G. Lenox Curtis in rising to discuss the subject said:

The essayist has thrown out some of the most valuable suggestions as to the real causes of abnormal oral secretions. He places gout and rheumatism among the chief factors for this disturbance. He has mentioned, according to my belief, the principal cause of not only hyper-acidity, but the second principal cause of neuralgia, not alone affecting the head, but likewise the entire nervous system. While I regret he has not dwelt more directly upon the eradication of the cause of the trouble, it seems to me that he has presented to this Society a most valuable agent which is within the reach of everyone, and requires no knowledge of medicine to administer. While the mouths of many of the patients referred to by Dr. Milliken may present abnormal oral secretions, we cannot agree with him that it is the rule that those partaking of such foods as he mentions, are universally subject to this acidity. If, as claimed for this "Milk of Magnesia," it forms a coagulum and produces a film-like protector, lasting for several hours at a time over the exposed and inflamed surface of the teeth, it will take the place of all other anti-acids, and none who have occasion to use mouth-baths should be without it. However, why not let us consider the subject from a deeper standpoint, and give to our patients a medicine which permeates the entire system and modifies the secretions before they find their way into the oral cavity? I am indebted to Dr. George How Winkler, of New York City, for suggesting minute doses of creosote—say, the 20th of a grain or less, three times daily —which he claims if taken regularly for one or two weeks prior to dental work, completely diminishes the hyper-sensitiveness of the dentine and renders the teeth almost insensible to the whizzing burr and scraping excavator. He has also found that when given to children, women during pregnancy, and persons in a low physical condition and whose teeth are rapidly decalcifying, it not only prevents sensitiveness but completely checks decalcification and retards decay. In these cases I would like to recommend creosote for it is a valuable alterative and nerve tonic. The value of this drug and the knowledge of when and how to use it is too little known by the medical profession. Rheumatism and gout, which I believe to be a basis of degeneracy of the glands which control the secretions of the body, will be greatly lessened by the use of creosote. I have made many valuable tests, and find that at night when the mouth is at rest and the salivary glands inactive, the secretions are most acid. This, I believe, is not due alone to any systemic affection, but to the lack of sufficient saliva to neutralize and wash away the acid given off by the mucous glands and the decomposed epithelial cells.

A NEW THERAPEUTICAL REMEDY.*

By S. T. ANDRES, L.D.S., Montreal.

In bringing before your notice a new compound of much value, I do so with strong confidence in its merit from long personal experience, which is further indorsed by the testimony given on its behalf by many leading dentists and physicians who have also tried it.

Science has proved most of our ills to be caused by different micro-organisms, and it is well to know of a reliable means of destroying many of them; and when we find a means of doing so, while safe to use in the mouth under all conditions, and possessing valuable healing and anodyne properties, we should investigate and examine the subject carefully, as there is much need for such a preparation in our materia medica.

Dr. Henry Ievers, of Quebec City, to whom we are indebted for the discovery of this compound, sought for some preparation capable of destroying with certainty the microbes found in the human mouth, while also absolutely safe to use at all times, and he largely attributes this success to the complete absence of any ingredient which prevents its coming into direct contact with the parts affected, which the usual remedies sometimes fail to reach. That Dr. Ievers has succeeded in his efforts seems to be the universal opinion of leading dentists and prominent physicians who have tried it, and I can strongly assert that I know nothing that relieves pain so quickly, and also protects a tooth from decay while any of the preparation remains in the cavity, even on cotton. These properties render it a valuable agent, that we can safely prescribe to our patients for emergencies when away from a dentist, for an aching tooth, or a tooth giving signs of threatened inflammation, and for parents to use in deciduous teeth that we are anxious to save, but which may be too badly decayed to be filled in the usual manner.

I have used this compound with complete success in many cases of most violent toothache, sometimes placing it directly in contact with the exposed and highly inflamed pulps, securing relief almost instantaneously, and subsequently capping and filling these teeth (with some of the same preparation mixed with a prepared zinc oxide), to my complete satisfaction, and in cases of threatened alveolar abscess, its use has proved by far the *most reliable* means

* Read before Vermont State Dental Society, March 19.

of *aborting* the trouble that we have; proving far more efficacious than iodine and aconite or the capsicum plasters we have used heretofore in these cases.

I would strongly advise to have the patient directed to place a small plaster made from this material on the *dry* gum when feeling first symptoms of tenderness in *any* tooth, after crowning operations, or a tooth with a devitalized pulp, or one tender after the long operation of filling a large cavity, and have them renew it in two or three hours, if tenderness still continues.

For sensitive dentine, in some cases where the pain proves too severe to admit of further cutting, if you apply it on absorbent cotton packed tightly into the cavity and leave for a day, or longer if necessary, you will find a wonderful difference when you renew cutting of the dentine, or if you prefer you will give great relief by drying thoroughly and placing a little in the cavity and driving it into the dentinal fibrils with the hot-air syringe, and repeating when reaching sensitive dentine.

In ulcers of the mouth, tongue or mucous membrane, if dried thoroughly and then covered with this compound, *while dry*, it adheres without any other dressing, its insolubility resisting the fluids of the mouth and ordinary attrition of the teeth for ten to twelve hours, when a second application has in many cases cured sores that had persistently resisted other treatment.

This compound when mixed with certain proportions of prepared zinc oxide, makes a splendid root filling, being unaffected by moisture, and never softening or disintegrating like gutta percha, and can be made to reach the apex of small tortuous canals by mixing thinner than usual, and forcing it before a pellet of cotton. In these cases its germicidal properties are especially valuable. It also stands attrition fairly well when used as a filling for deeply decayed and sensitive cavities, and it insures perfect protection to the tooth tissue while *any* remains in the cavity, giving complete protection to the pulp (even when exposed), and may tide you over some delicate cases where you deem it inadvisable to be too thorough in the removal of decay, or unwilling to insert a metal filling at a certain time, and you can feel assured the tooth will be protected from irritation and decay, until necessary or desirable to replace with a more permanent filling.

Dr. Ievers does not conceal from the professions the ingredients entering into the compound called "Pheno-banum," but as it is necessary for us, when we use or prescribe an article, to be sure we are furnished with what we want, and what we ask for, it has been protected *against substitution* by copyrighting the name, "Pheno-banum," and I am sure when you have tried this compound, you will agree with those who have already done so, in according it a place among your standard remedies and filling materials, and

look to it as a means of enabling you to save many teeth which otherwise may be lost; and one that will assist you in retaining temporary teeth, when necessary, by directing the parents to relieve the pain, rather than have the child's teeth extracted too early.

"HOW TO LET THE PUBLIC KNOW."*

By B. S. STACKHOUSE, L.D.S., Lachine, Que.

How shall we let the public know that the dentist who advertises that he "extracts teeth without pain," "makes sets of teeth in two hours," cures all with his "all-cures," and who gives the impression in the press that he can do for almost nothing what others cannot do for any price,—how shall we let the public know that such a man is a knave? We find impostors in every place in commercial and professional life; we find humbugs among the retail merchants who cut prices, and among the dry goods people who deal in hardware, groceries, and books, and who make our millionaires flutter over the bargain counter as if it was their last chance and their last cent. To-day our markets are flooded with cutlery and surgical instruments of German make, stamped with the same names as English firms, spelled differently—wretched frauds, yet doing serious injury to legitimate business. In our profession the public is imposed upon by loud advertising crown and bridge workers, local and anæsthetic tooth tinkers, and two-hour-set men.

The public will go on believing and trusting impostors in spite of the exposed quacking of some of them. Anyone acquainted with the history of Montreal for the last twenty years can recall the appearance now and then of the loud advertising "experts," as they like to call themselves, who play their little game until they get "played out," and yet no matter how often the knaves come there will always be credulous people to welcome them. If a burnt child will not dread the fire, we can, at least, in some way control both the fire and the child; but if people will entrust the care of their teeth to men whom ethical dentists know to be not only impostors, but ignorant, we must just let them do it. Surely an intelligent public ought to understand that no intelligent dentist would let quacks get ahead of him either in theory or practice, and that if any good thing comes into our profession, that those who

* Read before Vermont State Dental Society, March 19.

are in the front of our educational interests would more likely be the first rather then the last to test it, and give it the proper place in practice. It may be that the good work the Dental College of the Province of Quebec is doing for the students will in some measure react upon the public. There is no *raison d'etre* for the existence in an intelligent community of the brazen-faced quack, who knows his own ignorance so fully that he never appears in our dental societies or dare measure swords with educated confreres, but who knows, too, that the public being ignorant of what is best and most reliable in dentistry as in medical practice, is apt to believe as much in the advertising charlatan as in the most honest and skilful practitioner. I can only answer my own question, How shall we let the public know? by the statement that the public likes to be humbugged, that the public will be humbugged, that if we try very hard to expose humbug we will be put down ourselves as humbugs. I therefore propose to mind my own business and let the public take the consequences.

A WORD FROM THE PACIFIC.*

By J. P. PARKER, D.D.S., San Francisco, Cal.

MR. PRESIDENT AND GENTLEMEN,—My essay will be somewhat rambling, as I wish to tell you about the profession on the Pacific coast. To begin with, we have good, bad and indifferent dentists. The good is in the minority, but enough to hold the standard high, and it is of this class which I shall chiefly speak. Out of the one thousand dentists in California, we can find between two and three hundred that would be classed as good. You can find the "Cheap Johns" without difficulty anywhere. We have four active dental societies doing good work. The State Society is by no means as large as it ought to be, but seems to possess energy to finally conquer; with a membership of a little over one hundred, it holds a four days' session annually and binds together many good workers. There is a society in the southern part of the State, which I hear is doing good work. We have in San Francisco the Stomatological Club, which is a wonderful power in binding together some of the best workers on the coast. It meets every Tuesday afternoon and evening. The afternoon is devoted to clinics and the evening to papers and discussions. It is the best sort of post-graduate course I ever have been acquainted with, and has done wonders for its membership; also, it stands behind

* Read before Vermont State Dental Society, March 19.

the *Stomatological Gazette*, the coast magazine. Then we have the San Francisco City Society, meeting once a month, and a good many smaller local societies. We have one of the best equipped dental colleges in the country, in connection with the State University. By this you will see we are well supplied with educational facilities. I think I am not boasting when I say that we have some of the brightest men in the dental profession. Dr. J. W. Younger, of whom you have all heard, at least, is one of the foremost and brightest. He has advanced some theories and practices that the profession generally are a little slow to accept, or even investigate, and you may have observed that considerable jealousy exists, even throughout the East, towards him, yet his kind liberal disposition is not such as would provoke jealousy. We have the same human trait exhibited here on the coast, and I can safely say that if more good dentists were less human and more professional, we would have a paradise. One thing I would mention that we have of which you cannot boast. It is a class of dentists, many of them good operators, who came here in poor health for the sake of the climate, popularly known as one-lungers, who for the sake of remaining will operate for almost nothing, and eke out a miserable existence, rather than go elsewhere and die. We have a good number of hard-working students, each taking up some special point of study and experiment, laboring untiringly for the advance of our great and noble profession. My mind and efforts have of late been engaged in trying to get a better knowledge of amalgam as a filling material. Dr. G. V. Black during the last year has been about the only one who has presented anything new, or that would provoke discussion on the subject, but it is one of the highest importance to us all, and I believe if studied more would be of great benefit to ourselves and patients. Dr. Black's efforts as presented, have not brought forth the recognition I would expect as yet, but perhaps it will come. He has taken up some points which I believe, if carried out, will in time bring a knowledge to us that will greatly improve our work with, and increase our confidence in, amalgam filling. Take, for instance, that quality which Dr. Black terms "The Flow," and it is something wonderful what you can do with it by bringing light pressure. This quality is one of the greatest concern, when we are to use it in compound cavities, where there will be a perpendicular surface exposed with frail margins. "The Flow" will naturally move in that direction, breaking away the margins and in time bulging so that removal is necessitated. Many of us have seen bicuspid and even molar crowns split, either the buccal or lingual surface being entirely bursted away, perhaps leaving large fillings still firmly held by some other retaining points. These, I believe, are usually due to the gradual flow of the amalgam filling,

and not by an expansion when setting. This may not always be the cause of bulging, but by very little experimenting, one can easily convince himself that it cannot be relied upon, not to flow in cavities where there is an opportunity with heavy pressure of mastication constantly brought against it. Dr. Black's tests were made out of the mouth, and it is reasonable to believe that the flow would be increased with a raise of temperature. There are other things which were brought out in Dr. Black's experiments which will open our eyes to the true conditions and tendencies of that important material and factor in dentistry. I have now under way some experiments, which I hope will bring me a better knowledge of what, and how, to get the best returns for our effort. If I succeed in developing anything worth giving to the public, I will remember you in the future.

Abstracts.

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

DR. A. C. HEWITT, of Chicago, says that in no case should nitrous oxid gas be administered to a pregnant woman.

MENDING BROKEN PLASTER CASTS.—Nothing equals oxyphosphate for mending broken plaster casts or plaster teeth.—*Gordon White.*

SETTING CROWNS WITH CEMENT.—Before setting the crown, wipe the gum around the root with a solution of perchlorid of iron, which will prevent weeping, protecting the cement till crystallized. *E. L. Custer.*

CLEANING GREEN STAIN.—Pyrozone (3 per cent.), moistened with pumice, adding one or two drops of phosphoric acid, used for cement fillings, is good for green stain on teeth. A tumbler of warm water, containing a little carbonate of soda, is good for rinsing the mouth.—*S. B. Palmer.*

SIMPLE METHOD OF CLEANING IMPRESSION TRAYS.—Give the impression trays a coating of sweet oil with a woollen cloth dipped in the oil. Put them in strong soapsuds (made with soap shavings or powder), boil and wipe dry. Now polish with whiting by using a woollen cloth, or fine leather. In this way you can keep your trays bright and clean, and the plaster will not adhere to them.—*E. B. Edgers, D.D.S.*

"ANY PIECE OF FILE WILL DO."—We often see in papers and discussions a remark like the foregoing in regard to the selection of a matrix in filling teeth. The advice is all wrong and unscientific. The matrix should reproduce the original form of the tooth, when possible, and the flat surface of the file, and of some matrices, leaves the approximating surfaces in a condition which is a source of discomfort, and invites new decay by retaining food and other matter until fermentation ensues. Whenever the jack set of matrices are applicable, they are very superior to any other, on account of their perfectly contouring the matrix surface.—*Western Dental Journal.*

WRITING of crown and bridge work in the *Dental Review*, Dr. T. E. Weeks says that while not wishing to be understood as disparaging the necessity of careful preparation of teeth and roots which are to carry crowns, he wishes to emphasize the fact that there are other points of equal importance. His observation has convinced him that only a small part of the irritation and inflammation of the soft tissues about the teeth bearing crowns is caused by bands which don't touch the teeth at every point of their circumference at the gingival margin. Such irritation may come from (1) the edges of the band being rough or improperly bevelled, (2) the band being forced so far beneath the free margin of the gums as to encroach upon the tissues at some point, (3) improper occlusion, or (4) improper contour and contact of the proximate surfaces.

THE USE OF COMPRESSED AIR IN OPERATIVE DENTISTRY.—The February *Cosmos* gives an interesting abstract of a paper given by Dr. S. Freeman before the American Dental Association, on the uses of compressed air in operative dentistry. Dr. Freeman prefers the Champion beer pump for compressing the air, or, in cases where the water pressure is not more than twenty-five pounds, the compound pump by the same manufacturers is better, as it is often desirable to have a pressure of forty to fifty pounds to the square inch. The reservoir is a tank tested to one hundred and fifty pounds' pressure to the square inch. Dr. Freeman uses the compressed air in spraying the mouth to produce an antiseptic condition, using the following: Borine, 1 part; Pyrozone (3 per cent.), 2 parts; water, 1 part. He uses it in stomatitis of various kinds, and in applying medicine to the gums it promotes absorption, thus facilitating the use of counter irritants, sedatives, and local anæsthetics. He also finds it very useful in diseases of the antrum, and in pyorrhœa alveolaris. It is used in desiccating the dentine and forcing medicaments into the tubuli to obtund sensibility, and in bleaching teeth it is also useful as a time-saver.

CLEANSING PASTE FOR THE HANDS.—To half pound pulverized borax, add one pound carbonate of soda and a half pound fine pumice, with sufficient glycerine to form a paste. Use in place of soap to cleanse and whiten the hands.—*A. C. Hewitt, in Southern Dental.*

CHLORO-PERCHA AS AN INSULATOR.—Before setting crowns or bridges on hypersensitive teeth, it will be found that thoroughly coating the entire surface of the tooth, or teeth, with a film of chloro-percha will prevent the pain experienced from thermal changes in these teeth after being crowned, and will also prevent the pain produced by the acid in the cement while setting the crown.—*D. W. Dillehay*, in *Cosmos.*

DR. A. W. HARLAN says he some years ago abandoned the use of oil of cassia in the treatment of any exposed teeth for the reason that a staining of the tooth is often caused which is difficult to remove. Pyrozone will sometimes remove it, but very often fails. The ozonized oil of turpentine will remove the stain if used repeatedly. In cleansing root canals, Dr. Harlan pointed out, after you have removed the contents as far as you can, the best way to put the canal in condition to receive a dressing, whether oily or coagulant, is to wash out with ammonia water solution, one-half of 1 per cent. This wash is useful before filling the canals also if gutta-percha is to be used. After washing out canal and drying the oil, whether it be cassia, eucalyptus or myrtol, you will find that the gutta-percha clings to the walls better than if wash be not used.

TREATMENT OF ORAL ACIDITY, LOCAL AND SYSTEMIC.—The *Dental Register* gives a summary of an essay by Dr. A. M. Scott, of New York, before the Southern Dental Association. The conditions existing when the reaction of the oral fluids is abnormally acid, as from nutritional disturbances, abnormal systemic conditions, functional perversion, threaten the integrity of tooth structure and associate parts—erosion, hyperæsthesia of tooth structure, chronic inflammation of the gingival margins of the gums, recession of the gums, etc. In all of these cases a noncorrosive alkali is naturally suggested. Chalk, calcined magnesia, bicarbonate of soda, lime water, etc., have all been used with more or less indifferent results. Their action is only transient; they are gritty and insoluble, they are anything but pleasant to taste. To meet both these conditions and overcome the objections to the agents named, magnesium hydrate offers all the advantages possible; and there is but one form suitable to the purpose, and that is Phillip's milk of magnesia, a powerful antacid, chemically pure.

TO prevent dark joints in vulcanite work, grind gum sections to fit closely, and, just before removing from articulator, remove every other block, and touch the joints with a little oxyphosphate cement, mixed thin. Replace the blocks and wipe off all surplus cement. —*Dental Office and Laboratory.*

COMMENTING on a case of death from chloroform given for a dental operation, the London *Lancet* of March 7th says: "It is a matter of no small regret that dental practitioners should not be better informed upon these matters than to permit the employment of chloroform on their premises as an anæsthetic. There is ready at hand a safe and convenient anæsthetic in nitrous oxide gas, which fulfils all the requirements of the dentist, and this anæsthetic should in dental cases be resorted to rather than chloroform."

SUBSTITUTE FOR RUBBER CUP IN CLEANING TEETH.—C. P. Lennox, Toronto, uses, as a substitute for the rubber cup in cleaning teeth, a short piece of the rubber tubing used for regulating. He stretches the tubing over a brush mandrel, a "barrel stone," or any other engine point of that shape, allowing about three-sixteenths of an inch of a free end. Used on engine in same way as a cup it will spread out and follow the shape of the teeth, even going into folds and between teeth, which a cup will not do. The stretching of the rubber also causes a considerable pressure which you do not get in a cup.

CHLOROFORM.—D. J. Spotswood says, in the *International Journal of Surgery*, that chloroform may be given as safely as ether if the following rules are adhered to: 1. The stomach should contain no food and a very small quantity of liquid. 2. Place the head a little lower than the trunk. 3. Have no tight clothing about the patient. 4. The anæsthetic should be chloroform (Squibb's) 70 per cent., alcohol 30 per cent. by volume. 5. A hypodermic of morphine sulph. gr. ¼ and atropia sulph. gr. $\frac{1}{150}$ should be given a half hour before administering the anæsthetic. 6. The first inhalation of the vapor should be well diluted with air and very gradually given. 7. A teaspoonful of aromatic spirits of ammonia should be given in a half ounce of whisky or brandy by the stomach. 8. A starched towel, folded in the shape of a cone, the apex open, should be used in administering the chloroform; this allows the air to enter freely. 9. The pulse and reflex of the eye should be closely watched and the towel cone removed from time to time when indicated. The physiological and therapeutic effects of the drug readily suggest the reason for these precautions, hence I shall not enter into a discussion upon the subject. I have never had a death from chloroform in an experience of five years.

THE *Dental Practitioner and Advertiser* summarizes the most important of the final conclusions of Dr. G. V. Black in his studies on the "Physical Characteristics of the Teeth," as contributed to the *Dental Cosmos:*

"Caries of the teeth is not dependent upon any condition of the tissues of the teeth, but on the condition of their environment.

"There is no basis for the supposition that some teeth are too soft or too poorly calcified to bear filling with gold or other metal in use for that purpose, since all are found to be abundantly strong.

"There is no basis for the supposition that the teeth of children under the age of twelve are too soft to receive metallic fillings.

"There is no basis for the selection and adaptation of filling materials to soft teeth, hard teeth, frail teeth, or poorly calcified teeth.

"With our present knowledge, the only basis for the selection and adaptation of filling materials is the operator's judgment as to which he can most perfectly manipulate.

"There is no basis for the supposition that pericemental inflammation, or pyorrhœa, attacks dense teeth any more than those less dense.

"There is no basis for the treatment of pregnant women medically with the view of preventing the softening of their own teeth, or for the production of better calcified teeth in their offspring."

Proceedings of Dental Societies.

THE ILLINOIS STATE DENTAL SOCIETY.

The thirty-second annual meeting of the Illinois State Dental Society will be held in the Senate Chamber, Springfield, Ill., May 12th to 15th, 1896. The executive committee has been especially fortunate in preparing a very interesting programme. No member can afford to be absent. Dentists practising in the State are cordially invited to attend, and if possible to become members of the Society. The profession outside of the State are always welcome to these meetings. The hotels and railroads have granted the usual reduction. Pay full fare in coming and take receipt therefor; this when countersigned by the Secretary entitles the holder to return for one-third the usual fare.

Masonic Temple, Chicago. LOUIS OTTOFY, *Secretary.*

Dominion Dental Journal

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"LIVE AND LET LIVE."

We sometimes think that the climate of this continent must be solely responsible for the bounce in which so many people indulge. This fashionable hyperbole sometimes creeps into our journals, more on the part of the publishers than the editors. Baron Munchausen could get many smart tips to-day from some of them.

We are led to these remarks by the fact, that our excellent contemporary, the *Cosmos*, announces that it is "the best dental journal on this planet." It keeps on the safe side—there may be a better one on Mars. It states that it will give "all the news of dentistry—not the gossip, but the news—the record of the work and thought which make dentistry progress. *This they can get nowhere else." (!)* Our excellent contemporary does not state how it proposes to give "all" the news in twelve issues a year. However, we know that it will do its best; and we hope that it will take these remarks in a fraternal spirit. It ought not to be necessary to its existence to publicly announce to the profession, that if they subscribe to it, "there is no need to take any other." We beg to advise our readers to subscribe to the *Cosmos*—and to all others. While we say, *Vivat Cosmos, et cætera*, we would add, "Live and let live."

DR. G. V. N. RELYEA.

Our readers will be pleased to see the portrait of one of the fathers and founders of the Dental profession in Ontario. Dr. Relyea was one of the charter members; and, though on the shady side of life, seems to enjoy a perennial youth.

EDITORIAL NOTE.

We must not forget to thank Dr. E. O. Blanchard for the privilege of using the photographs of the X rays revelation of a portion of the maxillary bones, used in our last issue.

Personal.

E. HERBERT ADAMS, M.D., D.D.S., is to be congratulated on being appointed by the Public School Board of Toronto, as their representative on the Collegiate Institute Board of the city.

DR. G. LENOX CURTIS, the distinguished oral surgeon of New York, was married on the 12th of February to Miss Richmond, of Coatesville, Pa. Happy boy, happy girl, may they always be!