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Dominion
Dental Journal

Vol. X. TORONTO, DECEMBER, 1898. No. 12.

Proceedings of Dental Societies.

DENTAL ASSOCIATION OF THE PROVINCE OF QUEBEC.

The regular triennial meeting was held on the 21st of September. An elaborate announcement of numerous proposed reforms had been sent to the licentiates by the Board, not one of which was discussed owing to the rowdyism of several of the members. Of recent years an addition has been made to the ranks of a few hysterical idiots who never miss the chance of exhibiting the vestiges of barbarism in their composition. These frenzied boors have been a pest to the Association for several years, and when they talk they talk by the hour and say nothing. Their verbosity runs on like a leaky tank. At the last meeting it ended in fisticuffs and kicking of the most approved Parisian *gamin* variety. There were no eyes gouged, or ears bitten off, but the amateur cannibals took it out in terrific *sacres*, and a fraternal *melée*. One "gentleman" explained afterwards that the violence of his conduct was due to the fact that he was "drunk." He had no need to make explanations as his condition was very transparent.

The President, Dr. E. B. Ibbotson, was in the chair; but, in spite of every effort, was unable to suppress the *flux de bouche* of the gentlemen who had indulged in *whisky blanc*, and if the meeting was a disgraceful failure, the chairman was in no sense to blame, as he acted with calmness and dignity. The members showed their confidence in him and the Treasurer, Dr. Stevenson, by re-electing them both. The Secretary's report was read. The report of the Treasurer gave rise to a good deal of justifiable

indignation. Since the last election there have been so many changes in this office that no one seems to be personally or officially to blame. The books have been very loosely kept, and under the vague head of "sundries" hundreds of dollars have been disposed of in a way which shows the placidity of disposition of the licentiates of Quebec. The delegations to Quebec to lobby amendments to the Act have been mysteriously expensive. The following is the Treasurer's report as submitted :

E. B. IBBOTSON, *Treas., in Account with D. A. P. Q. 23rd Sept. 1895, to 31st Dec. 1897.*

Income Account.

Balance brought forward		$865 61
Received from Special Exams., Sept. 1895.....	$250 00	
Received from Special Exams., Sept. 1897.....	400 00	
		650 00
Received from Matriculation, 1895-'97		955 00
Received from Primary and Finals, 1895-'97		1,835 00
Received from Annual Dues, 1895-'97		122 00
Received from Registra'n Fees, 1895-'97		350 00
Notes Discounted (since retired).....		250 00
Sundries		75
		$5,028 36

Expenditure.

BOARD OF EXAMINERS—		
Dr. W. G. Beers	$ 40 00	
" J. H. Bourdon	17 50	
" E. Casgrain	240 30	
" A. H. Hyndman	177 45	
" A. H. Beers	144 50	
" J. Nolin..... $143 00		
" " Assessor 60 00		
	203 00	
" G. W. Lovejoy.....	273 00	
" S. Globensky	228 50	
" L. J. B. Leblanc.....	127 50	
" E. B. Ibbotson.. 127 00		
" " " .. 15 00		
	142 00	
		$1,594 25
Dr. G. W. Lovejoy, Secy's honorarium		200 00
MATRICULATION EXAMINERS—		
Rev. Abbe Verreau	120 00	
Dr. H. A. Howe	213 00	
		333 00
Dental College (rent)	60 00	
Janitor	60 25	
		120 25
Travelling and Expenses at Quebec *re* Bill—		
1896, Nov. 7th, Drs Beers, Globensky and Lovejoy..	375 00	
1896, Nov. 11th, Drs. Globensky and Lovejoy.....	40 00	
1896, Dec. 19th, Drs. Globensky and Lovejoy.....	20 00	
1896, Dec. 21st, Drs. Globensky, and Ibbotson.....	94 00	
1896, Dec. 26th, Drs. Globensky and Ibbotson	50 00	
		579 00
Refund of Fees Matriculation Examination	260 00	
Refund of Fees Primary and Final Examination....	515 00	
		775 00
Legal Expenses, Globensky and Lamarre	375 00	
Legal Expenses, J. A. Dionne..	175 00	
		550 00
Notes paid with interest.....		262 99
Stationery and Printing as per vouchers	90 15	
Stationery & Printing, Bishop Engraving Co. (Diplomas)..	56 00	
		146 15
Secret Service.....		34 30
Sundries as per vouchers.....		96 50
Cash on hand 31st December, 1897....		336 92
		$5,028 36

F. A. STEVENSON, *in account with D. A. P. Q., Jan. 1898, to Aug. 15th, 1898.*

Income Account.

Amount brought forward from 1897	$334 96
1898, Jan. 5th.	
Received from Matriculation Examination	590 00
Received from Primary and Final Examinations	780 00
Annual Dues	135 00
Registration Fees	90 00
	$1,929 96

Expenditure.

From January 1st to Aug. 15th, 1898.

Stationery and Printing			$27 85
Typewriting Dental Act and Amendments			20 25
Sundry Expenses as per Vouchers			19 35
Paid Board of Examiners as follows:			
Dr. J. Nolin	$61 00		
Dr. J. Nolin, Assessor	48 00		
		109 00	
Dr. L. J. B. LeBlanc		40 00	
" A. Lemieux		40 00	
" F.A.Stevenson	40 00		
" " " Assessor	20 00		
		60 00	
" H. E. Casgrain		63 75	
" A. H. Beers		60 25	
" E. B. Ibbotson		40 00	
" G. W. Lovejoy	90 00		
" " " Assessor	25 00		
		115 00	
" S. Globensky		80 00	
			605 00
Dr. G. W. Lovejoy, Secy's honorarium			100 00
Dental College, $10 and Janitor, $5, Bishop's Janitor, $5			20 00
Matriculation Examiners—			
Dr. H. A. Howe		64 00	
Rev. Abbe Verreau		50 00	
			114 00
Bishop Engraving Co. (Diplomas)			24 00
Refund Matriculation Examination			160 00
Refund Primary and Final Examination			260 00
Cash on hand August 15th			576 51
			$1,929 96

Audited and found correct,
J. A. BAZIN, *Auditor.*
20th August, 1898.

PERSONAL.

In connection with this report the following personal is felt necessary:

In the above report my name appears on a delegation to Quebec to lobby a bill. The amount of $375 requires some explanation. As it seems impossible to fathom the details, I feel it due to myself and the profession I represented, to submit my own and only share of the expenses.

PAID BY TREASURER.

Return fare to Quebec, $5.85; Pullman car, $3.00; Pullman porter, $0.50; hotel bill (Quebec) — days $12.00; cab hire, (Quebec), $2.00; total, $23.35. W. GEO. BEERS.

Several members demanded details and explanations, but owing to the rowdyism none could be obtained. Not one of the many resolutions prepared was put to the meeting. The following were elected the new Board: President, Dr. E. B. Ibbotson; Vice-President, Dr. J. Nolin; Secretary, Dr. E. Dubeau; Treasurer,

Dr. F. A. Stevenson. Registrar—Dr. W. J. Kerr, Dr. J. G. Gardner and G. W. Hyndman.

Dr. Arthur H. Beers resigned his position as medical representative of the University on the Board.

Dr. Bazin read the following:

AUDITOR'S REPORT, 1898.

To the Dental Association of the Province of Quebec:

Believing that it is the duty of an auditor to not only prove correctness of figures and establish a true balance sheet, but that an examination of source of revenue and expenditure should be presented to an association such as this, where its members have but an extremely limited idea of details, I herewith desire to state that with but one or two exceptions, vouchers are shown for all expenditure, and I can declare the books of the treasurer as correct. But I see in the course pursued during the past few years a grave danger to the best interests of the profession of dentistry in this province.

If you will notice the treasurer's report, under the head of income, the item of primary and final examinations a total of $1,835.00. This source is called in question, as some claim there is no authority for charging a fee for primary examinations; but if it is allowed as correct, I wish to put in the opposite side the cost of these examinations, which amount to $1,594.25, with a refund of $515.00; total, $2,109.25; showing a loss direct of $274.00 in two years. If you go further in this analysis you will see that the cash in hand, September 23rd, 1895, was $865.11; but after the two years receipts and expenditure, $336.92, in hand, December 31st, 1897, showing a loss in twenty-seven months of $528.19.

In the last, or rather the present year, you will observe a slightly better showing in the total, as there is cash on hand, $576.51, in August 15th, 1898, as against the cash received from the retiring treasurer of $334.96; a slight gain of $241.55. But here again is shown a condition which must lead to bankruptcy, as follows: Received from primary and finals, $780.00; paid to the examiners, $608.00; total in hand, $172.00. These are direct expenditures. There are others, and I wish to exhibit these to the members of the association, not in any uncharitable spirit, but rather to give warning in time so that disaster may be prevented. You will notice that the item of legal expenses reaches a formidable figure, $550.00 for the twenty-seven months to December, 1897; and if we go back to December, 1894, it totals $827.00.

Now, there is another item that should have the searchlight thrown upon it; that is, the travelling expenses to Quebec which, during the twenty-seven months referred to amount to $579.00; and if you include the year previous of $347.00, it totals $927.00.

That expenses for travelling and hotel to obtain or prevent legislation must be incurred is beyond dispute, but the staggering amount of $927.00 in so small a time is fatal to our upbuilding.

I leave this report in your hands.

J. A. BAZIN, L.D.S., D.D.S.

THE NEW BRUNSWICK AND NOVA SCOTIA DENTAL SOCIETIES.

(Continued from page 405.)

Q.—Do we understand you that you deem it necessary that the band shall hold to the root tightly all round?

A.—I think when we have done our very best, we will still fall short of the ideal. There has been a great deal of carelessness in the fitting of bands; and more in preparing the root. You can see that while this band fits sufficiently well to show what I mean, it would be possible to draw that in here and fit so it would be almost impossible to pull it off. With the pin combined, it presses on all sides. A great many depend more on the pin. Just a flat cap can be put on, and you might preferably allow it to go over here at this point, or better, upon the lingual and that would save some of the strain in biting. Crowns are put on with very little attachment, but it makes a stronger piece of work to band the root as I have described. A "Richmond" crown is, to my mind, the ideal porcelain crown for bridge work. I will endeavor to show you how to form corundum wheels, if I have an engine and some one to tread it; I will endeavor to show how they can be gotten into shape so that you can more readily grind the portion under the free margin and even extend the crown under the free margin of the gum. With proper scalers the remaining portions of enamel on the root can be scaled off and the root shaped about as this one is.

Q.—In the preparation of a root which is not so well preserved as that one is supposed to be, for instance, where the tooth is broken away or badly decayed below the margin of the gum, how would you prepare such a root as that for the crown you describe?

A.—There is a difficulty; I see it. I have no special way of overcoming such difficulties; but I had a case where a young man fell on the frozen ground while practising for football, and broke the two central incisors; slivered them away up on the lingual side, and they broke away up under the gum on a slant about one-quarter the length of the root. I took a round corundum wheel and ground off the ragged portions of the stumps, packed in gutta percha and then, next day, with a screw, putting on a washer under the head of the screw, and forced the gum back. By leaving it two or three days, I exposed the root sufficiently to grind and shape it.

Then, by cutting it out and getting an impression in plaster and swaging a piece of gold and reswaging, after trying it in the mouth, I made a cap and, filling the cap with solder, cemented it on to the stump. Then I constructed a crown to fit over the gold-capped stump. You have presented a very difficult case to conquer. I have conquered a good many which at first sight seemed to be impossible. You have to handle these cases when you come to them, just about as you handle surfaces in filling teeth where they are out of sight; get them in sight, as much as possible, by cutting away.

Q.—Have you any special method of making an open-face crown?

A.—I think I have. Suppose that this is a cuspid. With a thin corundum disc or, preferably, a thin diamond disc, I should straighten the sides of the tooth, and I should grind away a little of this labial bulge. Let my cuff represent a band. Take a measure and form a band by lapping and fitting it up under the free margin of the gum and letting it extend below the cutting edge quite a little. Having fitted this band perfectly under the free margin of the gum, bevel the edges and fit at the bulge here, drawing it over. With a fine saw cut this front portion out, allowing the gold to extend around freely at this point, leaving quite an amount of gold near the gum line and extending down on to the face of the cuspid more than you want when it is finished. Now, with a saw, cut out the lingual side in the same way, leaving it somewhat in that shape (illustrating). Remove it and, with a pair of pliers having one side round and the other flat, contour the gold, draw it in. Then, replacing it on the tooth, burnish it down until it fits upon the under side as well as the outside or labial portion. An impression can then be taken in moldine or plaster and a fusible metal cast made of this under side and a piece of metal swaged to fit it. You can put the metal on and wax it, and very carefully removing it, invest and solder. Tack it at one point, then replace and reburnish the gold that is to go around on the face. I have had an instrument constructed recently that will enable me to swage, directly on the tooth in the mouth, the pure gold or nearly pure, and make an open-faced cap without resorting to fusible metal dies. It is not very long since I adopted that method; but I should not confine myself to swaging in the mouth always. Sometimes I am obliged to resort to impression in plaster or moldine for making a little die and swaging a piece to go on the under side and come up over the biting edge. If that can be seen done in clinic, it would make a very good clinic and it has been among my pet methods. Here is one open-faced bicuspid:

I should like to show you the taking of impressions and pouring zinc directly into the impression after drying it. I use a perforated cup, taking the impression in plaster and sand, using asbestos paper to form a tray. We will suppose we are to make a cup that can

be heated so that this plaster compound can be dried out. I sometimes take a compound impression, enlarge a little, make a zinc die and strike up an impression cup that will fit the case. After a while you will get a sufficient number of cups so you can have them on hand and find you can select a cup that will suit almost any case. If you want to make a partial gold plate, for instance, supplying posterior teeth for the lower jaw, it is of importance that you have a good cup to get an impression. An impression having been obtained in plaster and sand or powdered silex, I take asbestos paper and wrap it around the impression, sticking the ends with ordinary liquid silex. The silex will stick these together so that there is no danger of coming apart. Paint this band all over with silex, making it stiff, then filling in any holes there may be, so as to get a perfect cup into which you can pour the zinc; this is put into the oven and thoroughly dried; then melt the zinc, being careful not to overheat it. Dr. Pearsall, of Dublin, told me his plan was to put in a little new zinc every time he melts. Melt the zinc and be careful not to bring it to a glow; then let it cool down and let shrinkage take place until the zinc will just run well and you will have only the slightest depression in the centre, if you pour it rightly, and you will get a perfect model upon which you can swage your plate. For full upper sets, as a rule, I make my casts in that way, of zinc, and can get good results, in preference to Babbitt metal.

Q.—Does not the powdered silex have a double effect and prevent the impression from shrinking?

A.—I think it does. In preparing plates and making rubber plates, one dentist I know of, Dr. Green, of Geneva, has a barrel of ground marble dust and always mixes it with plaster, thinking it prevents shrinking.

Q.—I should like to ask in regard to cracking porcelain, whether you have special ideas on the pins? Some think they should be bent, some split and some riveted.

A.—I think sometimes the pins can be weakened by taking the forceps and flattening a pin before bending it, or you can take them in the joint of a pair of small pliers and let the jaws come up and you can flatten the pin at this point by just squeezing them between the jaws, and in that way weaken so you can bend them down. Great care should be used in bending pins. Still, I think the danger lies in heating up and cooling down and in letting porcelains come in contact with one another.

Q.—Do you think a tooth on the bridge is stronger by having a gold band showing, or is there any way you can get gold on the back which will make it as strong without showing the tip? A tooth on the bridge, can you make it as strong against stress of mastication, without showing the gold tip, as by allowing it to come over the end of the porcelain?

A.—I don't believe you can, especially where you have to pin porcelains down. The breaking of porcelains in bridges that are set is one of the things we have to contend with, and the repairing of porcelain is something which, if I had time, I should like to talk about. I have constructed an instrument for dilating a tube. A pin on the teeth may be elongated. It is often the case pins are not long enough, and even the longest pins are frequently found to be a little short and give us a good deal of trouble. Anyone who makes bridge work for a number of years will find he is annoyed by having porcelains come off, and to replace porcelains successfully is quite an important thing. To elongate these pins, take a tube of platinum with a pure gold upon the inside. In your own laboratory you can make the platinum and gold yourself. Take a piece of platinum, we will say No. 28, and pure gold 30, and preferably in size about that wide (indicating about an inch, or a little more); put the two pieces under the blow-pipe and make perfectly clean, or you might immerse in alcohol, then lay the platinum on to the gold, having set the rollers so that 28 will just come through the rollers easily; then grasping the gold and platinum with tweezers, hold it over a Bunsen burner until it is a white heat and pass quickly through the rollers. It is simply annealing; but if conditions are right passing through the rollers, you will get perfect welding, perfect interlocking of the crystals of gold and the platinum, and you will get a piece of platinous gold in that way. Cut off a strip and you can very readily make a tube to fit the pin. Then with a blow-pipe and a tiny piece of pure gold, unite the ends. Having placed the two tubes on the pins, invest and put under the blow-pipe, after heating gradually, and the pure gold will unite on the inside with the platinum pin and you will have two elongated tube pins. You drill your holes through the bridge to accommodate these pins and then upon the under side counter-sink it and the tubes passing through may be ground off even with the general surface. I have constructed a tube dilator. It has a sole leather pad (on one side for contact with the facing), which may be made plastic by soaking it in water, or it can be covered with rubber and there is no danger if properly handled. Placing the dilating punch-like end into the tube, it can be dilated so as to fill the counter-sink portion of the gold. A small-headed gold pin may then be made and cemented in, if it is thought best; or the space may be filled in with gold foil. In that way it seems to me a bridge may be repaired easier than in most other ways. Adjourned to 2 p.m.

AFTERNOON, September, 1st, 1898.

Meeting opened at 2 p.m. Dr. Cogswell in the chair.

Clinic by Dr. J. M. Magee—Subject, "Contour Amalgam Fillings."

Clinic by Dr. A. J. Sawyer, of Manchester, N.H.—Subject, selected
Clinic by Dr. Melotte, of Ithaca, N.Y.—Subject, selected.
Adjourned to 7.30 p.m.

EVENING, September 1st, 1898.

Meeting opened at 7.30 p.m. Dr. Cogswell in the chair.
Minutes of preceding meetings read by the Secretary.
Paper read by Dr. H. C. Wetmore, of St. John, N.B.—Subject, "The Practical Value of Chemistry in Dentistry."

DISCUSSION.

On motion, the privileges of the meeting were extended to strangers, members of the profession, present.

Dr. CATES—Assuming that two of the principal points in this paper be correct, and if teeth are caused to decay by fermentation caused by an acid that would form from the secretions of the mouth, we are led to acknowledge that in one of the latest discoveries, being an anti-ferment, or having the property of killing or destroying the fungi that produce caries, we have a very valuable thing, and for myself, and those I think who have used this new anti-ferment—formaldehyde—I think we have in that substance something that will stop fermentation; and you will find another valuable solution, called Wampole's Antiseptic Solution, in which this ingredient is found. You will find that will also stop fermentation, and this is one of the valuable chemicals we have lately added to our list, and I think if it were more generally used than at present, our patients, especially, would be benefited by it. It has been a mooted question for a long time. We know where there has been fermentation an acid will be formed *by secretions of the mouth.* The heat of the mouth, 98 degrees, and secretions, mixed with particles of food, will cause fermentation and an acid will be formed. If we have some simple wash that may be used daily by our patients, and can stop this fermentation, it must be a valuable thing to them. I recommend Wampole's solution, which contains this anti-ferment. You may procure it also in the form of powder.

Dr. C. O. WEBSTER, of Pictou, N.S.—I would like to say that I am indebted to Dr. James Daley, of Milton, Mass., for recommending milk of magnesia to be used in cavities that are caused by acid. I have found that by treating the cavities with milk of magnesia, it will leave a slight scum that will remain sometimes for a month. By using a steel instrument on the tooth, the scum will entirely disappear; but unless friction be applied, the cavity will remain coated for some time. It appears to arrest the caries altogether, and I think the other members of the profession will find it as beneficial as I have found it.

Dr. J. M. MAGEE—I cannot criticise Dr. Wetmore's paper, but there is one thing we find in our practice—at least, I have found it. In cases where a gold cap crown has been in the mouth some time, I have found the adjoining tooth, sometimes on one side and sometimes on each side, extensively decayed. I have always attributed it to chemical or galvanic action, though could not prove it. I knew caries was chemical action, therefore I supposed it was due to chemical action. I know they will decay very extensively and very rapidly. The only way I could cure them was to excavate and fill with amalgam. I use a cement under the amalgam. That seems to stop the chemical action between the fillings and gold crown, acting like an insulator. It requires two metals and an intervening space containing moisture, to make a galvanic battery; but where cement was used, chemical action has ceased. The direct current between the crown and adjoining tooth had been stopped by the intervening layer of cement.

Dr. COGSWELL—I would like to ask the gentlemen if they have ever used Condy's fluid in cleaning out cavities, and what effect it has upon teeth. I imagine it removes the sense of touch. You see the action of the alkali upon the acid. It always turns white upon two or three dressings. I find it satisfactory, and there is a chemical action, one destroying the other.

Dr. SANGSTER, Sackville, N.B.—In the application of potassium permanganate to remove the acidity, etc., is it intended to be left in any length of time, or removed at once at the same sitting?

Dr. COGSWELL—I merely use it as an antiseptic to wash the cavity out, and it is excellent to aid in counteracting the effects of the acid upon the tooth. You will notice the action immediately. It goes in a crimson color and comes out perfectly white, and there is perfect proof to the patient that there is acid there. It cleanses it entirely, and my experience proves that it removes the acid. I only put a few drops in a little water. I use Condy's fluid.

Dr. ROBERTSON, St. John, N.B.—From my knowledge of drugs, if that is not used (in Condy's fluid form), sufficiently diluted it will lose its value. If used on your hands, they will turn sometimes to the color of russet leather, and I think the same effect would be produced if not used sufficiently diluted.

WILLIAM H. POTTER, D.M.D., Boston—You have very kindly thrown the meeting open to strangers. I happened to be here from Boston, not knowing about your meeting; but I must say I have gained a great deal of pleasure and information from the little I have seen. I am interested in the paper which you have just heard, about the practical value of chemistry, because I believe it is by consideration of this sort we are going to establish our reputation and consider it as scientific men. We have heard much of the mechanical side of our work; but if we can go into the scientific side, about what is going on in the mouth, about fermentation,

bacteria and that sort of thing, that kind of work is recognized as true scientific work. I believe each one here can to a certain extent carry on considerations and observations along the same line as the more famous men in the profession. I thought to mention the use which I make of creoline. It is a useful germ destroyer, and for some years I have been using it in combination with a tooth powder, made up of chalk, soap and a little borax—I don't remember just the formula of it. I instruct patients to use that solution in the mouth every time they use a tooth powder, after the fashion of a wash, forcing it by the tongue to the roof of the mouth, and sending this fluid through the spaces into the cavities of the cheeks, and in that way removing the germs, as far as possible, from the cavities, and leaving at the same time a fluid which, if it does not destroy the germs, at least controls their growth. I think we have to look after the mechanical side first, and remove, as far as possible in a mechanical way, all results of fermentation, and then if we can leave something in the mouth which will prevent the rapid formation of germs and control that growth, which we know does very much harm, we will have accomplished a great deal.

Dr. DONHAM, Digby, N.S.—Permanganate of potassium is a drug I have used a great deal for medicinal purposes for the mouth. Taken internally, it is used to reduce flesh. It is antiseptic; you might say, a microbe killer. It is a powerful caustic. As a mouth wash I have read of it as being recommended in some of our medical literature for cleaning the mouth; but I think, of course, all these agencies, if they are used too strong, will do harm, but that dilute solution probably does just the proper amount of work and no more. It is sufficient so far as a medicine will act, but it requires judgment not to use it too strongly. In relation to the decay of the teeth, of course it is dependent on a great many circumstances. You will notice particularly that decay of the teeth is between the adjoining teeth; it is not on the surface where the tongue or any friction comes, but where little particles of food lodge; that ferments and produces an acid. This lack of cleanliness will cause disarrangement of the stomach, dyspepsia and other complaints. Cleanliness is the main thing. I am a member of the medical profession and practise a little dentistry. In my own experience where people have had asthma, shortness of breathing and all that, and medicines would not cure them, extracting the teeth would do the whole thing and no medicine at all, showing that the cause of the stomach disarrangement and short breathing in this case had depended on decayed teeth.

A paper was then read by Dr. A. C. Cogswell, of Halifax, N.S.—Subject, "Nicotiana." (Published in issue of January last.)

Dr. CATES—While there is an immense amount of fact against the use of tobacco, there are two points I think you will admit in

its favor, that is, pertaining to the teeth. We find on examination that tobacco is an alkali; it interferes with the acid and it allays pain and obtunds sensitiveness; that we know. Yet, in view of all these facts presented to-night, who among us would dare to continue the use of tobacco? (Laughter.)

Dr. DONHAM—I do not wish to discuss this subject at any length, but it put me in mind of a case I had. A gentleman was dropsical from heart disease, and had eaten tobacco forty solid years; chewed the weed and swallowed the tobacco, and did not die for forty years. He was dropsical; he lost consciousness. Another doctor was with me and said my patient would be gathered into Abraham's bosom that night; but I brought him around and he lived a solid year. I think you can get habituated to a pretty strong dose of tobacco.

Dr. CATES—That appeal to our sense of decency is well timed. I use tobacco, I am sorry to say; but I really do not think we should use tobacco. With our knowledge of such things we have to use to prevent the inroads of tobacco, I do not think we have any excuse for using it, whatever. It is no doubt a filthy habit and it is an expensive one. It is offensive to ladies, generally; but that paper, as I said before, is a timely article among us, and I think I would go in with any number of gentlemen present and form an anti-tobacco society.

Dr. COGSWELL—My object was simply to bring the matter before you as a profession. I think in many cases we get careless, and it sometimes gets to be objectionable. As a profession we want to be neat and nice about our person and about our appearance in every way, and should take great pains about what we do in that respect, in order to elevate ourselves as a body. That was one reason which induced me to write this paper. I was led to it by the remarks of some ladies, who spoke of dentists who use tobacco and they did not like to go to them. It may aid us and assist us to do better. I would like to ask the gentlemen here if the use of tobacco does not have an injurious effect on the teeth. I think tobacco itself (the plant) is astringent; but I think the effect of tobacco as a foreign substance, on the molar teeth especially, is bad. One medical doctor was convinced at the last meeting and proclaimed himself a convert.

Dr. J. M. MAGEE—I do not think anybody can do more or less than praise Dr. Cogswell for his able paper; but there is one little mistake I notice here, I think we might correct; at least I think it is a mistake. In the mouths of smokers, where I have noticed the roof of the mouth, those little pimples or blisters that he speaks of, I have never seen the gum "spongy." Wherever I have seen it, the gums were firm. I have never seen them covered with germs from tobacco. The effect of tobacco is to paralyze these germs, and from that very fact it is not a bad thing for caries. It will stop

caries—tobacco chewers are especially free from caries; but there is the objection that it stains the dentine wherever exposed. Many in our own ranks use it. I think it is one of our duties to curb the habit in the young as much as possible, where we have a chance of doing so. Wherever I find a youngster smoking cigarettes, I try to give a warning, and if under age threaten him, because dealers are not allowed to sell to boys under sixteen years. Sometimes the effect has been good and the youngsters have abstained for a time at least. I do not think to a mature person, the smoking of an occasional cigar is injurious and, when a man is in the habit of smoking, after a heavy meal it is quite soothing to sit down to a pipe; but I do detest and abhor this spitting around everywhere. I do not see why a man should desire to see how big a mark he can make on the floor or sidewalk.

Dr. F. A. GODSOE, St. John, N.B.—I do not want in any way to criticise this paper, because I do not think anyone can possibly do so; it is a paper of which you should feel proud. It could not but be forcibly impressed upon our minds as true in almost every respect, and I for one think the effects of tobacco upon the system are not what we should desire. I am a user of the weed myself; but during the day-time, unless I am upon a holiday, I never feel disposed to use it; but I do at night, and find a great deal of recreation, especially when alone. Our friend, Dr. Cates, says he will be one to form an anti-tobacco society and give it up. He has been a habitual smoker for many years, and if it has a disastrous effect upon his constitution, it certainly might have such upon mine. For myself, Mr. President, just at present I do not feel disposed to join such a society. I tell you the plain truth when I tell you I enjoy a smoke. I do not indulge in it to such an extent that I think it has an injurious effect upon me. It may come gradually as to effecting absorption of the gums, which you speak of there. I have seen cases where teeth were, as I took them to be, preserved by the use of tobacco, as far as caries was concerned. In the same mouths where you find this parboiling, I have also found the palatine portion of the molars thickly covered with tobacco and there has been shrinking of the gums to a great extent. I always attributed it to pyorrhœa alveolaris and found on examination of these roots I could bring away a great deal of calculus. I could not for a moment consider tobacco was the real cause of raising of these gums. The spongy condition of which you speak, I have found. I have also seen the roof of the mouth in the condition of which you speak in heavy smokers. I deplore the habit of standing on street corners and filling the sidewalks with tobacco juice so that ladies cannot pass; but I do not think the members of the dental societies in New Brunswick, Nova Scotia and Prince Edward Island would be guilty of such a habit.

My object when I got on the floor was simply to ask if the time

is opportune to tender a vote of thanks to our President for the able paper which he has given us to-night. I feel Dr. Cogswell has given us something on which we can ruminate—those here who are in the habit of indulging in the weed.

Upon motion of Dr. Godsoe, seconded by Dr. Robertson, a vote of thanks was extended to Dr. Cogswell for his able paper, to which Dr. Cogswell made a short reply.

Paper read by Dr. Murray, of Moncton, N.B. Subject, "Nitrous Oxide Gas."

Dr. ROBERTSON—I was taught when at college that if ammonium nitrate is heated too highly you produce nitric oxide, an acid decidedly poisonous. That I think Dr. Murray was slightly mistaken in. I think that if a person inhaled a gallon of that they would probably be a fit subject for a coffin. I have had a little experience with nitrous oxide. I once had a medical man bring a patient to me. The patient was one who, after I had administered a few gallons of gas, began to discolor. The young lady was about nineteen. The doctor took hold of the patient's wrist to feel the pulse and did that repeatedly until I got annoyed, and finally he dropped it. He said to me afterwards he had never seen nitrous oxide gas administered and I did my best to explain. A barber came into my office with a lower second molar to be extracted. I found my cylinder contained 50 gallons of gas. I administered gas to that man until my arm got tired holding the inhaler. You could just see him make an effort, but he could not raise his fingers. I told him I was going to extract the tooth and I could see his lips move a very very little. However, I dropped the inhaler and extracted the tooth. He said afterwards he was very sorry at the time he could not prevent it, but was glad afterwards that he could not. I found he had inhaled 45 gallons of gas. If a patient ceases to respire with me I have a small bottle, about an ounce, containing ether. I lift the head from the rest and pour about a tablespoonful down the back; it is just like so much ice-water, and the effect is very beneficial. To me it seems ridiculous for people speaking of dentists administering anæsthetics to people with heart disease. I would like to ask any dentist if he ever came across anyone about to have a tooth extracted who had not a weak heart. I think we, as members of the profession, and I am sure the majority of the medical profession, cannot tell just who have weak hearts. Take the accidents which happen under chloroform; they happen almost entirely in the hands of those who are professors in colleges and experienced men; that is what I glean from the journals; I have yet to hear of an accident happening in the hands of an inexperienced man. I have had some rather disagreeable experiences with chloroform. I had one patient a short time ago and a young medical man came with him to my office. We had about half an ounce of chloroform, D and F, the best you can get.

We used not more than three drachms. When I had finished my work, having taken out about twenty teeth, he collapsed and we had a very narrow squeak with that man. Respiration ceased; there was not any more life in him than in a piece of wood. I took hold of the man by his lower limbs and stood him on his head and we resorted to artificial respiration for a long time when he finally recovered.

Dr. CATES—I think there is a gentleman present who will remember when one of the leading physicians of St. John led a patient into his office and that patient was so weak that he required assistance to gain access to the office. The physician said he would like to have gas administered and have a tooth removed. His heart was very weak, in fact he was in such a precarious condition in regard to his health that the teeth were thought necessary to be removed and as one of the last resources to help him and gas was administered. The man was so far gone that two weeks afterwards he died.

Dr. MAGEE—I made two or three memoranda while listening to that paper being read and one is just a corroboration of Dr. Robertson's remark about nitric oxide. It is very irritating when anyone breathes it, and I do not think there is a particle of doubt about the gas being either nitric oxide or nitrous oxide. In regard to making gas, as Dr. Murray spoke of now, I do not suppose it is worth while our taking time for, when we can get such good gas from the dental depots. He made a reference to the fact that patients will kick up a shindy, so to speak, and do lots of remarkable things. It is my experience that at a certain stage in the gas (it may be different lengths of time in certain cases), whatever the person starts to do he keeps on doing until the gas has made him completely unconscious: the muscles relax or stop that action only when the gas has paralyzed that part of the brain which has set them in action. They may start laughing and they may begin to cry, but whatever they begin to do they keep on doing. He also spoke of hallucinations that people have. I used to make it a habit every time I got a cylinder to test it upon my self before using it on anyone else. Now, I get one particular gas and knowing it to be uniform, have not had any occasion to try it except to allay someone's fears that it might be injurious. Then I take a little. When losing consciousness I always think I am in a shipyard. There was another point he referred to and that was the subject of breathing; he says sometimes they stop through fatigue. To me that is not the reason; it is just the same as when you exhale and inhale air to the full extent of the lungs for several times. I think the whole body is supplied with oxygen to the extent that the lungs do not need to act and that is the reason they stop breathing at that time. I am never afraid when they breathe fully and then stop; the danger sign is when they breathe faintly and the

breathing gets fainter and fainter. Better take away the inhaler and let them have a whiff of the air and that is about all that is necessary.

When the tongue has got back in the throat and the patient attempting to breathe and cannot, the suggestion was to use the tenaculum. We do not often have this at hand, but it is a very easy matter with the fingers to pull the tongue forward. Poke the fingers away back and hook the tongue downward and forward.

Then as to the bad effects that follow gas; when one gets an overdose of gas it is always followed by headache and sometimes nausea. Pain in the head is due to the effects of nitrous oxide. It dilates the arterioles. I have never had one of those cataleptic cases yet. I have heard of them, but never had the pleasure of meeting one and do not want to. In reference to the combination of ether and nitrous oxide, I have never had occasion to use it. We are not allowed in New Brunswick under our dental laws to use ether and chloroform. I do not think we ought to use it I do not think there is really any danger, but it is against the law. In combination with nitrous oxide, from all I have been able to gather, it is perfectly safe. First carry anæsthesia to almost perfect completeness with nitrous oxide and then keep it up with ether. I knew one man who practised that for a long time just on the same lines he had followed in the use of chloroform first and then ether.

Dr. MURRAY—In reference to the combination, Mr. President, I have used it several times, of course not for myself. I can accomplish all I wish to accomplish with nitrous oxide gas, but I have used it for physicians. I had a case not long ago where I administered the gas, and the physician the ether, and when we got the patient completely anæsthetized I continued the ether and the physician performed the operation. I must say that in the operations which have come before me all have been perfectly satisfactory, as far as the anæsthetic is concerned. It takes a very short time indeed, as we all know, to put a patient under gas, and they can be kept anæsthetized perfectly well with the administration of a very small proportion of ether. Then the operation can be performed very successfully and without any pain whatever.

Dr. MCAVENNY—After twenty-five years' experience with gas there are many points I would like to touch upon. There is one thing I would like to speak of particularly, and that is when a patient comes to your office and you fear you may have trouble. When he gets in the chair you say, "Now I just want you to do as I tell you." He says he will try. Say "No, I won't start unless you promise me faithfully you will do just as I say." He says again, "I'll try;" but don't go on, it is no use; if he once says he will do as you tell him then go on, and you will have no trouble with that patient.

Dr. W. P. BONNELL—I have a couple of points I have found

valuable to me in my practice. One is perfect quietness in administering gas. You have a young lady in the chair, very nervous, and if she hears any remark by anyone she will become nervous and frightened. I never make any remark more than that the patient is doing nicely. The other is in stopping breathing. I find that can be overcome by telling the patient to exhale. They have an idea they must inhale and they cannot, but just tell them to blow as hard as they can, and they then do nicely. I must say of late I have not had any trouble in connection with this matter.

Dr. MOORE—Dr. Magee, in criticising Dr. Murray's paper on the question of stopping breathing after a number of deep inhalations, spoke of the system having taken in so much oxygen that he was not afraid at that stage of the stopping. Dr. Murray explained the action of nitrous oxide gas, not as giving an extra supply of oxygen to the body, but as keeping it away from the circulation. I would like Dr. Magee to explain just how his fear would be allayed.

Dr. MAGEE—I made a mistake in that; it is not an oversupply of oxygen, but nitrous oxide is a supporter of life; that is, it exhilarates It enters the circulation and seems to fill up the body, sustaining it for awhile.

Dr. ROBERTSON—If oxygen, as we know, is the great life-giver, of course there is more oxygen in arterial blood than in venous and a patient oftentimes becomes sort of bluish-black, as you all know. I was taught, and I think the majority were, that the effect of nitrous oxide was not hyperoxiding but hypooxiding, which is, as you know, a diminution of the quantity of oxygen in the blood. I don't think, though I don't know, that nitrous oxide is a life-sustainer; in the air nitrogen and oxygen are not in combination, as they are in nitrous oxide.

Dr. DONHAM.—The different anæsthetics result similarly, though in entirely opposite ways; one paralyzes the respiratory organs, and diminishes the oxygen of the blood, and so creates an increase of waste tissue, and the other by increasing the amount of combustion fills the blood again with carbonic oxide, which is the venous blood. When a person is paralyzed with chloroform, or has the anæsthetic effect from gas, it is either from the diminution of oxygen required to carry on the natural functions of life, or the increase of it which causes this paralysis. From the different agencies you can equally well perform your operations, only the effect comes in a different way. The first time I administered gas was in Woonsocket, R.I., when a lady came in with eighteen teeth to be taken out. The gas bag was there, and I thought I might perform this little operation. I gave her what I thought was quite sufficient; I did not know the exact moment when to stop, but thought she had taken enough. The operation was successful.

I took out all the teeth, and she remained unconscious long enough for me to extract half a bushel. I did not understand just what was wrong, but believe I had given an overdose. The next time I saw it administered was by Dr. Bigelow, and as the blood from the wound was black the doctor said he would not use it again. I think the same restoratives apply to all these anæsthetic drugs alike.

Dr. C. O. WEBSTER—There is one point I would like to ask about in the use of nitrous oxide. What is the tendency in persons who have a hæmorrhagic diathesis? My personal experience is they are rather apt to have more trouble after using gas than they otherwise would.

Paper by Dr. F. Woodbury, Halifax, N.S. Subject, "Education of a Dental Surgeon."

Dr. MAGEE—Having had a little experience with legislation to the end that our own society in New Brunswick should advance the standard of educational requirements for admission to our profession, I must say that the paper has touched the most vital point. I think that at the first start these men who took up dentistry did so because they were compelled to. There was a demand for their services, and the blacksmith and the butcher and other men took it up. They are the men we must thank for all the good we have accomplished, even at this late date, but I think a part of the trouble at the start was that those men feeling that as they themselves when they began practising did not have any special knowledge, thought those who were to enter the profession after them did not need to know any more, and the requirements should not be any greater for the new ones than it was for the old. When they started colleges they took in all who presented, and of course just taught them as little as was really requisite to send them out to work, taught the mechanical part and paid little attention to theory. Of course the need having been filled, and better thinking men got into the profession, or men who thought it was a higher and nobler profession than a money-making business, thought it was a good thing to advance the standard and to teach men it was not a carpentering business but something that had relation to the whole system, gradually brought in first one thing and then another until now we have a very good standard. As time goes on there is no question in my mind but that every man who practises dentistry will have a medical degree as well. I am now getting along to middle life and it is not very many years until I shall have a medical degree, I don't care how I do it. I was going to say it would be a good plan for young men to be encouraged to take a medical degree first. They will probably soon be compelled to do it for their own sakes.

Dr. COGSWELL—It is a step in the right direction; the more knowledge one has the more able he is to meet and compete with others. In the United States many do obtain both degrees.

Dr. MURRAY—I am very much pleased indeed with Dr. Woodbury's paper. It is a subject which I have often thought about and when I saw he was to read the paper I looked foward to hearing it. I think in order for us to cope with the other professions it is just as Dr. Woodbury said in his paper, that the literary qualifications of a dentist must be on a par with the literary qualifications of other professions. In the past we have had men come into the profession whose literary qualifications were very poor; the result is that it has been the means of keeping the standard down to a certain extent, therefore in order for us to have this standard raised on a par with other professions we must have educated men, men of culture in the profession, on a par with those in other professions. I think there can be a great amount of good done at the colleges as far as raising the standard of our profession is concerned. If they would proceed in the right way I think that the men whom they sent out would be better. Make their preliminary examinations high and those who go up for examination and fail let them go home again and get qualified, and then before our dental societies we will not have so much trouble about college graduates failing to get through their examinations. It is there it should be taken hold of at first. With a great many colleges all you have to do is sign your name, matriculate, and get through your dental course without any regard whatever to your literary qualifications.

W. H. TOWN, of the S. S. White Dental Mfg. Co.—A little antagonism sometimes does good. For forty-two years I have seen the profession grow up and colleges develop. The mechanical faculties are very rarely found combined with the literary, and I have observed that the men who stand high in literary position and write literary articles, those very men I have known to be in professional hells all their lives in offices, because they have not the manipulative ability to realize the ideals which they so magnificently expressed; but I would not belittle the literary education. I say the mechanical quality is largely in the ascendant to the ordinary dentist and the best men in the profession (and I know lots of them) have little literary qualification. There is Dr. Bliven, of Worcester, who never had any advantages whatever and yet his peer is perhaps not known in the world in certain lines. I know many such instances, and I also know this, that many men with no advantages at all, but confronted with necessity and with original investigation as to what to do, walk into the vast unknown for, gentlemen, knowledge is a very superficial matter, we know exceeding little and the limits of the unknown are so very wide—that some fellow has happened to stumble into the path from necessity and discovered a gold mine which you literary fellows will write books about afterwards.

Dr. WOODBURY—I don't think it will interfere with anyone's manipulative power to have a proper knowledge of surgery. I

don't think it will hurt the dentists of New Brunswick, Nova Scotia, and Prince Edward Island, to have the power to administer ether and chloroform, or the dentists of Canada, when they come across a little tumor, to be able to remove it without calling in some one that does not know half as much about it. I don't think it will hurt a surgeon to have enough common school education to be able to listen to a lecture on operative dentistry and be able with reasonable intelligence to interpret it when he does listen. I don't think it will hurt a dental student to be able to have general education enough and mental training enough in good square consecutive thinking to make him able to sit down and read some original communications in some of the papers. It occurs to me that our profession is suffering for the privileges that we ought to have. We ought as dental surgeons, I claim, to be able to have the right to operate on the maxillary bone and have the right without question to administer constitutional remedies for the cure of constitutional distubances having expression in the mouth. It is very questionable, *in my mind, if I administered a constitutional remedy* to bring about some constitutional effect—it is very questionable if anything should happen or a family physician found it out—whether I should have any protection in the courts. I doubt it very much, and even in the adminstration of gas I doubt very much whether the dental profession would receive protection from the medical brothers or consideration from the courts. We are in such a position we do not know where we are, and I do not see any way out of it but that dentists have a medical degree. We cannot have consideration in the eyes of the medical profession when we demand notice unless we do stand with them in the medical degree and unless we stand on another level, as I stated in my paper. I do not want to see my boy, if he goes into the dentistry and has no taste for literary pursuits—I do not want to see him spend five or six years in an arts course and pursue something he does not intend to carry out, but I do want him to have enough education to be able to grasp the subjects he comes in contect with and be able to talk about them and think about subjects intelligently and pursue the technical education he intends to pursue. Neither do I see that having that education it will interfere with his mechanical skill in any way.

Paper by Dr. J. S. Bagnall, of Charlottetown, P.E.I.—Subject, "The Deciduous Teeth."

Dr. MAGEE—This matter, I might say, is one of almost vital importance to me, because as I make somewhat a specialty of remedying irregularities I feel it is necessary in every case where there is a correction to be made, to get it done as early as possible, and if it can be done with the deciduous tooth in place, so much the better. I almost invariably find if the deciduous teeth are prematurely extracted there will not be sufficient room for the per-

manent ones to come through; sometimes there will be plenty of room, but oftener there will not. Dr. Bagnall has made a quite extensive study of the thing. The first cases he cites are of one class; the last, of another. The first is where there is an inflammation from roots that have been left and the permanent teeth could not with comfort get through alone, and the other class is where deciduous teeth have been kept in the mouth much longer than their natural term of life. He says, "I always maintained they would come through," and in my own opinion he is perfectly right. They will come sooner or later, but because the deciduous teeth were extracted so early and the permanent teeth were so far down, the bone had become solid and it took nature a long time to push up that shell. We know a blade of grass will push up asphalt; it is bound to grow, and an erupting tooth will also grow with any kind of a chance and will work up to its proper position sooner or later. In another case further down, he says, "If all means at my disposal fail to relieve the troubles, etc., to administer ether, if necessary, and remove the offending tooth or teeth." He is perfectly right in that. I don't think that is a question anyone should consider. If a patient cannot endure life, it is better to remove the cause of the trouble, even at the expense of an irregularity and perhaps the loss of a permanent tooth when it came through; but I have in dozens of cases seen where there has been an extraction of a deciduous first molar before the time it would naturally be lost, the coming forward of the second molar almost invariably closes the space. I have not noticed the difference if there happened to be a front tooth lost. I have known deciduous cuspids to be taken out to allow space for a lateral to come up; but of an incisor in so young a subject, I do not just now remember a case. If a second deciduous molar is removed before the age of five or six years, the first permanent molar invariably comes forward. I have never seen a case where it has failed to do that; it always comes forward and closes the space somewhat. Then there is not room for the second bicuspid to come in the proper place, and as a consequence there is the crowding of the anterior permanent teeth. We often find a tooth crowded forward until, perhaps, a lateral is pushed out of its proper place. There is always that forward movement; but I don't think any question should be raised on the extraction of teeth where a child cannot get relief in any other way. As to the absorption of the deciduous teeth: Wherever a permanent tooth comes in contact with a live deciduous tooth, there is bound to be absorption, if it comes in a proper place between the roots. A deciduous molar molar will have a bicuspid in among its roots, and very gradually absorption takes place until eventually we will find nothing but the top of the deciduous tooth left. This will have a little red spot in it that nature has placed there to absorb the tooth. I think the reason that that bicuspid shown in the

model has come backward into the place where the molar was taken out of is, that the molar was abscessed, and the erupting tooth moved into the crypt thus formed. The molar was probably taken out at the age of seven or eight years, or perhaps a little earlier. That brings up the question he makes at this point: "This leads me to inquire are there not times when it is judicious and even necessary to extract the deciduous teeth in order that the eruption of the permanent ones may not be retarded or diverted by non-absorption of the roots of the former?" It is just a question which everyone will have to decide for himself, when there is a tooth developing in the jaw. By the use of the X-rays, it is possible now to locate a tooth, and then by its use we would not have any doubt about extraction. If we were sure there was a tooth there, and its eruption was interfered with by the presence of a deciduous tooth, we should extract the deciduous tooth. I have known of some cases where deciduous teeth have been extracted and bicuspids coming down have filled all the space between the molar and lateral incisor. There is another cast showing two cuspids, with two incisors and two deciduous cuspids between them. It looks to me as though there had been a crowding of these lateral incisors out of proper line and extraction had been resorted to. Some adult members of my own family have deciduous teeth in place. A deciduous cuspid, lateral incisor and molar were present in one mouth. I extracted the molar with the hope a bicuspid was beneath it; but, unfortunately there was not. In another case I can see no evidence of a tooth coming through. Many of these cases, I think, are hereditary; or it may be something has happened to the germs of the permanent teeth; perhaps they are mummified. The last class of cases referred to is that where deciduous teeth remain in the mouth. I think we all have to use our judgment in cases of that kind.

Q.—How is the lower jaw in that case?

Dr. BAGNALL—I don't think the laterals were ever there.

Q.—Are the lower incisors behind the upper?

A.—They were regular.

On this question of deciduous teeth, I don't think there is much information to be gleaned from our text books, or any published articles. I take pains when away at different times to bring up questions before a man whom I think has some special knowledge, or is a shining light in that particular line of work, and had occasion at one time to speak to a dentist in Boston about this matter. He said, invariably when finding a cavity between two deciduous teeth he takes his engine, with a corundum point and water to keep it cool, and trims the deciduous teeth down to make them the shape of a dog's tooth; trims down until it comes close to the gum, leaving the tooth so that there is nothing but the tiniest point at the gum. He claims there is no room for the food to lodge, it keeps the jaw as it ought to be and saves untold misery in the end. It

is almost an invariable rule with me to fill these deciduous cavities with gutta percha. The force of mastication will cause the gutta percha to spread, and if there is any tendency to contraction there will be a little more room given by the space obtained in that way. My Boston friend says he does not believe in that at all. Sometimes we see a molar so far carius that something must be done to relieve suffering. I have not had one case yet where I could apply the new remedy, Formagen, to a deciduous tooth, but hope to use it soon. I have never hesitated, on occasion, to destroy the pulp of the tooth; but find the greatest difficulty in getting that tooth to remain as nice as a permanent tooth, for the reason I cannot fill the roots as successfully as the permanent teeth. I always encourage the parents to keep the roots there if they are not objectionable. If the root can be kept until the permanent tooth has grown sufficiently far to prevent the forward movement of the first molar, I do not think it would hurt at all to remove them, and should say if the child has reached the age of perhaps eight years and is pretty well developed, that would be a fair guide. Perhaps you would know by the eruption of the anterior teeth how the posterior are apt to come. One could tell if it was advisable to extract even earlier than that age. The extraction of these teeth I do not think will be followed by any ill effects or contraction. The extraction of the deciduous cuspid is more frequently resorted to for the correction of an irregularity in the lateral incisor than any other teeth, or it has been, so far as my experience goes; but it is the very worst tooth we could extract for that purpose, because the permanent tooth comes in later than the bicuspids, and the space almost invariably contracts.

Then we have the condition shown by the cast where both deciduous and permanent cuspids are in place. I believe the lateral incisors were taken out and the cuspids have taken their place. I save the teeth as long as I can, to allow for the proper eruption of the permanent teeth; but never hesitate to give relief if it is necessary.

I was called on some little time ago to extract a tooth for a little patient about ten months old. The physician said the teeth were aching and abscessed, the gums were all swollen and it was a bad case. The lips were pulled back, the gums were full and swollen and bled freely, and I only had to look at the case to recognize a case of scurvy. The teeth were discolored a little, with a brownish deposit on them, and they wanted me to extract. I recommended something else and, of course, would not extract the teeth; but had they been extracted, I think there would have been contraction in one so young as that. I may be mistaken about that; but I know that, posterior to the cuspids, contraction does take place.

Dr. BAGNALL—There is just one point I should like to explain. In the matter of the child's teeth where my friends thought they would not come through, the trouble began when the child was

about three years of age, and they would not erupt until the child was ten or eleven. It was not at the time they ought to be there but away years before. The teeth erupted at the regular time. I have an idea that where you extract the teeth early the permanent teeth come in more quickly, I think earlier, than if their predecessors are lost in the natural way. If a deciduous tooth is extracted the permanent tooth comes earlier than if not extracted.

Dr. MAGEE—If an abscess affects this deciduous molar, the permanent tooth will come up earlier because there is a gap there, but it depends on the time at which it is extracted of course. If about the age of nine or ten, and the permanent teeth would not naturally come through until eleven or twelve, it will come a little earlier in that case.

Dr. COGSWELL—Q. Do you consider the first teeth remaining an advantage in the growth of the permanent teeth?

Dr. MAGEE—A. I think any natural action is better than anything we can hasten by other means.

Dr. COGSWELL—Q. Would you think the removal of all the first teeth would have an effect on the growth of the second?

Dr. MAGEE—A. It does help the arch of the permanent teeth to keep the others in. I do not think it affects the *development* of the second at all.

Dr. COGSWELL—I have a case in point where a physician removed all the temporary teeth, and it was supposed the others would not come through properly, but they are perfect. The child must have been five years of age. The teeth came through at the regular time and in perfect condition.

Dr. BAGNALL—That is my theory, yet I think nature removes the bone of the deciduous teeth and uses it to the benefit of the second. That would be the idea, and it is a loss to lose the teeth. The difficulty about this matter of having to extract generally comes when a child is from two to four or five years of age. Later when a child gets to be seven or eight, more or less absorption has taken place and the disturbance is not so great. The child has a greater advantage where the root is partly absorbed.

Dr. MAGEE—We should educate the parents to the necessity of having these children looked after. We know, unfortunately, they frequently do not seek our services until the children have toothache, and then we have to do something radical. I do not like to extract a molar if I can keep it there.

Dr. CATES—When a deciduous tooth is working according to nature, absorption going on and disintegration of the bone cells taking place, what becomes of this material? Is it reabsorbed and rearranged in bone cells again for the building up of the tissue of perhaps the growth of the incoming teeth? Could anyone inform me on this subject? If we have a loss of these deciduous

teeth by premature extraction, must there not be necessarily a hindrance in growth for want of that substance?

Dr. COGSWELL—That is why I asked the question whether it is necessary to have the deciduous teeth in for the proper growth of the permanent teeth.

Dr. MAGEE—I do not think it makes any difference. If a deciduous tooth has been absorbed in a normal condition we will find a little red spot in the middle of it. It is my opinion that nature has that little thing there to absorb the tooth. If the tooth is dead that thing will not be there, but it is always present in a live tooth. The dissolved structure is carried all through the system as anything else would be. It is not necessary that that little red spot should eat away the structure of that deciduous tooth and carry it downstairs to the new one growing there. It eats up and pays into the system.

Dr. C. O. WEBSTER—Referring to the question as to whether the absorption of a deciduous tooth is necessary to the development of the permanent teeth, I don't think it is, for the reason that there is quite a thick tissue between the teeth; the teeth are not directly connected. There is a tissue there, and as our St. John brother says, I don't know how the material is got downstairs, but there are two sets of cells, one torn down and the other building up. I don't know where the material goes to, but don't think it can have any effect on the permanent teeth directly.

Upon motion of Dr. F. A. Godsoe, seconded by Dr. Sangster, a vote of thanks was extended to all those members who had given papers during the evening.

Upon motion of Dr. Thomson, Mr. W. H. Town was requested to address the meeting.

ADDRESS BY MR. W. H. TOWN, OF THE S. S. WHITE DENTAL MANUFACTURING COMPANY.

I would not if I could, and could not if I would, read a paper to you at this late hour of the night. The principal reason is because there was a misunderstanding about the programme forwarded to the S. S. White Company. This subject of myself and the company was left entirely out and I did not prepare a paper. However, I will give you a brief resume of what I might have written; it will not detain you long. I commenced my career in this house in '56, under the name of Jones & White. I have had the honor of serving under the four different names of this company. I thank you, gentlemen, with your high professional standard, for the recognition involved in this invitation.

Personally, I never knew a man so white, so lovely all the way through, so organized, so humanitarian and all-embracing in his mind to whom it could have been said as Shakespeare said of

Hamlet's father, "A combination and a form indeed, where every act would seem to set his seal to give the world assurance of a man." He was a spherical man, an all-round man who in his public capacity as well as in his private capacity, in his all-embracing aims in business and in his humanitarian improvements, in patriotic relation in the great civil war, for I want you to understand that Samuel S. White organized and sent to battle a company for his country; he had sixty men go from his factory with the assurance that their salaries in full should be paid during their terms of service: he also contributed $300 to every college in the United States when not a rich man, for the development of literature and science, and, personally, I am glad to pay a tribute to him, who, though dead, yet speaketh; who, though dead, yet liveth in the S. S. White Dental Manufacturing Company, a company of Quakers, of religious men, of scientific men, scholarly, honored, listening to the spirit of the times and advancing with it; and I know, gentlemen, of hundreds of thousands of dollars to-day in plants, magnificent plants, on Staten Island, simply because the S. S. White Company have tried to keep abreast of the times and have contributed in no small degree, to my certain knowledge, in the last forty years in the great development of the colleges of this country and the scientific development of it. We are are all the time solicited by surgeons to make instruments of the finest character. As an instance, we were approached to make manicure forceps by men of Germany and France. We said, "We cannot, it is a side issue; but if you will give us an order for five thousand we can do it as a side issue," and to-day the S S. White manicure forceps is known to the world as a result of that side issue. It is a fact that S. S. White fought in the interests of humanitarianism. I had the honor of delivering the first set of teeth ever manufactured on rubber. I have known men as poor fellows who had no literary ability, contribute something for which you, gentlemen, could take off your hats and reverence them. In fact, most things that have come to the world have come from just such sources. Christ himself took twelve unlearned men when He wanted to teach the world. In the battle with the Dental Rubber Company, S. S. White had extensive interests. I knew this man; I was approached to form the union back in '64. S. S. White said to me, "You go into that matter, find out all about it, my interests are with the dental profession and I will defend it as much as in me lies." The result was we formed the Dental Protective Union.

I wish to show you the wonderful humanitarianism of S. S. White—a lovely character, a beautiful man, whose eye read you as though you were transparent, and could sympathize with you in your weakness. There are lots of men on our list who have been forty years or more in the business, and do you suppose they will any of them suffer? Why, one of our bookkeepers, not working

for ten years, used to come and draw his salary every week until he died. We have a man whom perhaps you know, Mr. Freeman, who was disabled for three and a half years and his salary paid right along, and although in great weakness he is an honored member of our house. While, as an individual, S. S. White has ceased to exist, and perhaps there is not so much personality, because a corporation cannot necessarily have that, yet the spirit of admiration is in the S. S. White Company; and if you, gentlemen, could know the instructions that we as their representatives have in relation to their business, that nothing is ever to be exacted, nothing misrepresented in the slightest degree, that satisfaction must be given; we are more anxious to satisfy than you are if it could be traced to our door. Six hundred men on Staten Island. It is said all over the world there is no such magnificent place as that, holding their own houses and beautiful homes, salaries from $700 to $2,000. Many widows and children in Philadelphia are being kept in work there. Personally I have many beautiful recollections of S. S. White—the S. S. White Dental Company—it is trying to purify refined gold for me to tell you anything about them. You yourselves know we have done and tried to do a great deal for you, gentlemen, and this is only a small relation. It is all over the world in this relation, helpful, and we spend money freely in experiments. What do you think we will ever get out of the electrical experiment? We have spent thousands of dollars already for an engine that gives you power for surgical appliances all the way through. We simply do it to keep up the reputation of the house as established by that magnificent humanitarian agency, S. S. White, and we are proud to acknowledge ourselves his servants and partake of his spirit as far as possible.

Adjourned to meet at 9 a.m., Friday, September 2nd, 1898.

A paper by Dr. W. G. Beers, of Montreal, was given to the meeting in the absence of Dr. Beers. Subject, "Personal Experience in the Treatment of Pyorrhœa Alveolaris."

FRIDAY, September 2nd, 1898.

Meeting opened at 9 a.m. Dr. Cogswell in the chair.

Clinic by Dr. Melotte. Subject, "Practical Office Points."

On motion of Dr. G. K. Thomson, seconded by Dr. J. M. Magee, a resolution was passed that a vote of thanks be extended to those who have so kindly read papers and performed clinics at this Convention, particularly Dr. Melotte, of Ithaca, N.Y., and Dr. Sawyer, of Manchester, N.H., who have come such a distance and taken much time from their practice to do us good.

On motion of Dr. G. K. Thomson, seconded by Dr. Woodbury, a resolution was passed that a vote of thanks be extended to the S. S. White Dental Manufacturing Company for their assistance,

both financially and otherwise, in obtaining material for the programme of this meeting, also to the Dominion Dental Company of Montreal, the Boston Dental Manufacturing Company, Messrs. Patterson & Foster and Mr. C. R. McDowell.

Meeting adjourned.

"AT HOME" ROYAL COLLEGE OF DENTAL SURGEONS.

Fun went laughing by the handsome building of the Dental College, on Friday evening, Dec. 9th, and the students drew him in and would not let him go until the wee hours of the morning. It was the third annual "at home," and the tall building was filled with ruby lights, the variegated colors of a Turkish tapestry and hearts as "light as wind-tossed feathers." Such a scene finds its adequate expression in music, and it was in this way that the glorious evening began. Of course, there were no heavy-footed strains, but the music of love songs and madrigals, all warmth and heart. Who these singers were this programme tells:

"Creole Love Song" (Smith), Miss DeGeer; "Beautiful Moonlight" (Glover), Misses Kerr and Chattoe; "Two of Them" (J. M. Barrie), Miss E. Tyner, A.T.C.M.; "Forging the Anchor" (Paul Rodney), Mr. E. Percy Brownell; "Madrigal" (Victor Harris), Miss De Geer; "Tommy" (J. B. Smiley), Miss E. Tyner; "The Bandolero" (Leslie), Mr. E. Percy Brownell; Miss Maude McMacken, accompanist.

The programme also included a short address by Chairman C. A. Kennedy, crisp and to the point.

The dancing began a little after 10 o'clock. Beautiful women, in pink and gold, and as dainty as china, filled the picture, and swaying to the music of some entrancing waltz demonstrated the the power of human beauty to the coldest. To be a patroness of such an event is equal to the honor of a fortune and a title, and this satisfaction was last night shared by Mesdames Hardy, Mulock, Ross, W. Willmott, Loudon, Stuart, Primrose, Mackenzie, Clark and Capon. The outside representatives were Mr. Henry, of Montreal, and Mr. Goode, of Buffalo.

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CATAPHORESIS—A WARNING.

The experience of a thousand wise predecessors will not divert folly. We must all get experience for ourselves, and no doubt it is a providential dispensation. But there is no excuse for that presumption which dogmatically arrogates an almost divine right of judgment; which, in the infancy of a new idea, or a novel experience, insists that it has encompassed within its opinion, every possibility of fact or failure.

The cataphoresis fad is not altogether new. It is not one of those fads which are without any merits. It has been successfully applied in clinics—though the value and permanency of results are not fully seen in clinics. It is a fad which requires some special predilection and experience in a direction wherein few dentists technically excel. It is not a thing to be despised or condemned because of its failures, but rather a thing where failures should inspire to conquest. Some of its advocates have been, perhaps, too assertive in their declarations that they have seen no harm in it; that they have done no harm with it. It is generally impossible to know at once whether or not mischief has been done. But recently facts are coming forth to prove that toxic effects of cocaine upon the pulp have extended beyond that tissue to a dangerous condition.

Dr. M. W. Foster, of Baltimore, reported a case in the *Cosmos*, where a pellet of cotton, saturated with a 30 per cent. solution of cocaine hydrochlorate was placed in the cavity of a tooth, and the usual cataphoric current applied. The dose was repeated. About ten minutes from the last application the patient complained that the fingers of the left hand felt as if they were asleep. The symptoms became so alarming that brandy was hypodermically injected and friction applied; the patient "commenced a peculiar howling

sound." The condition lasted from 3.30 p.m. until 8.15 p.m. The rigidity of the body was very marked. The power of speech was not regained until 8.15 p.m. after digitalis had been administered. The throat was very dry for a night and a day; the eyes painful, and for some time the vision was dimmed. This case is, perhaps, more pronounced than any most of us have witnessed; but, within the limited opportunities for observation, a sufficient number of cases have been known to justify extra precaution, especially on the part of those enterprising bluffers who think the possession of electrical apparatus and the merest smatter of knowledge, sufficient stock-in-trade to entitle them to rush in where experts are cautious about treading.

"A SET OF FALSE TEETH FOR $3.00."

We condole with our friends in New Hampshire. The following choice bit of quack advertising may be suggestive, as an object lesson in degeneracy in that direction to which we are fast tending in Canada, and which will end in placing the prosthetic art out of the office into the "shop," on the level of cobbling. The New Hampshire genius is one of those hypocrites who assume honesty the better to deceive. Yet he is evidently one of those uncultured boors who do not know enough to tell a lie, much less the truth, correctly. Of course liars need not be grammarians; but, as a rule, our professional liars put out their productions in a little more classic phraseology. The gutter-digger of New Hampshire starts out by announcing that he has "made a study of up-to-date dentistry *for a few months*." It is surprising he condescended to give so much time to so trifling a necessity.

"For a few months past I have been making a study of *up-to-date* dentistry. In the line of false teeth, I find that teeth come up to the requirements for that kind of work, notwithstanding the fact that twelve sets of teeth can be bought for $10.00, or about 83cts. a set. Vulcanite is another product of up-to-date dentistry. A pound of the rubber costs $1.75, makes about thirty sets of teeth at 6cts. each. Add a few cents worth of plaster of paris, wax, and kerosene oil to the above figures and the cost of up-to-date teeth is about $1.00. I have just received the above teeth and rubber which I shall be very glad to make up at $3.00 a set. You don't want to pay $10 or $15 when you can get them for $3.00.

"P.S. I am making up prices on another line of up-to-date Dentistry, which I will give you later.

"P.P.S. Am afraid I have got prices of up-to-date teeth too high. Look for lower prices later.

"Dr. C. S. R."

DR. GEORGE H. WEAGANT.

In our September issue the report of the Eastern Ontario Dental Association contained an item of a presentation to our friend Dr. Geo. H. Weagant. Unfortunately it was included in the report under Dr. Weagant's own signature, and appears as if it had been sent by him to the JOURNAL. Anybody who knows the doctor will know better, but he has written us in great wrath, as he is not the sort of fellow to tout his own trumpet. The fact is, that the item was sent to us by Mr. S. A. Craige, who was visiting the doctor at the time. Mr. Craige took the clipping from a Brockville paper, and noticing that Dr. Weagant cut that part out of his report he determined to send it. Dr. Weagant had not the slightest idea that it would go in *his* report. Everybody will be sorry to hear that he is in Colorado for the benefit of his health. Everybody will be glad to welcome him home again.

QUEBEC MATTERS.

The politics of dentistry in Quebec seem to be about as rotten as they can possibly become. The *ancient régime*, officially and personally, was entirely one of gentlemen; the present make-up of the profession has had intruded into it the instincts of the *canaille*. No one who does not personally merit it need take offence at this statement. Those who deserve it can hug it to their bosoms. They have shown the truth of the old adage, that "silk purses cannot be made out of sows' ears." We are charitable enough not to publish their names.

Formerly no one sought, much less schemed and plotted for office. To-day there is an unseemly chase for it, and thle Sancho Panzas who think themselves "fit for government," include the most utterly unfit, and the most offensively presumptious. Accusations of boodling have been freely circulated; an erratic system of doing business has been tolerated, which has created distrust.

In brief, there has been, to say the least, a very marked degree of business incapacity and financial extravagance. The position of the profession, and everything connected with its official existence, demand investigation. It will not do to throw upon the present Board the responsibility of reorganization, or the blame for the state of affairs. The present Board have the confidence of the licentiates, and it is the duty of the members to strengthen their hands. They have inherited a condition of affairs of some perplexity, and need to take the members into their confidence

The custom of doing important business during the three years term of office without the knowledge of the licentiates should be curtailed. It is imperatively necessary that the annual meetings should be revived. In the personal and official interest of the members of the Board, whom we know to be animated by honest motives, it is wise to render an account of their steward-ship, and to take council with those who appointed them at least once a year. The *canaille* will discover that their hysterics will have no avail.

EDITORIAL NOTE.

If any dentist, in the enthusiasm of youth or the zeal of honest and unselfish intention, thinks he has a mission to do good to his profession, and is anxious to get into harness, he may make up his mind that if he succeeds, he will in the long run, get more kicks than kindness. Some people deserve to be kicked. They are intensely for self and the dollar, and if they are not actually hypocritical thieves, they run so close to the business of stealing that they only owe their escape to their talent for concealment. But the most of hard workers in official capacities in our ranks are incorruptible and above reproach. In fact they are as they should be, more scrupulous of funds which do not belong to them, than of that which is their own. We find rascality suspected and proved in every sphere of life. Dentists are not demigods; but, as a rule, they are very respectable citizens who rarely, if ever, get into the penitentiary. They are not solicitous of public office, because they have not the time. Yet there are some who give a great deal of time and thought to the public service and receive public gratitude. The odd thing is that when they serve the profession in the same way they provoke professional jealousy. Somebody must serve the profession. There are ambitious cranks, and very respectable, but wholly unqualified men, who hunger to serve in any and every official capacity. But happy after all is the man who minds his own business.

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