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AUGUST, 1871.

No. 10.

THE CANADA
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ISSUED MONTHLY.

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THIRD VOLUME.

THE CANADA

JOURNAL OF DENTAL SCIENCE.

MONTHLY—\$2 A YEAR, STRICTLY IN ADVANCE: AN INDEPENDENT PERIODICAL.

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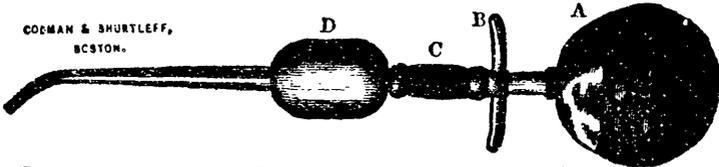
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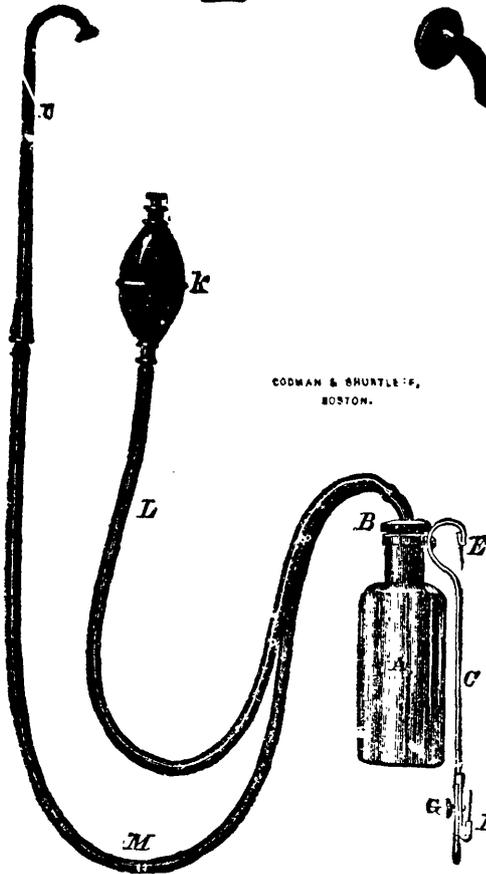
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bulb. When used merely for blowing out cuttings, it is unnecessary to heat it except in cases of very sensitive teeth. Price, \$3.50.

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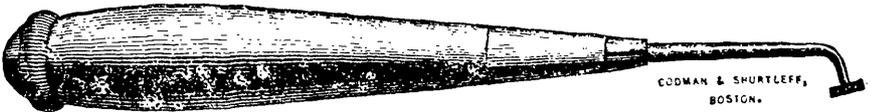
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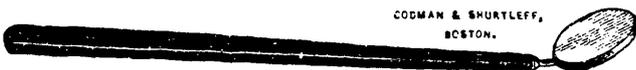


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trimmer firmly by being drawn into the ferrule by a single turn of the milled head. This socket proves very satisfactory, as it holds the instruments so firmly that they will neither turn nor pull out with any force necessary to be used.

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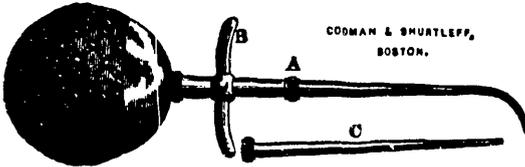
These extremely convenient mirrors are of our own manufacture; they are small round glasses, either plain or magnifying, mounted in nickel-plated frames, and have long slender handles of ivory or bony.

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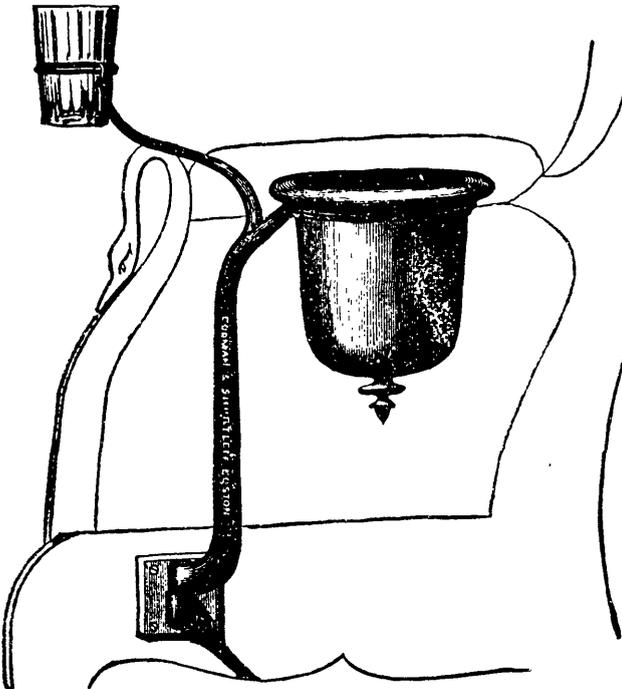


This Syringe is very carefully made, and will stand the test of wear; the only true test of any instrument. Its form is such that it may be held with perfect steadiness by two fingers passing

over the projecting arms, the thumb pressing upon the bulb; in this way the point can be directed with perfect accuracy, without any of that uncertainty of aim so troublesome in other bulb syringes.

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We here present a cut of a Spittoon of a new design. It has a brass socket and plate for attachment to the chair or room wall by screws, a brass crane or support with a ring for holding the basin, which is of heavy spun copper, tinned inside, and bowl-shaped, to admit of easy cleaning. The spittoon funnel is of purple glass. A tumbler bracket is connected with the main bracket or crane by a socket at the point shown in the cut, and revolves independently. This bracket may be fixed in any convenient position by means of the thumb-screw at its base. The whole swings in the lower chair socket and may be swung around so as to be

in a convenient position when the chair is upright and thrown back. When Anesthetics are used, the tumbler and funnel may be removed, leaving the spittoon as convenient as before, with no danger of breaking. We are confident that the convenience, durability and general appearance of this Spittoon will give it the preference over the common forms now in use. PRICES. Price as per cut, \$10; the same with brackets Nickel Plated \$13; the same with brackets and basin Nickel Plated, \$15. Illustrated priced catalogues on application.

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THE CANADA
Journal of Dental Science.

Vol. III.] August, 1871. [No. 10.

ORIGINAL COMMUNICATIONS

ON THE ADVANCEMENT OF DENTAL SCIENCE.

Read before the Ontario Dental Society. By H. T. Wood, L.D.S., Cobourg.

The subject to which I wish to call your attention, for a few moments, is the Advancement of Dental Science. And, in the beginning, I desire to acknowledge my inability, on the present occasion, to do anything like justice to a subject so interesting and extensive. I can only briefly glance at a few of the more important eras that mark the development of Dental Science. A very slight acquaintance of the subject will satisfy any one that we, as a profession, have made very great progress.

Our art is a very ancient one; Herodotus, the oldest Greek historian, informs us that dentistry was practised, long before his time, among the Egyptians, of whom he says, "That the cure of the *teeth* was assigned to certain members of the healing art." In confirmation of this, we hear, at the present day, of Egyptian mummies, whose teeth are filled with gold.

From the time of Herodotus to the sixteenth century, dentistry is almost lost sight of. About the year 1574 it commanded some attention; during the ensuing twenty years we find some six persons writing on the subject; in the following hundred years we find forty-three; and from the eighteenth to the nineteenth century we find one hundred and ten. From 1800 to 1843, a little less than half a century, including medical journals writing on dental subjects, we find one hundred and fifty-two authors.

About the close of the eighteenth century dentistry was introduced into America, by the surgeons who accompanied the French armies to the United States, and also by special practitioners. From the close of the Revolutionary War in 1782 to the year 1830, dentistry made rather slow progress; from three to five could perform all the operations required

in such cities as New York, Philadelphia and Boston, while the West and South were supplied by itinerants.

In 1825 there were not more than one hundred dentists in the United States; in 1865 there were probably more than six thousand in practice. They had at that time twenty-six Dental Societies. At present they publish six Dental Journals, and have in successful operation nine Dental Colleges.

These institutions are doing a great amount of good, not only to the people of the United States but also to the people of Canada. In regard to the progress of dental science we are not much behind our neighbors. As near as I can ascertain there were not more than six dentists in this province thirty-five years ago, and they travelled about from place to place. Our worthy president, Dr. Relyea, is perhaps, one of the oldest practitioners among us. His advent into this Province was in 1841, thirty years ago. Dr. Kahn of Stratford, Dr. Stone of London, and Dr. Wells of Simcoe, have also been in practice from twenty-five to thirty years; I might also mention others who have been in practice from fifteen to twenty-five years, but time forbids.

For some time dentistry was something of a secret art; secret among individual members, each one trying to *obtain* all the information he could and *give* as little as possible in return.

About the year 1860 some of our leading brothers made efforts to form associations, but for want of united action each effort proved a failure, until Dr. Day, of Kingston, issued circulars calling a meeting of the dentists of this Province, to be held in the city of Toronto, on the 3rd day of January, 1867, and, strange to say, only the following gentlemen responded to the call in person: Dr. Day, Messrs. C. S. Chittenden, F. G. Callender, J. O'Donnell, H. T. Wood, A. D. Lalonde, M. E. Snider, D. A. Bogart and J. S. Scott, nine all told. Rather discouraging for those who had travelled from 150 to 200 miles; but we had men of the right metal, each was determined to do his duty.

The first business of that little meeting was to organize an association; after the election of officers, in which Dr. Day was elected president, &c., a committee was appointed to draft a bill of incorporation, to be submitted to Parliament at its next session.

The association then adjourned to meet in Cobourg on the second Tuesday of July following.

The meeting in Cobourg was more encouraging, the members having increased from nine to thirty-three in six months. After a very harmonious and profitable session, during which the bill of incorporation was adopted, the association again adjourned to meet in Toronto on the

second Wednesday of January, 1868. The association assembled in the St. Lawrence Hall on the 21st January, 1868; from sixty to seventy members were present. This meeting was of very great importance. Parliament being in session, the members of the association went in a body to the Parliament buildings, and while there Dr. Boulton, M.P.P., introduced the Act respecting Dentistry. The medical profession gave us every encouragement, Professor Berryman and Dr. Dewar, both members of the Medical Council for Ontario, Dr. Boulton, M.P.P., A. M. Roseberg, M.D., and B. T. Whitney, M.D., Buffalo, N.Y., were in attendance, instructing and encouraging the profession with their very able addresses.

The Bill was passed by Parliament after some alterations, and received the assent of the Lieutenant Governor on the 4th March, 1868.

"Let there be light" is just as appropriate to-day in our profession as it was in the beginning. Why go groping about in a slipshod manner? when we can not only become fellows but even masters of our noble profession. The light of day is just beginning to dawn. The seed sown by the association is beginning to take root.

Local societies are formed, papers on practical subjects are read, clinics are performed, and all our societies are giving and receiving instruction; completely upsetting the trade of the tooth-carpenter and establishing in its place, in an incredible short space of time, a system of dental surgery of no mean repute. One of the results of this advancement is, that teeth are saved to-day, quite satisfactory to all concerned, that would, a short time ago, have fallen victims to the death-grip of the forceps.

What a change from the narrow, contracted views that at one time characterized the profession, to the noble principle of doing good not only to each other, but to the whole community.

In speaking of advancement I ought not to pass in silence over the introduction of the mallet. Dr. Atkinson, of New York, deserves great credit for the solution of this great problem; by it, the practice of teeth-filling has been completely revolutionized. I can call to mind but very few gold-fillings of my own, or of other practitioners, that I now consider good. In fact, I have about come to the conclusion that I never filled a tooth well until I used the mallet in some form.

Dental literature is a great instrument of advancement and instruction in dentistry. All the members of the profession, in the Dominion of Canada, ought to take the *Canada Journal of Dental Science*, and as many other good journals of the same kind as they can afford.

If we desire to continue to advance in the future as we have done in the past, we must liberally support our own journals and our own col-

leges. In my opinion we will not be able to take that position among the professions of our country, to which we are entitled, until we have successfully established a Dental College; and I hope the time is not far distant when we shall see one in this city equal to any similar college on the continent. If we do not accomplish this, then we are not true to our trust.

The whole number of licenses granted by the Board of Ontario is one hundred and sixty-six. The persons entitled to their licenses without examination have nearly all received them. The applicants in the future will be chiefly from the ranks of the students.

From the superior advantages now within their reach, and the provisions that I trust will soon be made for their instruction, some of the brightest ornaments of our profession will be found among them.

The "Act respecting Dentistry" has done more to raise the standard of our profession in the eyes of the community than anything we could possibly have done. The people appreciate good operations. They regard the circumstance of a man's being without a license from the Board as a good proof that he is not properly qualified to practice.

The Board is determined that the people shall have no reason to complain of incompetent dentists. As has been done in the past, the standard of examination will be continually raised in the future, so that our licentiates shall occupy a position second to none in the world.

SOME REMARKS ON FILLING TEETH.

Read before the Ontario Dental Society. By THOMAS ROWE, M.D., D.D.S.,
Cobourg.

Upon one point Dental Surgeons are agreed, and that is, that a good gold filling is superior to a filling of any other material.

And I think we are still further agreed on another point, which is, that conditions frequently render it very difficult, if not impossible, to make a good gold filling, such as is necessary to preserve the balance of the tooth as well as restore its lost parts; because all fillings are imperfect which are not impermeable to moisture, leave dentine exposed to air and the fluids of the mouth, or do not restore the contour of the tooth.

Now, let us consider some of the difficulties with which we have to contend. I will take them up in the order presented in practice. In the first place dental surgeons, as a rule in this province, are compelled to earn their bread by the sweat of their brow, which condition has induced the habit of reckoning all outlays in comparison with the incomes, proving at all times a bar to progress. Unfortunately we live

among a class of patients whose love of luxuries predominate, spending as they do, yearly, hundreds of dollars on superfluous clothing, whiskey, tobacco, and o'her ways perhaps more disreputable; yet feeling that every cent spent upon their teeth is entirely thrown away. Perhaps, gentlemen, you think I have drawn a dark picture; and dark it is, indeed, when we consider that the dental profession is almost entirely responsible for it.

Perhaps you will ask how are they responsible for it? When I beg leave to ask how many good dentists are there among us and what per centage of good operations come under our observation; what proportion of first-class operations do we individually make; or, to put the question in a plainer form, I will ask is there a dental surgeon present who is perfectly satisfied with ten per cent. of his own operations? I think I can safely answer that question, by stating that there are but few among us who make five per cent. of their operations nice enough to stand their own criticism. If this be so with the best, what can be expected of the mass, and how can we expect the people to have confidence in the abilities of dental surgeons? and in making this statement I refer to perfect operations, fillings which will preserve the balance of tooth substance and restore contour, with all natural convexities and concavities. If all this be true, there has been already a formidable array of obstacles presented, and to those are added the cost of gold, sensitive dentine preventing proper preparation of the cavity, and mental and physical inability to bear the operation extending over three or four hours. The saliva too frequently proves decidedly troublesome, a very small amount of moisture being sufficient to destroy the integrity of the filling.

Many patients are decidedly hard to manage, seeming inclined to give all the trouble possible, and finally indicating that they, and not the operator, should receive the fee for the operation.

Now it is well known that either of the above obstacles are frequently very troublesome to contend with. But when we are forced to combat them all combined, as we frequently are, the making of a good gold filling is rendered impossible. Therefore it becomes evident if we are to attempt to save certain teeth in certain cases, we must resort to a material less costly and more readily introduced. But now we find ourselves in difficulty, because the large number of inferior materials in use indicate to us at once that we are not possessed of any one material suitable for all cases. Some of them are too soft, they will not resist the force and wear of mastication; others dissolve in the fluids of the mouth; while a dark color is decidedly objectionable for a filling in a front tooth. As belonging to, or representatives of, the three classes, I will name the

different preparations having gutta percha as a base, among those being too soft, consequently unfit for permanent fillings, although well adapted for temporary fillings in many cases. The different preparations of zinc answer well for temporary fillings, but wear, and the fluids of the mouth in most cases render them unfit for durable operations. Consequently, we are compelled to resort to that much abused material called amalgam, being the only one capable of withstanding all the combined forces. But its color is decidedly objectionable, especially for front teeth.

But I will hazard the statement that, when well prepared and thoroughly packed into a properly shaped cavity and decently finished, it is infinitely superior to a poor gold filling. And the amalgam I mean is no miserable contraband material composed of quicksilver and filings of coin silver, which any dentist, in these enlightened days, should be ashamed to use, but a composition of silver, tin and quicksilver, which is improved by the addition of platinum.

There has been a great deal said about salivation, or ptyalism, having been produced by amalgam fillings, the truth of which I very much doubt; nevertheless, if it has happened occasionally, the material must have been very indifferently prepared. And if, in its preparation, you follow my directions carefully, I shall hold myself responsible for all injury done in the way of salivation.

In the first place, the cavity must be as well prepared as for a gold filling, by carefully removing all softened tooth substance, trimming down thin edges, and securing good undercuts or retaining points. After which, the cavity should be filled with a pledget of cotton, saturated with creosote or carbolic acid, until the amalgam is prepared.

Perhaps you do not understand why the creosote is applied.

It is for this reason, that by removing all the moisture possible, there will still remain enough to more or less oxy lize the filling as well as have a tendency to soften the dentine; but placing the creosote in the previously dried cavity saturates the abrupt ends of the dentinal tubules, or so far dilutes the remaining moisture that it is rendered inert; and I presume you are all well aware that it is impossible for a body saturated with creosote or carbolic acid to decay.

The cavity being ready, the amalgam should be prepared by placing a globule of quicksilver in a mortar, or in the hand, (and I prefer the hand, first, because it is more convenient, and secondly, because I believe its warmth assists in the cleansing process,) adding sufficient filings to make a mass that will fill the cavity. After thoroughly incorporating the filings and quicksilver, wash in alcohol repeatedly, until there is no more discoloration; after which, place in a chamois skin and wring with

pliers, not as dry as you can, because there will not be sufficient quicksilver remaining to thoroughly organize the filling, but it should be so dry that packing will not bring free quicksilver to the surface of the filling.

After the material is prepared, the next step should be to protect the cavity and filling from moisture as completely as in gold filling, then dry out thoroughly, and with a blunt plugger or bur head drill tapped with the mallet, carefully introduce small portions of amalgam into all undercuts and retaining points, adding piece after piece, until the entire restoration is made; after which, all ragged edges and surfaces should be nicely smoothed, and the patient requested to call next day to have the work finished.

The amalgam, at the end of twenty-four hours being well set, take your burnishers, and with gentle taps of the mallet thoroughly condense the entire surface; be as careful as in gold filling to burnish nicely at the junction of the filling with the tooth, then, with sand paper and polishing powder, finish nicely, and my word for it, you will have a serviceable piece of work.

A CURIOUS CASE.

By H. G. WEAGANT, L.D.S., Morrisburg.



A young man, apparently about nineteen years of age, came into my office to have a tooth extracted, at the same time saying that he was in a great hurry and wished to catch the train, which was due in a few minutes. I hastily examined his mouth, and found the gums very much swollen, and a large abscess formed above the tooth. The tooth, and in fact, all the other teeth, of which he had a complete set, appeared to be perfectly sound and healthy, regular and all but the end of the fang well developed. I proposed lancing the swelling to let it discharge; but this he would not allow, saying he had not time to wait and did not care to save the tooth, as it had already given him enough pain and trouble. I extracted it easily with the forceps, and at once saw that it was deformed. For obvious reasons I let it drop in the spittoon, and as it fell I noticed something, which I at first took for dead pulp, detach itself from the tooth and adhere to the side of the spittoon. I picked it up and laid it upon the table. I thought it looked like a soft undeveloped molar tooth; but before I could examine it more closely, the patient caught it up, tore it to pieces and tossed it away. About a wine-glass full of thick yellow matter followed the extraction of the tooth. Upon examining the tooth I found no signs of the pulp remaining.

[The above cut is a fair illustration of the case. Ed. C.J. D.S.]

HOW TO REPAIR RUBBER PLATES.

By G. V. N. RELYEA, L.D.S., Belleville.

Put your plates in plaster as usual. Instead of perforating the old rubber, coat it with a solution of rubber dissolved in chloroform; then put on your new rubber, and the old and new will as thoroughly unite as if all new. On examination it will be found to be perfectly incorporated. Try it.

JOTTINGS.

By S. WOLVERTON, L.D.S., Grimsby.

For the information of some of your readers, who may not be aware of the fact, I would state that I have found a very great advantage gained, as far as controlling pain is concerned, by adding to my carbolic acid or iodine a few drops of oil of peppermint. I found immediate relief from it in my own case, when I was afflicted with alveolar abscess of the worst form. It combines with the iodine and creosote and makes a beautiful sea-green color, which does not stain the hands. It is said that this oil has been used by the Chinese for a long time as a remedy for neuralgia.

I should like to enquire through the *Journal* whether those who are using Pack's gold have not found that there is less difficulty completing a filling, that has by accident become damp, than with other foils that they have been in the habit of using; and, if so, will give some reason why its adhesiveness is so much better retained under moisture than that of the other manufacturers.

On my return to the country after the closing of the dental school in Toronto, my friends were anxious to know whether I was a fully-fledged dentist yet. I told them no; that I did not expect the title of L.D.S. until after the next examination. One of them enquired what L.D.S. stood for. I explained the meaning to him. "Oh," he said, "I thought they stood for pounds, shillings and pence." Not so bad, thought I, and I only hope that my friends, when I come to practise, will take them in the same light.

GOLD PLATING ON SILVER BASE FOR ARTIFICIAL DENTURES.

By T. W. RAINES, L.D.S., Almonte.

Finish a silver plate in the usual manner; remove all stains from soldering; fit the plate in the mouth; if all right, proceed.

- 1st. Coat all the metal with quicksilver. Fiate solder and clasps.
- 2nd Cut No. 20 gold foil in strips, use strip after strip until you have the plate covered; rub with a piece of chamois until the gold all disappears; add another layer of gold and rub as before.
You can put the gold on to any desired thickness.
- 3rd. Expose to a gradual heat until all the quicksilver is evaporated; polish, and you will have a rich gold surface.

"SOMETHING IN A NAME."

By H. G. KENNETH, L.D.S.

Though I do not pretend myself to have been free from blame in the matter of the proper use of names and terms in dentistry, I have appropriated any lesson on ethics I could obtain, and am anxiously desirous of assisting in raising our *profession* by every direct and indirect means in my power. There is a great deal in a name, and I, for one, do not believe that a rose would smell as sweet if called a thistle. Our patients judge us and respect us from the way we respect ourselves, and they also estimate dentistry just as we educate them. I must confess to having had my ideas and practices entirely changed by the advent of dental progress. I used a show case and advertised loudly. To-day I do neither, and would be ashamed to see my name appended to advertisements I used five years ago. Now if we care to improve in the use of correct language, with reference to our daily walk and conversation, surely we should have an equal anxiety to be correct in using names and terms in connection with our profession. Some years ago a lady from Chicago called at my office with another from a city of Ontario. The latter said: "What will be your *price* for filling." The Chicago friend gave her a nudge, and said: "Don't say 'price,' Mary, say 'fee.'" I date my own use of the proper term from that moment. The following is transcribed from an article on the subject I read some years ago:

Profession,	not Trade.
Fees,	not Prices.
Practitioner, Operator, Dentist,	not Workman.
Patients,	not Customers.
Instruments,	in the Surgery.
Tools,	in the Laboratory.
Operation, or Specimen of Work,	not Job.
Student,	not Apprentice.
Assistant,	not Journeyman.
Laboratory,	not Workshop.

Let us all learn these by heart, and teach our patients by our conversation, the proper use of proper terms in dentistry.

A CHEAP QUACK DENTIST.

BY X. Y. Z.

I recently came across a pretty fair specimen of our Canadian quack and cheap dentist. He was busy taking the teeth off filthy old sets which had been worn for several years, and to the question, as to what he purposed doing with them, he replied with an air of ingenuity and smartness, "Why, use them for new cases of course. You see many persons, for whom I put in partial sets, return in a few years to get full sets, and then I get back their old pieces. Sometimes they do to work up for their permanent sets, if not, they do for some body else."

I wish his patients much joy of their work. Pleasant thought, isn't it, to think that one has in his mouth old grinders formerly worn by another whose habits and health were not marvels of purity? I am afraid that the above party seriously considered my suggestion to go into the resurrectioning line.

PROCEEDINGS OF DENTAL SOCIETIES.

 ROYAL COLLEGE OF DENTAL SURGEONS OF ONTARIO.

By J. B. WILLMOTT, D.D.S., Secretary, Toronto.

The Board of Examiners of this College held their semi-annual meeting in the Rossin House, Toronto, on the 18th and 19th of July.

There were present of the Board H. I. Wood, President; A. C. Stone, M.D., Treasurer; John Bowes, Registrar; J. B. Willmott, D.D.S., Secretary; Thomas Rowe, M.D., D.D.S.; B. W. Day, M.D.; H. H. Nelles, D.D.S.; John Leggo, Lyman Wells, John Elliott, and G. V. N. Relyea.

The only business of importance before the Board was the consideration of applications for license. John Best, of Fingal, Ont., having furnished satisfactory evidence of having complied with the conditions of the Act, was granted a license on time. The following, after passing a pretty rigid examination in a highly creditable manner, were allowed a license to practise, and the degree of Licentiate of Dental Surgery. S. Zimmerman, D.D.S., of Nelson; W. Hulburt, of Pembroke; S. Wolverton, of Grimsby; and T. W. Clark, of Kingston.

"The Act respecting Dentistry," passed by the Legislature of Ontario, in 1868, though in several points defective, has already brought forth much fruit in the elevation of the profession. This is every year more clearly visible, as each succeeding class of students presenting them-

selves before the Examiners, are found prepared to pass satisfactorily the more severe ordeal required of them.

Some better provision than that now made by the Act is necessary in order that a dental college may be established on a firm basis in Toronto.

An application will be made at the next sitting of Parliament for an amendment to cover this deficiency.

We have no doubt but that the Ontario Legislature will readily grant any enactment which will have the effect of elevating the standard of the Dental profession.

ONTARIO DENTAL SOCIETY.

By J. Woods, L.D.S., Secretary, Toronto.

The third annual meeting of this association was held in the Rossin House, Toronto, commencing on Thursday, the 20th instant, at 2 p.m. The President, Mr. G. V. N. Relyea, occupied the chair, and in the absence of Mr. W. H. Branscombe, Dr. J. B. Willmott discharged the duties of Secretary *pro tem*. The attendance was very good, the number present being about forty.

The following new members were proposed and elected:—Messrs. H. Robinson, Schomberg; F. M. Clark, Kingston; S. Zimmerman, Galt; J. Woods, Toronto; T. Raines, Almonte; J. Zimmerman, Zimmerman; T. Frank, Orangeville; and H. G. Wegeant, Morrisburg. The retiring President, Relyea, then read his annual address, after which the meeting proceeded to elect the officers of the society for ensuing year. The following were chosen by acclamation:—President, Mr. D. Pentland, Peterborough; Vice-President, Mr. S. T. Clements, Napanee; Secretary, Mr. J. Woods, Toronto; Treasurer, Mr. J. Bowes, Hamilton. After reading a very interesting paper on the advancement of Dental Science, by Mr. H. T. Wood, the meeting went into committee of the whole for the purpose of considering the proposed amendment to the Act respecting dentistry. Mr. J. W. Elliot in the chair. The preamble and first two sections of the Bill were adopted without much debate, and at 5.30 p.m., the committee rose and asked leave to sit again in the evening.

After arranging for the performing of clinics on the following morning by Messrs. Callender, Toronto, and Chittenden, Hamilton, the meeting adjourned till 7.30 p.m.

EVENING SESSION.

The President, Mr. Pentland, in the chair.

The meeting resumed the consideration of the proposed amendment, in committee.

At 8.30 the committee rose, and the Bill was referred to a select committee, consisting of Dr. Willmott, Messrs. Callender, H. T. Wood and Leggo, for revision.

The committee having retired, the members spent some time in examining specimens of dental instruments, improved Pyroline, Canada rubber, &c., exhibited by Mr. W. G. Beers, and several interesting preparations presented to the museum by Mr. Relyea and others.

The meeting was then called to order, and a discussion on the use of rubber dam in filling took place, Mr. Relyea explaining his mode of using it at considerable length.

After an absence of about three-quarters of an hour the committee of revision entered and reported a draft of the Bill as adopted in committee, and the meeting again went into committee of the whole for its further consideration. At 9.45 the committee rose, and the Bill was referred back to the select committee to add another clause amending the 14th section of the existing Act, and providing for the holding of one session of the Board only in each year. In the meantime the meeting returned to the discussion on the rubber dam, Drs. Day, Chittenden and others taking part. At 10.15 the select committee returned and reported the Bill as amended, and on motion of Mr. C. S. Chittenden, seconded by Mr. H. T. Wood, it was adopted.

Dr. Willmott and Mr. Leggo were then appointed a committee to draft petitions to the Legislature and the Lieutenant-Governor in Council, praying for such legislation on the subject as would meet the wants of the profession as embodied in the draft of the Bill just adopted. Mr. C. S. Chittenden brought to the notice of the meeting the conduct of Mr. S. J. Sovereign, of Hamilton, one of the members of the society, which he represented as grossly unprofessional, and meriting the severest condemnation of the association. Dr. Relyea explained that the Board of Directors and Examiners had already taken action in the matter. It was then laid over until the following day and, on motion, the meeting adjourned at 10 30 p.m.

Friday, July 21.

The forenoon was spent in witnessing two very interesting operations performed by Messrs. Callender and Chittenden. The former was the restoration of a large portion of a right sup. central incisor, which had been broken off, and the latter the filling of a posterior approximal cavity in the first right sup. molar, illustrating the use of the rubber dam. Both of these operations received the greatest attention, and richly merited the high commendations bestowed on them by those present.

AFTERNOON SESSION.

The President called the meeting to order at 2.30 p. m. Several accounts were presented, which, on motion, were ordered to be paid. The case of Mr. Sovereign, which was laid over on Thursday evening, was again brought up, and on motion of Dr. Day, seconded by Mr. R. G. Trotter, it was unanimously resolved that he be expelled from the society. The committee on essays and subjects for discussion at next meeting, recommended the following, which were adopted:—Dental physiology, S. Zimmerman; Fang filling; E. Thomas; Facial neuralgia, C. S. Chittenden; General extraction of teeth and roots; J. W. Elliot; Different materials used in filling teeth, H. T. Wood; Best methods of preparing cavities, S. M. Brimacombe; How to prepare and insert the gold and finish the filling, S. T. Clements; Anæsthetics in dental operations, Dr. Day; Taking impressions, S. Woolverton; Selecting and arranging teeth for the mouth, Dr. Willmott, Vulcanizing rubber, L. Clements; Pyroxelene base, W. C. Adams; Treatment of teeth with dead pulps, J. Bowes; Treatment of teeth with exposed pulps, Dr. Neiles; Preserving the teeth by filling, Dr. Willmott; Inflammation of dentine, T. W. Raines; Manufacturing teeth, F. M. Clark; Possibility of preserving shells of teeth, F. G. Callender. The committee also recommended that the President be instructed to arrange with Dr. Atkinson, of New York, to be present at the next meeting. The committee appointed to draft petitions to the Legislature and Lieutenant Governor in Council reported drafts, which were adopted and signed by all the members present. The Secretary was instructed to obtain the signatures of the members not present, before the meeting of the Legislature. It was then moved by Dr. Willmott, seconded by Mr. H. T. Wood, That when this meeting adjourns it stands adjourned to meet next year in the city of Toronto, on the day following that fixed for the election of the Board of Examiners of the Royal College of Dental Surgeons, Canada. The committee on essays and subjects for discussion for the present session presented their report, which was adopted. Dr. Rowe then read an admirable essay on "Remarks on Filling," which provoked considerable discussion, and at the request of Mr. Beers was ordered to be published in the *Canada Journal*.

As most of the members were obliged to leave by the evening trains a large part of the programme was necessarily omitted. The Treasurer also presented a report showing a balance on hand of \$83, and on motion it was adopted. The meeting then adjourned.

PROPOSED AMENDMENTS TO ONTARIO ACT.

In order that the following proposed amendments to the Ontario Act may be seen and read by all dentists in the Upper Province, we send this number of the *Journal* to every one, whether subscriber or not.

An Act to amend the Act of the Province of Ontario, passed in the thirty-first year of the reign of Her Majesty, intituled: "An Act respecting Dentistry," and chaptered thirty-seven.

Whereas it is expedient to amend the Act of the Province of Ontario passed in the session held in the thirty-first year of the reign of Her Majesty Queen Victoria, intituled: "An Act respecting Dentistry," and chaptered thirty-seven: Therefore, Her Majesty, by and with the advice and consent of the Legislative Assembly of the Province of Ontario, enacts as follows:—

1st. Every Board of Directors to be elected after the passing of this Act shall consist of seven members, of whom any four shall form a quorum.

2nd. Every Board to be hereafter elected shall hold their first meeting on the day following the election of such Board, at noon, at such place in the city of Toronto as may, from time to time, be fixed by the Board.

3rd. Section sixth of said Act is hereby amended by striking out the words "first Tuesday in June," and inserting the words "third Tuesday in July, in the City of Toronto."

4th. Section tenth of the said Act is hereby repealed, and the following substituted therefor:—"10. The Board shall have power and authority to appoint one or more examiners for the matriculation or preliminary examination of all students entering the profession. Such examination shall be passed prior to entering into articles of indenture with a licentiate in dentistry, and the commencement of study shall date from the signing of said articles. The Board shall also have power and authority to fix and determine, from time to time, a curriculum of studies to be pursued by students, and to fix and determine the period for which every student shall be articulated and employed under some duly licensed practitioner, and the examination necessary to be passed before said Board, and the fees to be paid into the hands of the Treasurer of said Board, before receiving a certificate of license to practice the profession of dentistry."

5th. Section eleventh of the said Act is hereby repealed and the following substituted therefor:—"11. The said Board shall hold one meeting in each and every year, in the City of Toronto, at such place as may from time to time be fixed by the Board, for the purpose of examining students

granting certificates of license, and doing such other business as may properly come before them; such meeting to be holden the first Tuesday in March, and to continue from day to day until the business before the said Board shall be finished; but no such meeting shall continue for more than one week."

6th. Section fourteenth of the said Act is hereby amended, by striking out the words "third Tuesday of January and July, whichever shall first happen," and inserting the words "first Tuesday in March."

7th. The said Board shall have power and authority to make arrangements for the establishment of a Dental College in the City of Toronto, either in connection with some existing University, or otherwise, and to appoint the Professors in the same.

8th. The said Board, and the Professors of the Dental College so established in the City of Toronto, shall constitute a body to be called the Senate, any seven of which body shall form a quorum, which body shall have full power and authority to confer the degree of Doctor of Dental Surgery upon the persons mentioned in the next section of this Act, upon their passing such examination as the said Senate shall from time to time determine.

9th. All persons who have been constantly engaged for ten years or upwards, in an established office practice, in the practice of the profession of dentistry, and all persons who have attended two full terms in any recognized Dental College, and all persons who have attended one full term in any recognized Dental College, or two full terms in any recognized Medical College, and in addition thereto have had five years' office practice in the practice of the profession of dentistry, shall, upon proof thereof, and upon payment of such fees as shall from time to time be fixed by the Senate, and upon passing the examination mentioned in the next preceding section of this Act, be entitled to, and receive the degree of Doctor of Dental Surgery.

10th. Such Senate shall hold a meeting annually, on the first Tuesday in March, in the City of Toronto, at such place as shall from time to time be fixed by the Senate, for the purpose of examination for and conferring such degree.

11th. All regularly licensed practitioners in Dental Surgery shall be exempt from service on juries, and shall receive due compensation for the loss of time occasioned by their retention as witnesses in courts of justice, and shall be entitled to all the rights and privileges conferred upon physicians and surgeons.

12th. Section eighteenth of the said Act is hereby amended by striking out the words "not exceeding twenty dollars," and inserting in lieu

thereof the words "of not less than twenty nor more than fifty dollars, and to the costs of prosecution"; and by inserting after the word "penalty" the words "and costs;" and by inserting after the words "goods and chattels" the words "and in default of such distress the offender shall be liable to imprisonment in the common gaol of the county in which such conviction shall take place, for a term not less than one month nor more than two months."

13th. All parts of the said recited Act which are inconsistent with this Act are hereby repealed; but such repeal shall not invalidate any thing done thereunder.

DENTAL ASSOCIATION OF THE PROVINCE OF QUEBEC.

Licentiates of the Province of Quebec are notified that a meeting will be held in Montreal, at the Mechanics Hall, on Tuesday, the 19th of September, at 3 o'clock p.m., for the purpose of electing a new Board of Trustees and Examiners for the next ensuing two years, and discussing some proposed amendments to the Act of Incorporation. The importance of this meeting cannot be over estimated, and we hope to see every licentiate present. A good number have not as yet attended any meeting, and we hope they will begin with this one.

SELECTED ARTICLES.

PHOSPHATE OF LIME.

BY J. M. PORTER, D. D. S.

It would seem from the many articles published in dental journals advocating the use of phosphate of lime, in all cases where that constituent seems to be deficient in quantity in the teeth, that many dentists regard this as the only successful treatment in all such cases. And believing that many are laboring without securing the desired results in using this remedy, we will endeavor to give a reason for their want of success.

The observing dentist, who never makes an operation in the mouth without closely examining the cause of decay, will many times see that constitutional defects are having as much influence in producing decay as such local influences that are sometimes present.

It is well known that loss and reproduction is constantly going on in the body, that whether formation or destructive assimilation predominates,

will depend upon general systemic conditions, and *not* upon the amount of any *single element* taken as food. Scientific investigations prove that a given amount of carbon, nitrogen and hydrogen, taken as food into the organism will not produce the same amount of physical force in different persons. We may go further and presume that the same amount of food is equally digested in both cases. And further, it is conceded that any kind of nutriment entering tissues is not proof that it *all* enters the cells where the greatest amount of oxidation takes place. If, then, a portion of our daily food enters the portals of the tissues without entering the inner chambers of the tissues, but passes out again unchanged by a reversal of the forces that carried it in, thereby becoming dead instead of living matter, will giving phosphate of lime have any beneficial influence, supposing this element seems to be deficient in the teeth? Can you relieve such a condition by giving a single element of food, when nature refuses to partake of the food already digested? On the other hand we will suppose that excessive waste is being carried on to such an extent that any part of the body suffers as a result. Will simply giving a single article of food have any influence in checking this excessive waste? If so, upon what principle does it operate?

From observation and experiment, we have found that proper food (that is, such food as contains the elements which seem to be deficient in quantity), if used judiciously, will remedy a defect of this kind, *if any change of diet can*. If nature refuse to appropriate *food containing such elements as are deficient*, how can we expect better results when we give a single element of food?

Every dentist who is observing will see a marked difference in the structure of teeth, as he operates in the same mouth for two or three successive years, when the patient has been living on the same diet, and in the same climate, and seemingly in perfect health all the time, and when frequent tests convince the dentist that no local influences are present that could produce these changes.

We can only account for these changes by presuming that at one time nature refused or failed to appropriate the food digested, for we surely can not attribute it to any change of diet when there was no such change.

In conclusion we claim that it is impossible to modify general systemic conditions by giving as food a single element, which seems to be deficient in some parts of the body. We can not force nature to appropriate food by such treatment, neither can we check an excessive waste. This thing of treating symptoms is in our opinion very much like reporting personal experience at dental meetings, neither having the desired influence.—*Register*.

EXTRACTING TEETH DURING PREGNANCY.

BY DR. H. E. ROBINSON.

It seem to be laid down as a rule by nearly all surgical writers, and indeed is held in practice by nearly all surgeons and dentists, that teeth should not be extracted during pregnancy. Now we are all aware that the uterus is closely connected by the system with the teeth, and that this connection seems more sensitive when the uterus is in a gravid state. But it has always seemed to me that this fact was but another argument in favor of the extraction of the aching tooth, especially when the pain is caused by chronic periodontitis. I am not in favor of indiscriminate extraction of teeth, but will strive as hard as any dentist to save a tooth whenever possible. This should be done in all cases. But for periodontitis, I know of no surer cure than extraction. In the past two years I have had five patients who were pregnant, come to me afflicted with inflammation of the periosteum, some of whom had been kept awake for two nights, and in each case I extracted the offending tooth without any bad result whatever. In the last case, the woman was within about a month of her time for delivery, but she was suffering so acutely from the diseased tooth that I very carefully extracted it, and all was well. Therefore I conclude that, *where no other remedy is possible*, extraction is better than prolonged suffering.—*American Journal Dental Science*.

 CONTOUR FILLINGS.

BY EDGAR PARK. Read before the Missouri Dental Association, June 1871.

Severe criticism has been so freely indulged in by many, upon this subject, that perhaps it may not be amiss to expend a few moments in considering the relative merits of the contour operation where indicated, and others which may be performed.

This operation is indicated where the loss of a portion of the tooth has occurred.

There has never, to my knowledge, been a variety of opinion concerning the advisability of restoring the general contour in cavities having four solid walls to retain the plug. In simple, and even in compound fillings, I don't remember to have heard any objection urged to restoring, as nearly as possible, the lost portion; on the contrary every good operator recommends filling all these cavities sufficiently full to be susceptible of being finished in such a manner that the surface of the filling shall be continuous with the surface of the tooth.

But in cases where a considerable portion of the crown of the tooth has been lost, arises the question, as to the advisability of contour fillings.

I imagine no one will dissent from the statement, that in dental operations the great design is *utility*, which in the teeth, consists in the preparation of food for deglutition and digestion; in their instrumentality in the enunciation of sounds, and in preserving the natural expression of the face. To preserve the utility of each defective organ, it should be operated upon in a manner to preserve as nearly as possible the purposes for which it was designed—the teeth being doubtless fashioned by nature upon the most desirable plan for their several functions. To retain, then, as great an amount of the natural structure as is possible, in a sound healthy condition, is demanded.

A full set of perfectly formed, regular, natural teeth, is undoubtedly the best masticative apparatus that can be devised; and as a personal feature it cannot be improved upon—unquestionably a better model to follow than any idea of our own.

In a well regulated mouth there is no more masticating surface furnished than is designed for use, or than is necessary to equalize the process of digestion with the other organs, whose functions follow that of the teeth. Contour filling is therefore indicated in broken down malors. Indeed its necessity should be recognized in all cases where the tooth can be retained in a healthy condition.

In the bicuspid teeth, where serious decay has occurred in the proximal surfaces, is it especially indicated. Not only is one bound to furnish the patient his full allowance of masticating surface, but for the benefit of the individual teeth, their contour should be restored. I think it is safer to say that more operations fail in the approximating surfaces of the bicuspid teeth, than in any other location in the mouth, and in many cases where the utmost care has been taken, frequently the failure is attributable to the cause designed to prevent it—the free space so frequently left with the idea that through this, these teeth may the more easily be kept clean. This I apprehend, is a mistaken theory in operations of this nature. The free use of the file between these teeth is almost universally necessary in order to remove the frail margins of enamel and secure firm reliable margins. If these cavities are filled and finished squarely across, the crowns frequently approach each other until the surfaces of the plug, dentine and enamel are in contact, when decay will almost certainly again attack them at some point of contact. If you will call to mind the shape of these teeth and their disposition in the alveolus, it will be readily seen why this is more likely to occur in these

than in other teeth. A better method to adopt in filling such teeth is the one now advocated—after having filled the cavities, continue the operation until the contour of the teeth is restored, and the exposed dentine and enamel rods perfectly protected. After finishing, the convex surfaces of the plugs are in contact, rendering impossible the calamity mentioned above.

Coming now to the incisor teeth, this method of operating—which has been so unjustly and bitterly denounced by many as unsightly, fancy operations, advertisements, etc., etc.—I urge again the question of utility. This method of treating results in fewer objections than any other. But one can be urged against it (on the part of the patient). The exhibition of metal is objectionable, that is all, the tooth is stronger, more serviceable, and will be preserved much longer than by means of any other operation.

In these operations gold is the only material with which most operators can produce satisfactory results. Of this there are many preparations. To enter into a discussion as to the relative merits of the different preparations is not in the province of this paper. Perfect operations may be produced with each by the exercise of sufficient care and skill. Experiment on the part of each operator is a more reliable method of determining which preparation is most desirable in his hands, than in depending upon what any man says.

I shall not occupy your time with any elaborate detail of methods of performing contour operations upon various teeth, presuming each to have a method of his own, of much greater value to him. However, a paper upon this subject would perhaps, be unnecessarily incomplete did not the writer give some general ideas of the manner in which he would proceed in a given case. Suppose the right central incisor to require this operation: with a file I should reduce the fractured and uneven edges to a strong regular margin, affording material sufficient to furnish a reliable wall to the cavity, which now is to be made the principal retaining point for the superstructure. Now excavate, of course, removing all disintegrated and unsound dentine, being careful to avoid the sacrifice of an unnecessary amount of dentine for the sake of securing deep undercuts. They are unnecessary and objectionable, inasmuch as they materially weaken the walls. Having prepared the cavity in a manner to afford it the greatest amount of strength; a very fine file or polishing stone should be used on the margin to which the gold is to be adapted. The indispensable rubber dam is next adjusted over four or five teeth—The centrals, laterals, and right cuspid—inserting a wooden wedge between each two of the exposed teeth, beginning between the centrals. By the support thus

secured from adjoining teeth, and the force required to fill is distributed among several teeth, and the severity of the malleting process is astonishingly lessened. Thoroughly dry the cavity, and through a magnifying glass make a last observation. Being satisfied that the tooth is properly prepared, we proceed to introduce the gold—avoid haste—thoroughly impact each piece of gold before introducing another. The use of very small delicate points I find indispensable. Having perfectly filled the cavity, commence extending the gold over the cervical margin, building upon the filling against the walls from without and within. The force should be directed at an angle upward against the plug in every direction, looking toward its surface. If this is done the impaction of the gold will be finished at the mesial corner of the filling. The gold introduced we have but to finish. This is done, by all alike I presume—by means of files, burrs, stone, polishing powders, etc. No less care, however, should be taken in the last steps of the operation than in the first. The margin of the plug must be polished to a perfect surface with the margin of the cavity. The secret of success in these, as in all other fillings, is thoroughness. To produce perfect finish upon an imperfectly introduced plug is impossible. No amount of burnishing and polishing will conceal the faulty operation from the critical eye.—*Missouri Dental Journal*.

DENTAL FEES.

“All works of taste must bear a price in proportion to the skill, taste, time, expense, and risk attending their invention and manufacture.

Those things called dear, are, when justly estimated, the cheapest; they are attended with much less profit to the artist than those which everybody calls cheap.

Beautiful forms and compositions are not made by chance; nor can they ever, in any material, be made at small expense.

A competition for cheapness and not for excellence of workmanship, is the most frequent and entire destruction of arts and manufactures.”

JOSIAH WEDGEWOOD.

BIBLIOGRAPHICAL NOTICES.

THE PRINCIPLES AND PRACTICE OF DENTISTRY, INCLUDING ANATOMY, PHYSIOLOGY, PATHOLOGY, THERAPEUTICS, DENTAL SURGERY AND MECHANISM. By CHAPIN A. HARRIS, M.D., DD.S. 10th Edition. Revised and Edited by Philip R. Austen, M.D. With 409 Illustrations, 794 pages. Philadelphia: Lindsay and Blakiston, 1871, cloth, \$6.50, leather, \$7.50.

Messrs. Lindsay & Blakiston have laid the dental profession of America under deep obligations to them for the enterprising and creditable manner in which they have issued at various times, the text-books required by the dental student, books having comparatively a limited circulation, and therefore less profitable to the publishers than general literature, and which ought to be in the library of every dentist in the land.

A new edition of Harris was a necessity. Dental science in its rapid strides, soon ignores the dictum of its teachers, and compels them to follow in its wake with revisions, or, like Maury and Fox, become obsolete. Some of the most important "principles and practice of dentistry" have only been fully demonstrated since Harris died, and the present edition was absolutely necessary to maintain the high position to which the work, notwithstanding its original faults, is entitled. Perhaps there is no one dental book which has been more read than this; and certainly the simplicity of its style gives it a charm for students, while the popularity of its author, as one of the pioneers of dental literature and education on this continent, has always recommended it to every lover of the profession.

This work is one of those which are vastly improved by revision. The commentators of Homer and Shakespere may have made them more readable, but the oldest Homer and Shakespere are the most correct. In poetry and belles-lettres we prefer to read authors just as they wrote, even though it be in orthography such as Spencer's. Half the revised editions of aesthetical writers give us erroneous conceptions of their individuality. The genius of such writers, if there is any genius in them, is indigenous, and not created by commentators. Not so, however, with works of science. Most such works bear revision, and need it to be perpetuated. The present edition of Harris is brought up to the advanced views of the present time. Though nominally edited by Professor Austen, it has united the co-operation of Professors F. J. S. Gorgas, T. S. Latimer and N. W. Kingsley.

The arrangement of the work is much more systematic than previous editions; Part First being devoted to Anatomy and Physiology; Part Second, to Pathology and Therapeutics; Part Third, to Dental Surgery; Part Fourth, to Dental Mechanism. The early editions of Harris had a large amount of extraneous word-building, which we are glad to observe has been abbreviated and made more concise. Indeed, the composition of the present edition does credit to the editor and his co-laborers. While regretting that the researches and opinions of some writers of the United States—whose labors have certainly raised the character of *the science of Dentistry*—has been altogether ignored, even as reference, there is no omission in the work which could persuade us to do without it, and sufficient revision to make all past editions pass into disuetude. We hope the enterprising publishers will have hundreds of orders from Canada. A reading profession is what we need in this Dominion.

B.

BOSTON JOURNAL OF CHEMISTRY. — This is a very useful home scientific journal, devoted to the arts, agriculture and medicine; in fact, one intended to popularize science and scientific investigation. It should be in every home. It is published in Boston, 150 Congress st., at \$1 a year.

THE HERALD OF HEALTH, AND JOURNAL OF PHYSICAL CULTURE.— New York, Wood & Holbrook, 13 & 15 Laight st., \$2 a year. Another useful and much needed periodical, each number well worth the annual subscription.

AMERICAN JOURNAL OF CHEMISTRY, a monthly Journal of Theoretical, analytical and technical chemistry. Vol. 2, No. 1, C. F. & W. Chandler, 49th st., cor. 4th Av., New York. \$5 a year.

EDITORIAL.

THE MEETING OF THE ONTARIO DENTAL SOCIETY.

The third annual meeting of this society was the most harmonious and pleasant held since the associative principle first took root in Ontario. We were sorry, however, to miss some of "the old familiar faces," and many others who certainly would have found it to their advantage to have spent a few of their holidays with their professional brethren. The consideration of the proposed amendment to the Ontario Act necessarily

occupied much time; but the general business was expedited very fairly. It is expected that future meetings will be more exclusively practical, as many come considerable distances to gain practical demonstrations, and practical information that will subserve them in daily practice. The committee on essays and discussions for the next meeting have recommended a good series of subjects, and if those appointed to prepare papers will set to work and do their best—and they have a whole year before them!—we are sure to have a very practical and profitable meeting in 1872. Procrastination is the thief of labor, and we trust that none of the essayists appointed will shirk their duties, or appear a year hence with apologies of having lacked time. Let every member aim to make the next meeting one of specially practical usefulness, and continue that courtesy and *esprit de corps* which marked the meeting just closed. The society seems to have got into capital working order, and we hope it will enlist every dentist in Ontario. The elections passed off without opposition and yet with interest; and the action with reference to the unprofessional conduct of a Hamilton dentist was prompt and proper.

We think that the practical utility of most of the essays appointed for next year would be increased, if the essayists would accompany their papers with specimens and models which would illustrate the views they wish to represent.

B.

DENTAL ADVERTISING.

When we call to mind that the Acts of Incorporation created dentistry in Canada as legally a Profession as medicine or law, we should seriously endeavour, even at some sacrifice, to live up to the strict letter of professional ethics. In the past history of many honorable practitioners, there have been acts in connection with the mode of bringing themselves before the public, which at the time were, perhaps, essential, and at least fashionable. The circumstances existing when dentistry was not recognized as a profession, and there were neither qualifications required for practice nor any legislative and associative check on rampant charlatanism, when a man could dub himself "surgeon dentist," even though he couldn't sign his own name, and if to save his life from the gallows couldn't tell a deciduous tooth from a permanent, are altogether different from the circumstances existing to-day. What was allowable and apologetical then, because there was neither prerogative nor preventive, is wrong and unprofessional now, because we assume and have the status of a profession, and regular organizations for education and reform. There is now a disposition, we sincerely believe, among the very large

majority of the Canadian profession to draw a line between the fashions of the past and the present, and to eradicate certain associations which have long ago been deemed unwise and unprofessional. The difficulty lies between the quack, and some few who think they can survive only so long as they imitate the quack's means of advertising. The large majority of the profession favor the code of ethics, but an impediment to their good intentions exists in the few competitors whose souls can never rise above the level of their pockets, and who do not care a fig for any other honor, personal or professional, than that by which they can realize the most money. There are men in the dental profession of Canada to-day who for years have been persistently bartering their own self-respect, and the fair fame of the profession, to gain a practice, and who cannot be reasoned into the belief that they will ever be brought to grief and disgrace. But unless intelligence and education retrogrades instead of advances in Canada, and those who have put their shoulder to the wheel of progress lack energy and persistence, a *dies iræ* will come for dental quacks, and dishonor to any who take issue with them.

There is one matter which we may as well dispose of here. We have referred to the past history of the profession, and the fact that men got into its ranks who did it no honor; but, let it be remembered that, while holding the principle that a candidate for entrance to the dental profession should at least have a fair education, we do not insinuate anything against a candidate's previous career. Let a man be honest and educated, and we do not care whether he was a bootblack or a barber. "A man 's a man for a' that." The atomic theory was propounded by a shoemaker who turned chemist, and many of our best surgeons and dentists were previously earning an honest living in some other sphere. But, unfortunately, there are instances where men who have failed at shoemaking and barbering became dentists in a week, and, not satisfied with legitimate means of obtaining a practice, have resorted to every known trick and possible puff, assuming superior knowledge, superior skill, special secrets, patents and remedies. The origin of every unprofessional means of attracting attention can be traced to this source.

One of the essential objects of the voluntary associations is to act on these men; to coerce and reform, not to force and offend. If those who love the profession, and who rank high as operators, only loved their own ease and their own pockets, they would assuredly refuse to raise to an equality and to extend their information to men who stoop to unprofessional means of getting business. If it pays one who is ignorant of his profession to advertise, it would pay better one who is proficient, for the puffs of the latter would be *truth*, and those of the former *falsehood*.

But the reason why an honest dentist cannot compete with one dishonest, is simply because no honest dentist would operate with the sloven rapidity and ignorant indiscrimination of the competitor who fills teeth much the same as one would putty knot-holes, and whose dental practice is about as conscientious and expeditious as the prayers of the priests of Tibet, who grind out their piety on machinery similar to a hand-organ. Many who were poor operators, have availed themselves of the various educational systems in vogue, and have shown a desire to learn and reform, and we venture to say that not one has had cause for regret. But we cannot attempt to conceal the fact, that there is an element in the profession which consistently ignores any code of ethics, and whose professional honor has a steady downward tendency.

The question of advertising demands attention. By means of improper advertisements, the profession is degraded in the eyes of the public, and, but for it, quackery would be almost checkmated. We are well aware that our views of this question are not palatable to some; but we know that many advertise, use show cases, &c., only *in self-defence*, and would rejoice for the adoption of effectual means to repress them generally. But let us examine a few points dispassionately, and suggest a remedy. Custom is more persuasive than reason, especially where the pocket is concerned, and some may be enthusiastic leaders in reform to sacrifice the quack, who are not consistent when those reforms encroach upon their own domain. That is unfair.

For instance, in the matter of advertising in the press. The excuse given for the general use of dental cuts—some of them most barbarously revolving molars, bicuspidis, forceps, and excavators around a set of teeth as the planets revolve around the sun—is that they catch the eye and save the reader the trouble of looking over the paper for a dentist. True, but why then object to the show case, for many of its users say that it is only to catch the eye of the passer-by, and save him looking all over the street for a dentist. One is at the office door, the other in the papers. They are not significant either of the true duties of the dentist—to save the teeth. They have a mechanical significance, with the anvil and the plough. They are as unprofessional in the advertisement of the dentist, as a labelled bottle or a pestle and mortar in the advertisement of the physician. They give an excuse for the show case, and are repugnant to good taste.

The use of references was long ago deemed unprofessional.

We publish once more the following resolution, which was passed in the United States as far back as 1845, at a time when the profession was very far behind its present standing:

“That this society (the American Society of Dental Surgeons) view the publication of dentists in connection with their advertisements, of letters of *recommendation from divines and doctors of medicine*, and, in short, all who are not acquainted with dental practice, with decided disapprobation, and they would especially recommend to all its members, who may be pursuing this course, to discontinue a practice *savouring so much of quackery*, and which is so well calculated to degrade the profession.”

If these references are intended as a recommendation of ability, who is to decide that the parties referred to are qualified judges? We know for a fact of some whose names are paraded in the papers as “references” who are ignorant of the true qualifications of a dentist. If these references are recommendations of moral character, we are sorry for the parties who feel they need them, and yet glad to know they have the candor to avow it; and whatever they are intended for, they are wrong, because skill is the best recommendation, and dentists in decent practice ought to need no other reference than that kind of gratuitous advertising which our patients give us.

Since writing the above we have met with a paper on Dental Empiricism, written in England about fifteen years ago, from which we will make a few extracts, first suggesting to the Boards of Examiners and the Dental Associations of Canada, the propriety of early attention to this subject of advertising, and the recommendation of various forms for the use of licentiates. We wish it to be borne in mind that to the modest card and plain advertisement we do not object.

“The advertiser depends upon his advertisements; and herein lies the grand distinction between him and the honest practitioner. The empiric never desires to see his patient a second time; the advertisement that brought the dupe of to-day will bring him another to-morrow. The non-advertiser feels that his reputation—indeed, his very existence—depends upon his acting honorably to his patient. He can only increase his connection by the recommendation of one to another. The patient may feel confidence that he is dealing with a man who lives only by his good name: not so the advertiser, however honorable he may be (and we will allow they are not all dishonorable,)—he obtains his patients in so questionable a manner, that his skill must at all times remain doubtful. If he is a clever man, what need has he of advertisement at all? Ability will sooner or later meet with some amount of recognition; therefore the dentist who requires advertisement must necessarily be the inferior practitioner, executing the worst work, relying upon his advertisement, without which he would be without patients, as he is without skill.

“The answer to much that we have advanced will be, that the private and high-priced dentist (as the empirics will call him) demands higher fees and complains at the charges made by the advertiser. This we unhesitatingly dispute, and freely declare that the charges, on the whole, made by the private practitioner are, if anything, less than those of the empiric. It is true, he will not condescend to operate after the advertiser's fashion. Stopping a tooth is not merely filling it with any description of paste; and artificial teeth should possess some amount of finish,—the cheapest not being always considered by rational beings the best. Again, the advertised prices bear no proportion to the prices really charged, excepting in a few solitary instances; for if a man can afford to spend pounds a year in advertisements, his profits must be obtained from some one.

“Another mode of gaining notoriety, or, more correctly speaking, of attracting attention, is by the show-case, which we must also unhesitatingly condemn, and upon these grounds:—The show-case does not necessarily contain specimens of work executed by its exhibitor. Every practical dentist is aware that these cases may be obtained ready fitted up with work in all styles. But even granting that it is the work it professes to be, it does not follow, however well it may be executed, that such work will fit the mouth, or could be worn with comfort. Some may argue that the show-case is no more than the shop-window, in which is exhibited the wares of the artificer. But the cases are widely different. We may see a chair or a table, a piece of jewellery or a garment, exhibited for sale, we can purchase the chair and place it in our rooms. But such is not the case with a set of teeth. Every customer must be separately fitted, and in no instance could the dentist remove from his show-case a piece of work and transfer it to the mouth of a strange patient. We know that many regard the show-case as simply emblematic of the dentist's calling; but upon these grounds we should excuse the exhibition of a golden tooth or a gigantic pair of forceps.”

B.

DENTAL FEES IN CANADA.

The question of fees is momentous. It not only involves considerations of pecuniary interest, but urgent points of professional elevation, and we purpose briefly alluding to lessons which both these considerations teach. There seems to be a monomania among a portion of the profession in Canada for cheapening dental services, and this without any complaint or demand from the public. We can perfectly understand how-

the vigour of competition will induce some men, who only regard the profession as a trade, to attract custom by low fees, but we cannot understand how any such competition can induce *honest* men to co-operate—though they call it “self-defence”—with quacks and imposters in degrading dentistry to a lower level than a trade. In many districts of Canada, shoemaking and blacksmithing are positively very much more lucrative than dentistry, and while tradesmen can afford to confine their attention to their one calling, the dentist—poor fellow!—has, in many instances, to take up with other indirect and direct sources of livelihood to keep body and soul together.

In legislating for the profession it had to be mainly incorporated as it was found, and licenses to practice had to be given in instances, not a few, to “five-years’ men,” in Ontario, and “two-years’ men,” in Quebec whose knowledge of dentistry was picked up much quicker than a blacksmith learns to shoe a horse, or a barber’s apprentice to cut hair and shave. The men who are dishonest dentists would be just as dishonest in any other sphere, and, perhaps, the profession is not to blame for it is as much as humanity. Legislation can neither mend a man’s manners nor make his morals—it may trim and train both; but the pity is that rogues in dentistry escape detection oftener than rascals in general, and have not yet had the experience of police and prison to overawe them. The injury done systematically,—by appointment!—to society by dental quacks, is incalculably greater than that even perpetrated by thousands of penitentiary convicts who suffer incarceration for their crimes. Yet the dental quack is a licensed rascal, and the greatest rogues are out of gaol. With such no honorable men can parley. They make verbal promises, but conveniently forget them, and may sign a fee bill but find a dodge to evade it. The press can be bought to lie for them, even editorially or with apparent editorial approbation, and their advertising support has a wonderful effect in softening any qualms of editorial reproach. Society in Canada as yet to be educated to discriminate between what is honest and dishonest in dentistry, and has yet to overcome the primitive and ignorant idea that we oppose quack dentistry only because it is cheap.

The quack dentist drags down the fees. He would get little to do if he did not.

Another class who are numerous, are situated in close proximity to the quack, or, may be, are subject to the raids of empirics from a distance. They hang out the banner of cheap work, and patients flock to them as ignorantly as ever they patronised the greatest medical humbugs of the age. Respectable dentists in the vicinity find their patients deserting them, and business decreasing. Then down comes their

fees from fear of loss: and finally keep there. The quack is met with his own weapons and wins. At this stage another ramification develops, and men, not arrant quacks, but most generally very poor dentists, and not always honest, step out with further reductions, and habituate their patrons to higgly and bargain—which all fish-women may stand, but not even all tradesmen would permit—and educate them to form a low estimate of dentistry and the dentist. In a locality where there are several dentists, one too often tries to monopolize the practice by reducing his fees to the very narrowest margin; and in some cases actually boosts up the profit and loss at dentistry by better profits in some auxiliary means of living, more lucrative and congenial. The next step of the cheap dentist is then to lose his enthusiasm for skilled expertness, and to resort to the subterfuges and tricks so well known to men who do not get half paid for their labor; and to lay the flattering unction to his soul that the public is ignorant, and that artificial dentistry can replace what his conservative dentistry may botch. Hundreds of dentists who are poor operators to-day, are simply so because they have never been encouraged or half remunerated to do their best, and have irresistibly gravitated to a level beneath their possibilities and talents. While we might quite properly advocate higher fees for the profession on the very practical grounds of higher cost of living—an argument to which in every *trade* employers are willing to succumb—the dentist has one other argument to sustain his position. The plain facts of increased cost of living, and original inadequate fees are not to be overlooked; but the great sheet-anchor of an honest dentist who demands reasonably high fees is that the natural tendency of lowering fees is not only to diminish the appreciation of conservative dentistry, but to invariably deteriorate the quality of work performed. The very first effect of low fees is on the dentist. It is all moonshine to expect men to render services worth ten dollars for two. An operator who is poorly paid hastens slovenly through his work, in order to make out of several patients what he properly should have made from one. Well-paid men in any sphere work the best. It is nothing more than natural. A well-paid man is like a well fed horse and *vice versa*. The race of philanthropists who work mostly for love is extinct—it died out when civilization and taxes came in. Every city, town and village of Canada is richer to-day than ever; employers have larger profits, and the very house servants receive nearly double wages. The poor we always have with us, and in their case we must exercise Christian charity, and do it cheerfully; but the patients who support us are not the poor. The same classes who have always supported dentistry, are to-day getting their services rendered

in many districts for half what they paid ten years ago; and even allowing, for the sake of argument, that the fees were now generally the same for operating as some years ago, every one must admit that operative dentistry is far more conservative and advanced than it ever was, and that an intelligent public, able to appreciate this advancement, ought to be more willing to pay for it. We believe that there are few poor dental operators in Canada but would improve fifty per cent. did they receive respectable fees. It would pay them to keep up with the times, and to confine their thought and attention to one profession.

Another serious point. The cheap dentist is so often the very bad dentist, and the work for which he has been poorly paid so often fails, that a large part of the population are losing faith in dentistry altogether. They judge the whole profession from the failures of one or a succession of quacks or discouraged operators. The consequence is that thousands do not believe in conservative dentistry, but let the natural teeth decay, irregularities increase, neglect the teeth of children, and look forward to an artificial substitute as a relief from pain and decay.

The dental profession in Canada to-day is neither as useful nor respected as its own members might make it. Surely the associative work performed, and the free clinics from which many have admitted the benefit derived, must convince dentists who are not near as competent as they ought to be that their improvement is sought; and we seriously believe that, until this question of fees and a few points of ethics are more agitated and decided, the practical usefulness of every educational and mutual improvement system now in vogue must be comparatively impotent and often abortive. We beg every dentist in the Dominion to seriously reflect on the condition to which "cheap dentistry" must inevitably reduce the profession as a body, and ourselves as its practitioners and protectors. It may not be a new theory to many of our readers; but we are confident that, were the dental profession as harmonious on points of ethics and fees as our medical brethren, there would be plenty of scope and practice here for more dentists than there are in Canada, because the public would have more confidence, and would pay more attention to their teeth. As matters are, however, "cheap dentistry" and quackery are prejudicing the public, and the dental profession in Canada is overstocked.

B.

A MUSEUM OF DENTAL SPECIMENS.

For several years we have been collecting and classifying specimens of abnormal development and disease connected with the teeth, intending to form a permanent museum, which would always be accessible to dentists, and also sent for examination to the various meetings of the dental

societies in Canada. The advantages of such a collection is at once apparent to all, and, while we would not venture to ask rare specimens to become virtually our own property, we have already received encouragement to believe that our friends will assist to some extent.

Cases of abnormal development and disease, models of peculiar defects of the palatine organs, &c., &c., with as full and accurate descriptions appended as possible, will be thankfully received and noticed in the *Journal*, and, if required, paid for. Those wishing to retain original models, could oblige us by sending a copy. We hope to find among them many cases worth illustrating in these pages.

We beg to acknowledge, with many thanks, specimens from H. G. Weagant, Morrisburgh; L. Clements, Kingston; J. H. Webster, Montreal; E. Lefavre, St. John's; C. Brewster, Montreal; C. H. Wells, Sweetsburgh; Dr. A. Oliver, Kingston; C. Webb, Montreal. B.

HOW TO BEGIN.

Many hold back from contributing their practical ideas to a journal because they procrastinate until the spirit moves them to write elaborately or lengthily. We invite these parties to send any new suggestion, or otherwise, in as few words as they would tell them to a confrère. That is just the way to begin. Procrastination is the thief of *ideas*, as well as of time, and if you have anything new to tell, do so as soon as possible, or some one a thousand miles away will save you the trouble and lose you the credit. B.

ECHO ANSWERS "WHY?"

If our well-to-do classes could pay sixty dollars for a single set of teeth on gold, fifteen years ago, why can they not now afford to pay from thirty to forty-five, for the same set on a material better adapted in the most of cases than gold? If to-day we can better fulfil all the requirements of a set of teeth with vulcanite or pyroxyline than we could fifteen years ago with gold or platinum, why should we give those who are able to pay, the greatest benefit of our improvements? If every improvement is to lower our fees, where and what, is the encouragement to improve? B.

THE COUNTRY DENTIST.

In the next number we will consider the position and circumstances of the country Dentist, with reference particularly to advertising and fees.

We acknowledge with thanks, the receipt of three dental instruments in a case, both very neatly made by Mr. U. J. Chambers, Dentist, of Waterford, Ont.

GUILLOIS' CEMENT.

In response to frequent inquiries, we are now prepared to furnish this Cement.

There are four shades, Nos. 1, 2, 3, and 4. indicated by a sample attached to each package. No. 1, bluish; No. 3, bluer; No. 2, yellowish; No. 4, yellower.

From a communication to the *British Journal of Dental Science*, by Charles James Fox, M.R.C.S., L.D.S., we give the following extract:

"I have been for some time expecting to see some communication respecting this cement, recently introduced, as every one who tries it expresses privately extreme satisfaction with it. When this is the case, I think it is only fair to say so publicly. It is of the same nature as that commonly called osteoplastic, but it differs from it in this particular, that it can be mixed to a consistence much resembling putty, and in that state can be manipulated for some minutes without setting irretrievably. If you mix the other osteoplastics as thick as this, they set rapidly or crumble; if you use them in a thinner condition, they run about on the gums and teeth. When once set it is so hard, if it has been properly manipulated, as to turn the edge of the instrument, should it be deemed requisite to remove it. As to its durability, it is of course impossible to say much, seeing that it has only been introduced into England for a few months; but this much may be said, that, taking four months' experience with other cements, and four months' with this, I have found it so superior that I have entirely discarded all other osteoplastics, amalgams, etc. In small cavities in the incisors, or in shallow cavities where osteoplastics would wash out in a short time and dissolve away, Guillois' Cement remains at the end of four months as good as when it was put in. I cannot tell what further experience may prove, but *so far*—and only for four months' experience do I speak—I have not had one failure, which is more than I can say of any other."

Put up in one-ounce glass-stoppered bottles—the liquid in a drop-bottle—directions accompanying. Postage free.

Price, per box..... \$5.00

CEMENT PLOMBE.

(THE CELEBRATED GERMAN CEMENT FILLING.)

This cement is very highly recommended by those who have used it.

There are four shades, Nos. 1, 2, 3, and 4. No. 1, light; No. 2, cream color; No. 3, yellow; No. 4, dark blue.

Put up in one-ounce glass-stoppered bottles, the liquid in a drop-bottle.

Price, per box..... \$3.00

CEMENT LAC OR VARNISH,

FOR PROTECTING THE FILLING WHILE HARDENING.

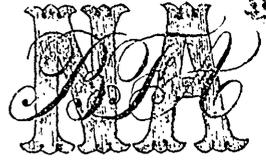
Price, per bottle..... \$1.00

SAMUEL S. WHITE,

Philadelphia, New York, Boston, Chicago.

NEW AMALGAM.

A beautiful and excellent preparation for filling teeth. For this new combination of metals (chemically pure) for dental purposes, great superiority is claimed over ordinary Amalgams. It will remain bright for years, and, when used according to directions, will preserve teeth more perfectly than any article in use, except gold; and under many circumstances can be successfully used for the permanent preservation of teeth when gold would prove a failure in the hands of a large majority of operators.



The process of combining and purifying the metals is such as to guarantee comparative freedom from the tarnish of fillings, or discoloration of teeth, so often observed from the use of ordinary Amalgam. Ten years' experience with it in the hands of some of the most skillful members of the profession has proved its excellence. The increasing demand for a reliable Amalgam has prompted the introduction of this article, with the confidence that it will give entire satisfaction to those who use it rightly.

To manufacture a superior Amalgam, always uniform in quality and texture, at a moderate cost, it is necessary to make it in large lots, and by the aid of machinery. It is also necessary that each lot be thoroughly tested by a competent Dentist before offering it for sale. The inventor has made such arrangements for its manufacture as to enable him to guarantee the reliability of every package.

To meet the wants of different operators, two grades of the New Amalgam were manufactured (fine and medium coarse).

Hereafter but one grade will be put up, which will consist of the two grades combined, and will be put up in quarter, half and one-ounce packages, with circular of instructions accompanying each, with trade-mark of manufacturer on each package and circular.

Retail Price, per oz..... \$4.00

Manufactured by Dr. B. F. Arrington.

All orders, wholesale or retail, will be filled by the undersigned, at his Depots.

TOWNSEND'S AMALGAM.

Price, per oz..... \$2.00

TOWNSEND'S AMALGAM, IMPROVED.

A very Superior Article, put up in 1oz., ½ oz., and ¼ oz., packages,

NONE SOLD IN BULK,

Price, per oz..... \$3.00

LAWRENCE'S AMALGAM.

Price, per oz..... \$3.00

WALKER'S EXCELSIOR AMALGAM.

Price, per oz..... \$4.00

All the above will be supplied to dealers at Manufacturers' rates.

SAMUEL S. WHITE,

Philadelphia, New York, Boston, Chicago.

Gold Foil.

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Vulcanizer, Rubber, Plaster, and all Laboratory Stains are more speedily and easily Removed from the hands by this preparation than by any other. It contains nothing corrosive, but will keep the hands soft, white, and free from chapping.

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This is to certify that I have assayed some scraps of "Dentists' Gold Foil," submitted to me by M. M. JOHNSTON & Co., of this City, and I find the same to be absolutely pure gold 1,000 fine.

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Tried and found Reliable.

THIS Amalgam was invented by DR. AMBROSE LAWRENCE, of Lowell Mass., in 1847, and has been used by him and many others since, with entire satisfaction. The metals of which it is composed are combined in such proportions as, after many experiments, have been found to afford the best results; and the fact that for many years it has received the favor of almost the entire Dental profession in this country, and, to a large extent, in foreign countries, also, renders any labored praise of its qualities unnecessary.

Its reputation is already established; a result of its working qualities, apparent in the fact that it makes a very uniform paste,—so tenacious that it can be readily adapted to the most difficult or irregular cavities—that from its great density it is not permeable to the fluids of the mouth, and will neither crumble nor wear away in mastication.

If used according to directions in cavities *properly prepared*, it will tarnish very little, if any.

N. B.—Dealers, as well as Dentists, should bear in mind that our Amalgam is never sold in bulk, nor in any other than our LITHOGRAPHED ENVELOPES, with our MONOGRAM TRADE MARK, on the lap.

This caution becomes necessary in consequence of some unprincipled parties offering worthless amalgams, of their own make, using our name to insure a sale. No one has our recipe nor the right to use our name in the manufacture of amalgams. "A word to the wise is sufficient."

Directions for using Lawrence's Amalgam accompany each Package.

RETAIL PRICE, \$3.00 PER OUNCE (TROY).

FOR SALE AT THE DENTAL DEPOTS.

And by the Proprietors (and only MANUFACTURERS,)

DRS. A. & G. W. LAWRENCE,

No. 9 John Street, Lowell Mass.

BIXBY & STEVENS,

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MANUFACTURERS OF

ARTIFICIAL TEETH,

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**RETAIL RATES:**

**GUM TEETH, 14 CENTS. PLAIN TEETH, 10 CENTS**

Large discount on bills of \$50 & \$100.

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Other goods at lowest cash prices.

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ESTABLISHED 1860.

THE MOST EXTENSIVE FURNISHING ESTABLISHMENT  
IN CANADA, AND

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Having greatly increased my stock of Dental Materials, I am now prepared to furnish Dentists with everything needed in the practice of their profession, including Operating Chairs, Instrument Cases, Lathes, Vulcanizers, Nitrous Oxide Gas Apparatus, Cabinets, Works on Dentistry, Anatomical Preparations, etc., etc.

A full and complete Stock of S. S. White's Celebrated, and all other makers of

### PORCELAIN TEETH,

At Manufacturers' prices. Would also invite the attention of the Profession to my

## IMPROVED GOLD FOIL.

Present price \$3.50 per  $\frac{1}{2}$  oz.

### SPONGE AND SHRED GOLD

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## DOUBLY REFINED ADHESIVE GOLD FOIL,

To which I would respectfully invite comparison with the best in the market.

Also, other makers' Foil at their prices.

Agent for Canada Journal of Dental Science, also, Agent for S. S. White's Dental Cosmos. Gasometers, and other Nitrous Oxide Apparatus, and Nitrate of Ammonia.

All the Dental Text Books, recommended by the Boards of Ontario and Quebec supplied.

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BETWEEN YONGE & BAY STREETS.

☞ The Highest Price paid for Old Gold and Silver Plates, Scraps, &c.

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# OXYCHLORIDE OF ZINC.

This article has been in use for the last eight years; the call for the same increasing as its availability as a Medico-Mechanical agent has become known. Similar articles have been brought to the notice of the profession under the names of Os-Artificiel, Osteoplastic, Bone Filling, &c.

We quote from the *Materia Medica* compiled by James W. White, and published by Samuel S. White, of Philadelphia :

" This preparation has been extensively tested as a capping or temporary filling over freshly exposed pulps, and with results which are represented as highly gratifying. For this purpose the solution should be diluted with water so as to be only just strong enough to cause the mixture to set. On its removal, months after, the subjacent-pulp has been found healthy, and even protected by a deposit of secondary dentine. The success which has attended its use gives hope of relief from the necessity of extirpating exposed pulps, when they have not taken on a highly inflamed condition. The cavity having been cleaned, creosote should be applied to the exposed pulp, and the oxychloride introduced in a semi-fluid state. The pain experienced varies in intensity. It is generally of short duration, but may in exceptional cases continue for an hour or even longer. The permanence of this material greatly depends on its being perfectly protected from the fluids of the mouth till it becomes quite hard (requiring about half an hour), which may be assured by any of the methods deemed most advantageous for preventing the ingress of saliva ; the rubber-dam, in this connection, as in the insertion of gold, proving a most valuable appliance. It is best to introduce a surplus of material, to admit of trimming to proper shape, which may be done at once, although it is advisable to cover it with a layer of gutta-percha in chloroform, and allow several days to intervene, for the more thorough solidification of the cap prior to the removal of the excess of material and final insertion of the metal stop-  
-ing.

" There is another direction in which oxychloride of zinc proves a most valuable adjunct in efforts for the preservation of teeth, viz., in filling the bulk of cavities in treated teeth. By this method many advantages accrue, among which may be mentioned the saving of time and expense, with an equally durable result ; the diminution of the risk of periodontitis, so liable to supervene upon prolonged violence ; the avoidance of risk of fracture in frail teeth, and the equal support insured ; the obviation of the yellow color when the enamel is thin ; and, in the event of subsequent trouble, the comparative ease with which its removal may be effected. The gold must of course leave no portion of the oxychloride exposed.

" This material is likewise employed for securing the effects of chloride of zinc in the hypersensitiveness of dentine,—used as a temporary filling, and allowed to remain until, in the judgment of the operator, its effects are induced. Should tenderness recur in excavating, a second and even a third application may be found advantageous."

It has the entire confidence of many of the best men in the profession as a thoroughly reliable article. It is manufactured with great care and with uniformity, and is believed to be the best preparation of its kind in the market. It is now put up in larger sized, glass-stoppered bottles, giving double the quantity that it formerly had.

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New Haven, Conn.

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The oldest and most extensive Establishment of the kind  
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I AVAIL myself of the opportunity afforded by the *Canada Dental Journal* to express my thanks for the liberal patronage I have heretofore enjoyed from the Dental Profession, and trust by promptness and attention on my part to merit increased favor in future.

Being a Practical Dentist of over twenty years' experience, gives me facilities for purchasing and selecting goods to thoroughly meet the requirements of my customers.

My Stock consists of a Large Assortment of all

## Instruments, Furniture & Material

used by the Dental Profession.

The Catalogue of any Manufacturer or Dealer in Dental Goods may be used in ordering from me, and all goods will be sold as low as can be obtained elsewhere.

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AT WHOLESALE AND RETAIL.

A large Stock of White's, Corfield's Justi's, Johnson and Lund's and other makers' Teeth always on hand.

Constantly on hand a good Stock of all the most popular makers,

## GOLD FOILS,

AND OTHER

Gold Preparations for filling, and at Manufacturer's prices.

I wish the Profession to distinctly understand that I intend always to be up to the times, in all the new inventions and improvements in all things pertaining to Dentistry.

Every article sold by me is warranted as represented, and in all cases, if not in accordance with the order, will be exchanged or the money refunded.

Dentists about commencing business, as well as those replenishing, are requested to call and examine my Stock.

All orders addressed to S. B. CHANDLER, Newcastle, Ontario, will receive prompt attention.

(Patented May, 1870.)

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**EUREKA GOLD FILLING.**

SOFT, TOUGH AND ADHESIVE.

The superiority of this form of gold for filling is universally endorsed by the Profession as a better article than foil, it being tougher, softer, and at the same time adhesive. It is softer than the softest foil, and its adhesive qualities are perfect. The gold is chemically pure, and these essential qualities are produced solely by my principle of manufacture, whereby I preserve its crystalline structure unbroken and uniform. By its homogeneous condition I can guarantee its being uniform for

**THE QUALITY CANNOT VARY.**

It is sold in a very convenient form for manipulation, and each box contains a description of the gold and how to use it. For sale at all the Dental Depots.

PRICE, \$5 PER 1-8 OZ., \$38 PER OZ.

Agents and travellers will receive a liberal discount.

IT CANNOT BE MADE HARSH BY ANNEALING.

**GEORGE J. PACK & CO.,***Manufacturers,*

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N. B.—Also manufacturers of adhesive and non-adhesive gold foils.

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| Dental Rubber, No. 1.. | \$2 50 per pound. | Flexible Rubber..... | \$2 75 per pound. |
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**TO THE MEMBERS OF THE DENTAL PROFESSION!**

BEAUTIFUL COMBINATION

OF

Elegance, Strength, Naturalness, and Adaptation.

**Dr. J. R. TANTUM & Co.,**

MANUFACTURERS OF

**EXCELSIOR**

**PORCELAIN TEETH,**

Address, 909 Market Street,

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We are now manufacturing teeth equal to the best of White's or Justi's. We sincerely believe them more beautiful than the former and stronger than the latter. They are far superior to any ever sold at the same rates, in this or any country.

As an inducement to Dentists to try our teeth, we will sell them at the following EXTRAORDINARY LOW PRICES, FOR FIRST CLASS TEETH.

**GUM TEETH.**

|        |              |                 |                       |
|--------|--------------|-----------------|-----------------------|
| 1 to   | 20 sets,     | \$1 96 per set, | or 14 cts. per tooth. |
| 20 to  | 50 sets,     | \$1 68 per set, | or 12 cts. per tooth. |
| 50 to  | 100 sets,    | \$1 40 per set, | or 10 cts. per tooth. |
| 100 to | 500 sets,    | \$1 12 per set, | or 8 cts. per tooth.  |
| 500 to | 10,000 sets, | \$0 98 per set, | or 7 cts. per tooth.  |

**PLAIN TEETH.**

|        |             |                 |                      |
|--------|-------------|-----------------|----------------------|
| 1 to   | 100 sets,   | \$1 25 per set, | or 9 cts. per tooth. |
| 100 to | 5,000 sets, | \$0 84 per set, | or 6 cts. per tooth. |

**Gum Plain Teeth and Plain Plate Teeth** at the same rates as Gum and Plain Teeth above.

**REASONS FOR THE ABOVE STATEMENT.**

During the last year we have spent large sums of money in experiments, and in the study of chemical affinities, until the eye and tests demonstrate our teeth to be as beautiful and strong as any now manufactured.

**PINS.**—Our pins enter the teeth well, having a good head inside. They are longer than those used by most manufacturers. The first complaint is yet to be made of their pulling out of the teeth. The heads of the pins outside of the teeth are put on by a revolving stamp, an invention of our own, which spreads the head equally in every direction from the centre.

**MOULDS.**—We have constantly employed a mould cutter, who ranks only second in the country in his line, who cuts the finest moulds from patterns as well as originates new designs.

**BURNING.**—Our burner has had an experience of sixteen years, and is unsurpassed in his department.

For these reasons, as well as many others we could give, we are well satisfied that our teeth are equal in mould, style, finish, adaptation, &c., &c., to any made by the leading establishments in America or elsewhere. We speak unto wise men in their profession, judge ye what we say, by using the teeth.

Dentists will see by ordinary large quantities at one time the teeth are much lower in price. Sent by express B. C. D. to any address.

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OF EVERY DESCRIPTION,

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☞ Orders filled for all kinds of Dental Goods.

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### SOFT, TOUGH AND MALLEABLE,

Can be made as ADHESIVE as desired by re-annealing. Receives our personal attention in refining.

For Sale at Dental Depots Generally.

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## S. B. CHANDLER,

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NEWCASTLE,

**B**EGS to announce that he has just received a large stock of ASH & SON'S celebrated TEETH, also, the Eureka Gold,

# H. C. CORFIELD,

## Manufacturer of Porcelain Teeth.

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Having removed to the commodious building, No. 37 North Tenth Street, one door above Filbert, we are now prepared to furnish the Profession TEETH of superior quality, and in great diversity of form and shade. They are fully equal to any manufactured, and at

### Much Lower Prices than asked by other Manufacturers.

Our Vulcanite Teeth, Gum Sections and Plain, are all fitted with Double-Headed Pins, or Pins with a head on each end.

Our Upper Central Blocks have each Five (5) Double-headed Pins, and the Lower Central Blocks each Four (4).

We have a full and varied assortment of all kinds and styles of Teeth in use, embracing

|                                         |   |   |   |         |
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| Gum Blocks or Sections for Rubber Base. |   |   |   |         |
| “ Single Teeth                          | “ | “ | “ | “       |
| Plain “                                 | “ | “ | “ | Plate.  |
| “                                       | “ | “ | “ | Rubber. |

And being willing to share some portion of the profits with the profession, have concluded to offer them at the following prices, for cash only:

**Plain Teeth \$1 12 per set of 14 Teeth.**  
**Gum Teeth \$1 40 per set of 14 Teeth.**

And by the quantity at such prices as may be agreed upon. We solicit trial of our teeth. Satisfaction guaranteed or the money refunded.

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*No. 37 North 10th St., above Filbert,*  
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# TOOTH TABLETS.

### An Improved form of Tooth-Powder.

Unlike the Tooth-Powders commonly in use, this article is made into neat, portable cakes, divided into little tablets each of the right size for use, not liable to scatter or be wasted, and therefore very convenient, especially for Travelers. There is no occasion for dipping the brush into the box, thereby soiling what is not used, but a single tablet, enough for one brushing, may be broken off and put into the mouth; thus, several persons can use from the same box with perfect neatness and propriety.

It is made of the materials that were most approved of in the discussions of the American Dental Association at their Annual Convention, and is believed to be the best preparation yet produced for the teeth and gums. It has received the hearty approval of many leading dentists, to whom the formula has been submitted. The following certificates are submitted to those of the profession who have not had an opportunity of testing it.

### CERTIFICATE OF THE DENTISTS.

This is to certify, that, being personally acquainted with I. W. Lyon, D.D.S., of New York City, and having been informed by him of the precise ingredients composing the Dentifrice known as "DR. I. W. LYON'S TOOTH TABLETS," and having ourselves used the same, we do unhesitatingly commend it to the public as the *best and most convenient Dentifrice now extant* :

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| John Allen.....       | " "            | Alfred N. Allen..... | " "            |
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| Frank Abbott.....     | " "            | R. M. Streeter.....  | " "            |
| Chas. E. Francis..... | " "            | B. W. Franklin.....  | " "            |
| D. H. Goodwillie..... | " "            | J. Taft.....         | Cincinnati.    |
| G. A. Mills.....      | Brocklyn.      | W. W. Allport.....   | Chicago.       |
| L. J. Wetherbee.....  | Boston.        | J. Ward Ellis.....   | " "            |
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Price, per dozen boxes..... \$3.50

A larger discount by the Gross. A liberal discount to the trade.

Each box contains 120 Tablets. Retail at 50 cents per box.

Or sent by mail for 65 cents.

Sold at all the Dental Depots, and by the Proprietor,

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WORLD'S FAIR,  
PRUSSIA, 1866.

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AWARDED

FOR

ARTIFICIAL TEETH,

TO



JOHNSON & LUND,

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## DENTISTS' MATERIALS.

DEPOTS, 27 North, 7th Street Philadelphia,  
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# Weston's Metal for Dental Purposes.

## THOROUGHLY TESTED FOR THREE YEARS.

Warranted superior to anything of the kind ever offered to the profession. Produces as sharp and perfect casting as any copying or type metal known. With care and experience plates may be cast so light and smooth as entirely to dispense with the use of burs and scrapers. For accuracy of adaptation, it is equal if not superior to any material in use.

It is tasteless and clean, and will positively keep its color in the mouth equal to the finest Gold or Platinum.

It is particularly adapted for full lower plates. For upper and lower parts of sets it has many decided advantages over the different cheap materials so much in use. In contact with aluminium there is no perceptible galvanic action or change of color. It receives a brilliant polish with very little labor.

Parties using this metal are not required to purchase a license. No additional apparatus required.

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| In 1 lb. packages.....             | \$6.00 |
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Each package accompanied with full instructions. Manufactured and sold by

**H. WESTON, Dentist,**

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AND AT ALL THE PRINCIPAL DEPOTS.

## Opinions of the Profession.

The following resolution was unanimously adopted at a regular meeting of the Bradford and Susquehanna Dental Association :

"That the members of this Society express themselves as more than pleased with the use of 'Weston's Metal,' in place of rubber, and feel themselves under lasting obligation to Dr. WESTON for enabling them to throw off the oppressive yoke of the Rubber Company."

216 North Sixth Street, St. Louis.

Dr. Weston :—Your metal is used and recommended by the Missouri Dental College to its students.

Respectfully yours,

**HENRY S. CHASE,**

Professor Operative and Surgical Dentistry.

OFFICE OF PERRINE & FRANKLIN, No. 115 W. 31st St.,

New York, March 1st, 1870.

Dr. H. Weston :

DEAR SIR :—We have given your metal a trial, and are pleased with it and the results. We believe for partial under cases it is superior to any other substance known to the profession. We can get a more perfect adaptation with it than with rubber, and all delicate points acting as supports, are stronger and more reliable than rubber. We have seen cases that have been in daily use since September last (now seven months ago), that show no evidences of oxidation—an important quality, and one that at first we had fears your metal did not possess.

The great facility with which your metal is manipulated into plates renders it an important adjunct to our list of materials out of which to construct dental plates, and other dental apparatus.

We shall take pleasure in recommending its use to our professional friends. You will please accept our thanks, and we doubt not you will receive the thanks of the profession for your successful efforts in bringing out so valuable a com-

pound, and the liberality with which you offer it to the profession is in striking contrast with past experience.

Yours truly.

GEO. H. PERRINE, D.D.S.,  
B. W. FRANKLIN.

*(From American Journal Dental Science.)*

We have tested this metal in the case of entire lower sets, and are inclined to the belief that it is superior to anything of the kind which has yet been brought to the notice of the profession. We advise a trial of it by those who object to rubber. There is no doubt but that it is stronger, and will keep its color better in the mouth than any of the cast plates in use.

*(From Missouri Dental Journal, May number.)*

We have been using this metal for the past six months or more, with much satisfaction. It is undoubtedly one of the best substitutes for Rubber of which we have any knowledge. It is tasteless—does not discolor, or has not in any of the cases which have come under our observation; is more lasting than Rubber, and a plate of this metal will be found to fit the mouth as nicely as a Rubber plate can be made to do.

*(From Missouri Dental Journal, Nov., 1869.)*

This metal has been considerably used in this city for making both upper and under dentures, and has given very great satisfaction.

*(From the same Dec. number.)*

The cry, "What shall I do?" still comes to us, as some poor victim of the Rubber Co., who has been overlooked, is hunted up, and the strong arm of the law is raised to annihilate him. In reply, we say, try Aluminium—and Weston's Metal for partial or lower sets. We are induced to recommend Weston's Metal in preference to that known as Adamantine, (Moffit's Metal,) or the Walker's Excelsior Base, because, from the tests we have made of these bases, this seems to us to promise the best results.

Compared with Rubber, this is superior in point of strength and durability. The Weston Metal has thus far proved as tasteless as Rubber. Patients who have tried Rubber, and been obliged to give it up on account of its effect upon the mucous membranes, causing inflammation and even sloughing of the soft parts, are now wearing plates of Weston's Metal with perfect satisfaction. So far as we have been able to judge, Weston's Metal is not affected by the secretions found in the oral cavity. It does not materially change color. It may, with care, be cast almost as thin as an ordinary gold plate.

**WESTON'S FLASKS—ESPECIALLY ADAPTED TO CASTING PLATES.**

Being longer than the ordinary Flask, it gives more room for the reservoir posterior to the plate, which is the whole secret of casting perfect plates. The Flask is closed with a spring steel clamp, and stands on feet to facilitate pouring the metal.

**PRICE. . . . . \$1.00**

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In a City of ONTARIO, of about 14,000 inhabitants, a FIRST-CLASS PRACTICE of fifteen years' standing. Terms reasonable for cash.

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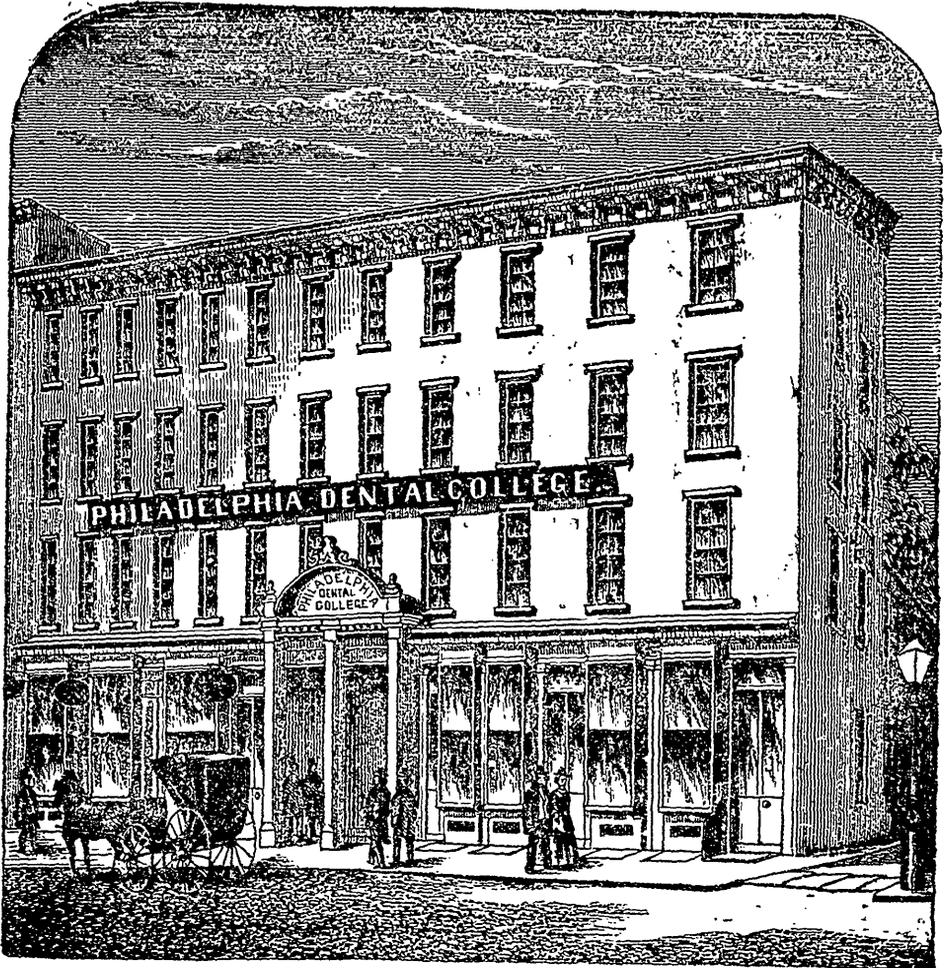
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The DISPENSARY and LABORATORY will be open all the year. During the month of October, preliminary lectures will be delivered daily, until the first of November, when the regular session of the College will commence, and continue until the ensuing February. Three hours of each day will be devoted to the lectures, and four or more hours may be spent in actual practice, under the supervision of the Demonstrators. The Dispensary consists of two large rooms, each fifty feet in length (lighted on all sides by twenty window and a fine sky-light), furnished with forty comfortable operating-chairs, arranged to command the best light, and affording unequalled opportunities for practice to the students. A large number of patients present themselves at the clinic.

Tickets for the entire course, including the Demonstrator's, \$100; Diploma, \$30; Matriculation (paid but once), \$5.

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