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*(Official Organ of the Ontario Dental Association)*



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# DOMINION DENTAL JOURNAL.

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VOL. III.

TORONTO, JANUARY, 1891.

No. 1

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## Original Communications.

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### Dental Journalism in Canada.

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

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If the profession in Canada is to advance as rapidly as its possibilities admit, it must develop strength inherently within its own borders, irrespective of whatever help may come from the outside. It must inaugurate an *esprit de corps* among its members that shall encourage home talent and home endeavor. The time has come when it should be considered disreputable for a Canadian dentist to disparage Canadian enterprises having for their object the elevation of the profession. This tendency to belittle everything Canadian has done more to retard the profession in that country than anything else. Instead of decrying the efforts of those who are working for the advancement of Canadian dentistry, let every practitioner at least lend a word of encouragement, and if a uniform sentiment is exerted in the right direction just at this time, it will do wonders for the profession. Dentistry in Canada never promised so well as now. Societies are being formed, the college is doing good work, matriculation is on a splendid basis, and last, but not least, the DOMINION DENTAL JOURNAL is in the field ready to do its full share in developing home talent.

But from current report I am afraid the profession are not doing

their whole duty in supporting it as it deserves. The Journal should appeal to the patriotic pride of every dentist in Canada, irrespective of its merits, and it gives me pleasure to add with equal emphasis that its merits should force it into favor irrespective of patriotic pride. As an "ex-Canuck," I am proud that such a journal should be published in the Dominion, and I appeal to the good-will and generosity, the patriotism and the principle of every Canadian dentist, to support his home journal. If you do not quite like the nature of the articles published in it, I suggest that you write articles for it yourself. You are sure to be pleased with your own articles at least, and you will be encouraging the Editor.

I was surprised and pained to see by an editorial, "Fair play for this Journal," that a dental supply house in Canada is working against the Journal. I cannot understand such a spirit as that among Canadians. It is an attitude unworthy of honorable men, and is doubly deplorable when directed against a home enterprise. It is that very spirit of petty prejudice running through the whole of Canadian dentistry that has kept it where it is.

What has made the profession advance so much more rapidly in the States than in Canada? It would be well for the Dominion dentists to look to themselves for answer to this question. They have the same brains, the same ability, the same opportunity as their American brothers—but they lack the *liberality*. With them it is nothing but the almighty ME. They have not a generous thought for their brother practitioners or for the profession. They narrow their own impulses by nursing their own conceits, and they belittle the calling which they represent.

This is not meant to be an unkind arraignment of my brothers across the lines, for some of the best friends I have in the world are numbered among them. Nor is this request to support the DOMINION DENTAL JOURNAL made by one who is in any way connected with it. In fact, it is made by one who is connected editorially with another journal, so that mercenary motives cannot be attributed to the plea.

But loving Canada as I do, and having at heart the success of Canadian institutions, I have been grieved to see a certain element striving to disparage what I believe to be a noble, self-sacrificing effort to elevate the profession in my native country.

## Death from Apoplexy during Inhalation of Nitrous Oxide Gas.

By J. D. THOMAS, D.D.S., Philadelphia, Pa.

Referring to the case of death from apoplexy after inhalation of nitrous oxide gas, which occurred in this city about a year ago, I will state the circumstances of that sad occurrence.

The gentleman had repeatedly taken the gas in the past, and was a pleasant subject for its effects. On the occasion referred to he called to have two teeth extracted. He was given the gas for that purpose, and after his recovery, the operator went to his desk, and the gentleman proceeded to rinse his mouth, carrying on conversation in the meantime. He used one glass of water while sitting in the chair, after which he got up and walked to the washstand, a distance of eight feet, re-filled the glass, and back to the cuspidor beside the chair, and stood rinsing his mouth. This he repeated until he had used four glasses of water, while standing, and occupied at least twenty minutes. During this time conversation continued uninterruptedly, the operator and patient being friends of long standing, and there was not the slightest indication that he was not perfectly well. At this time he lay down his napkin, with a remark upon the relief obtained by the extraction, and placing himself before the mirror, endeavored to look at the cavities where the teeth came from. He used his right hand to press back the cheek (the teeth were the first and second sup. molars), and the first symptom was when he removed his hand from his face he drew the fingers together, and said, "There is a numbness about that hand." He presented a pale appearance, and it was thought that faintness had been produced by looking at the sockets, as is sometimes the case, and he was told to lie down on the couch near by and brandy offered him; by that time he was powerless and unable to articulate. Consciousness remained to some extent for about ten minutes, and he died four hours and a half after. At the coroner's inquest the physicians were unanimous (Dr. Girvin, Dr. Drysdale and Dr. Hare) in their testimony, that the cause of death was apoplexy, and not from the effects of the gas. A brother of the deceased testified to the family feeling satisfied that death was independent of the effects of the gas, and the jury's verdict exonerated the operator from all responsibility for the result.



### Another Death under an Anæsthetic.

By L. D. S.

On Saturday afternoon, the 26th of last April, a young man named Dorcat Perrin, aged about twenty-four, called upon Dr. Gendreau, dentist, of Montreal, to have a tooth extracted, and begged the dentist to give him the Vegetable Vapor, which Dr. Gendreau had, like many other practitioners, administered for some time to the exclusion of nitrous oxide gas. So much dissatisfaction had been generally expressed relative not only to the frequent absence of nitrous oxide in cylinders supplied, but as to its deleterious quality, that the introduction into Montreal of a branch of the manufactory of Vegetable Vapor led many to test, and at last to welcome it as a decided improvement upon any other anæsthetic in use. Dr. Gendreau had been particularly careful not only to provide himself with the very best apparatus, but frequently to refuse any anæsthetic in constitutional conditions which seemed at all objectionable. When Mr. Perrin asked for an anæsthetic Dr. Gendreau made sure that the patient was not under the influence of liquor; that several hours (five) had elapsed since his last meal, and that the patient to all appearances, as well as by critical examination and inquiry was in good health. The vapor was administered in precisely the same way as nitrous oxide, the usual gag having been first inserted between the teeth. The hour was 11.30 a.m. The patient was somewhat nervous, but the anæsthetic was not forced upon him; respiration was perfectly natural; and deep sleep produced. The offending tooth was extracted, and while the assistant was waiting for the recovery of the patient, the operator turned for a moment to place his forcep on his stand, when he heard the patient gasp, and exhibit signs of distress. Instantly they lifted him from the chair, placed him on his back on the floor, and after using aqua ammonia, performed artificial respiration, at the same time sending for a physician. In less than five minutes the patient was dead.

An inquest was held, when coroner's jury returned the following verdict: "The jury are unanimously of the opinion that the deceased died from syncope caused by the administration of gas,

and they exonerate Dr. Gendreau from all blame." It has long ago ceased to be a mystery why the coroner did not order a *post-mortem*, as this gentleman for over half a century has possessed such almost autocratic power, that Montreal coroner's inquests have become the ridicule of the Province, and neither press nor people seem to protest.

Similar cases occurring under nitrous oxide gas, of which a few of the many are reported in the article on "Anæsthetics" in the "American System of Dentistry," may seem to justify such procedure; but where the reputation of a professional man is at stake, the public and the profession would have preferred something more scientific and reliable than the vague opinion of inexperienced jurymen, even when instigated by an "experienced" coroner.

Any question as to the purity of the anæsthetic was effectually disposed of. Dr. Bourdon, Examiner on Anæsthetics, of the Board of Examiners, of Quebec, and the President of the Board, shortly afterwards inhaled and tested the same cylinder, and carefully examined the apparatus used by Dr. Gendreau, and there could be no doubt that both the vapor and the apparatus were in good condition.

Moreover, to make assurance doubly sure, the same cylinder was obtained by the Editor of this Journal, and in conjunction with his associate, Dr. Bazin, it was used with remarkable success and most pleasant results in several cases.

What is Vegetable Vapor? Mr. Jas. F. Babcock, Analytical and Consulting Chemist, State Assayer and Inspector of Liquors, late Professor of Chemistry in Boston University and Massachusetts College of Pharmacy, made a chemical examination of one hundred gallons, and reported that he found it to consist of a basis of nitrous oxide, combined with the volatile active principles of several well-known vegetable anodynes and sedatives, which increase its efficiency, and that it is free from chloroform and any objectionable constituents. The ingredients used in its manufacture are prepared by well-known wholesale botanic druggists of Boston, who certify that it is free from chloroform, ether, "or other similar dangerous drugs." These herbs are hops, celery, motherwort, liquorice-root, and English valerian, dissolved in a solution of alcohol. They are sedative, antispasmodic and diaphoretic in their effect, and unquestionably produce a deeper, calmer and

more prolonged anæsthetic, with no lividity, little or no snoring, no sense of oppression, or irritation of the lungs.

When nitrous oxide was first introduced to the profession, it had to go through the usual suspicion, and, no doubt, this newest contribution will have to do the same; but so far it has certainly proved to be the safest anæsthetic on record. The *London Lancet*, in reviewing a verdict of censure on a dentist in a case of death during the inhalation of nitrous oxide, remarked: "The nitrous oxide had no more to do with the fatal issue, either directly or indirectly, than if it had never been brought into the room. The patient manifestly fainted from terror. Her syncope was just a result of the reaction of an overstrung nervous system; and if the dentist had only laid her flat on the floor, she would probably have recovered," etc. In most cases of death, so little gas was given, and the symptoms were evidently those of syncope after fainting, that the gas could not directly be held responsible. However, there are objections to nitrous oxide which do not present themselves with the vegetable combination. None of the herbs can, of themselves, or in combination with alcohol and nitrous oxide, produce any dangerous effects. It is being used in general surgery to some extent; several serious operations having been performed—the anæsthesia lasting twenty or thirty minutes. No matter by whom introduced, or how, it merits the attention of the profession. Though it is necessarily a little more expensive than nitrous oxide, that should be no consideration.

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### Hæmorrhage and its Results.

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By LUKE TESKEY, M.D.C.M., Surgeon to Toronto General Hospital.

(Read before the Ontario Dental Society.)

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The term hæmorrhage literally means a flow of blood, but when used technically does not refer to the loss of a small amount of blood, but only to such a loss as is likely to affect more or less perceptibly the entire system. The amount of blood that may escape from the vessels without causing any systemic disturbance depends largely upon the location. A very small amount escaping from the vessels into the substance or ventricles of the brain, for

instance, would be serious, and might be fatal. The hæmorrhage to which this paper especially refers, however, is what may be called external hæmorrhage, such as might be associated with operations in the mouth.

It is well to remember, at the outset, that the blood may very properly be considered one of the tissues of the body, with very important functions to perform. Not only through its agency is internal respiration carried on, but it would appear to be the laboratory in which the elements of nutrition are so operated upon as to fit them for the nourishment of the tissues to which they are carried—a kind of internal digestion previous to assimilation. The active agents in both instances are, no doubt, the blood corpuscles. By keeping these two important functions of the blood in mind, we can the more readily understand the effects of hæmorrhage.

Hæmorrhage may be caused mechanically by too severe and extensive operations upon the soft tissues of the mouth, which, speaking generally, are uncommonly vascular; or may be due to the condition of the blood itself. Such conditions may be due to heredity, or may be brought about by diseases which directly interfere with its proper organization, such as typhoid fever, septicemia, scorbutis, and all other diseases in which powerful organic poisons have been inoculated into the system. All these things should be kept in mind when a patient submits himself for an operation shortly after recovering from a severe illness. It is well to remember, too, that infants are exceedingly susceptible to injury from even slight hæmorrhages, it having been determined by observations in connection with maternity hospitals in France, that to them the loss of five or six ounces of blood may be a very serious matter. During youth and adult age the susceptibility to injury from loss of blood differs much with individuals, and in the same individual with varying conditions. A healthy, robust young man may lose several pounds of blood without any trace of injury being noticeable a couple of weeks later. Much depends upon the rapidity of the loss—a comparatively small amount lost rapidly producing greater immediate effects, such as fainting and vomiting, than a much larger amount lost slowly. In old age, the injurious effects of hæmorrhage are again increased, and resemble somewhat those of infancy. Old people do not recover easily from such an

injury, and the loss of even a few ounces of blood often seem to be the starting point to complete dissolution.

The immediate effects of hæmorrhage, such as shock and fainting, may usually be easily overcome by appropriate treatment, and are not as important as the remote and more insidious results. These latter are interesting as well as important, and I will give you a report of several cases which have fallen under my own observation, and which are, no doubt, typical of others:—

CASE 1.—The patient, a girl about nineteen years of age, had twenty-three teeth extracted. The hæmorrhage continued for three days, and she was confined to her bed for about a week and a half. For more than a year she was unable to do any work, and she believes that she never fully recovered, although that may be a mental exaggeration. Her symptoms were paleness, well-marked loss of weight, palpitation of the heart, erratic appetite, and general debility. She attributes her condition to taking gas.

CASE 2.—A young man, twenty-six years of age, just convalescent from typhoid fever, had two lower teeth extracted. The soft parts were considerably lacerated, and the hæmorrhage continued for two days. This was followed by a great exhaustion, so that he returned to bed. Soon after he exhibited the symptoms of rapid consumption, which continued until his death.

CASE 3.—An old man aged seventy-six had about half a dozen roots removed. The bleeding continued for one night and part of the next day. The patient grew pale and gradually became more feeble. The prostration finally compelled him to go to bed, death resulting about three months later.

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### Education Versus ——— ?

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By C. N. JOHNSTON, L.D.S., D.D.S., Chicago, Ill.

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In the October number of the DOMINION DENTAL JOURNAL, on page 185, I notice some remarks by a correspondent who fortunately neglects to sign his name. I am glad the name was omitted, because I wish to reply to him, and if I attack the letter without knowing the writer, it will be understood that my criticism is meant for the matter instead of the man. The letter at first glance might be deemed not worthy of serious consideration, but

I accept the writer as a type of a large class in the profession whose main ambition seems to display itself in a determination to drag dentistry into the dust.

So much for introduction; and now, my dear correspondent, let us commune together for a few moments.

You say that the DOMINION DENTAL JOURNAL, too high a stand, that "the profession is new in Canada, and the dentists cannot afford to starve for the sake of keeping up appearances, societies, journals."

If the profession is new, all the greater need for the very work the Journal is engaged in—all the more urgent necessity for the dissemination of that kind of knowledge which shall bring the profession out of the slough into which just such men as you have placed it. And do you really believe that those men who attend societies and subscribe for journals are the ones who come nearest starving? No, sir; they are the best fed (intellectually and otherwise), the best dressed, the best demeaned, the most in demand of any in the profession. They constitute *the* profession. Let me tell you who it is that starves. It is the narrow-minded mongrel—half dentist, half dough-dead—who shuts himself away from professional intercourse, and hugs his precious little soul in solitude, barking only occasionally when he sees something to snarl at in his profession. That is the individual who starves, not only in body, but in brain.

Your next remark is characteristic of your class. "I never asked anybody for ideas, and I don't give any."

Thank heaven for the latter statement! If you gave many such ideas as you have expressed in this letter, pity the poor dupe who would accept them. As to the first statement, you might have saved yourself the trouble of writing it. A casual observer in reading your communication could have surmised that you "never asked anybody for ideas."

Your slur on "educated young men" carries with it a small grain of truth mixed with a predominance of prejudice. It is true that many of our young graduates have more theory than they can apply, but that is not the fault of the theory, nor is it an argument against education. When you decry theory, my friend, you forget that every practical operation you perform in your office must have had some theory back of it for its development.

"Just let dentistry slip along in the old way." Yes, that's your whole argument in a nut-shell. When you wrote that, did you stop to consider what the old way was? The old way was for the barber to have a turnkey in some remote corner of his drawer, and serve the public indiscriminately by pulling teeth or cutting hair, as the case seemed to demand. That was the old way; and had dentistry depended on such men as you for its development, it would have been the way yet.

Then you say, "We don't want highly educated men."

According to your idea, a license to practise dentistry should carry with it the requirement that a man must be as nearly as possible an idiot, that he must be careful not to know too much, that in order to succeed in saving teeth he must stumble in his syntax. The greater the wisdom the worse the work, the bigger a dummy the better a dentist! Is that the line on which you conduct your practice? Do you ascribe your success "for *over* twenty-eight years or *more*" to this?

And if you "want good mechanics who can work in their shirt sleeves," why don't you join the baker and butcher, the barber and blacksmith? They are all mechanical in their way, and they work in their shirt sleeves. Possibly through a devious process of descent you have inherited your ideas of the proper practice of your profession from the two latter. At one time the barber and blacksmith were the only practitioners of dentistry. I had no idea till now that they had left so lasting an effect upon their followers.

No, my friend, in all kindness, you are mistaken. The whole tenor of your argument is that knowledge is unnecessary—that education is a snare. Do you know what that argument has done for the world in the past? It raised revolt against Columbus, the man who discovered the land in which you live. It imprisoned the genius who first claimed that the world moves. It, accompanied with religious intolerance, burned Servetus at the stake, and kindled the fires of the Inquisition. Above all things else, it has proved a deplorable drawback to advancement and civilization. But the argument is fast failing, and you are out of touch with the present age. You should have been born a few hundred years ago. You would have made a precious jewel for the sixteenth century.

## Our Laboratories.

By "PHINEAS."

What a rare thing it is to find a dentist who is proud of his laboratory. To the average practitioner the name suggests a small, close room, furnished with a work-bench, lathe, and vulcanizer, and presenting three or four shelves filled with such boxes, bottles, plaster casts, scrapers, files and other instruments, as are not lying on the bench. Should a visitor or patient find his way into this apartment, an apology is made for its appearance, and the dentist mentally resolves to have everything in apple-pie order before any one else comes in—but he won't. Some men are naturally systematic and orderly, others have become so as the result of long and careful training, but the average man rather enjoys disorder, and while, as a matter of business, his reception and operating rooms may be so carefully kept as not to offend the most fastidious taste, he gets even by allowing the laboratory to take care of itself. It is not my intention, however, to justify such a mode of procedure, but to make a few suggestions, which may be of some value to those who are trying to make the laboratory what it should be—a workroom adapted to and arranged for the work of prosthetic dentistry.

In the first place, the laboratory should be well lighted, with the bench in front of a window. It is difficult to work by a side light, and still more so by a light from behind. Many operations in the laboratory need to be watched very closely, and to avoid straining the eyes everything should be done in the best available light. The bench should be just high enough to allow the dentist to sit comfortably while at work, and should have a lathe permanently attached to it. It should contain a drawer for gold and another for rubber work, to which others may be added if there is sufficient room. Wherever gas is available a pipe should be run along the whole length of this bench with four taps. To one of these attach a bracket for lighting purposes, with joints to permit of movement in every direction. Have rubber tubing attached to the others and arrange one for waxing up, one for heating water, and one for vulcanizing. For waxing up use an ordinary Bunsen burner with



one of the little attachments that sends the flame out horizontally, and you will not only avoid dropping melted wax into the burner, but will save time and gas as well. For heating water use a large solid flame burner and a wide pan, and you will be surprised to see how quickly water can be brought to the boiling point. Such a burner can be bought for a couple of dollars, and no dentist who has once become accustomed to its use will ever again be without one. They can be used for melting zinc or lead, and when it comes to gold soldering of any kind the dentist who possesses one of these burners is master of the situation. All that is necessary is to place the case, suitably invested, on an iron support, so arranged as to bring the work in the hottest part of the flame. A sheet iron cylinder with wire across the top answers the purpose very nicely. Then turn on a very little gas and allow the whole to heat up gradually, turning on more gas from time to time. After the full force of the flame has been applied for a little while, take a common blow-pipe and blow from the side of the flame upon the case, and the hardest solder can be made to flow without the slightest difficulty. There need be no hurry, and the blow pipe need only be used to melt the solder, never to heat the investment. When the soldering process is completed, the gas can be gradually turned off and the case left to cool. The heat radiating from the burner and supports will prevent too sudden cooling, and throughout the entire operation the heat is so uniform that a case can be brought to a full red heat in ten minutes, and cooled again in the same length of time, without the slightest danger of breaking a tooth.

The lathe is one of the most important of laboratory appliances, and every dentist should possess a good one. Lathes made for the use of machinists are not suitable for dental purposes, while those made for dentists are usually mounted on a frame which becomes rickety after having been used for some time. In getting a lathe, a very good plan, and one which combines practicability with cheapness, is to buy a good lathe-head and attach it to your bench, using the frame of a worn-out sewing machine to supply the power. Such a frame can be bought for a few shillings from any dealer, and will be found to possess several advantages. It is strong and serviceable, and of just the proper height for the sitting position. Moreover, both feet can be used if desired, and, when the habit has been acquired, will be found much less tiresome than using either alone.

In using a corundum wheel it is necessary that the surface be kept constantly moist, otherwise the wheel soon loses its grit. To secure this result without flooding the wheel small lathe-boxes can now be purchased containing a moist wick which is kept constantly in contact with the wheel. In the absence of such an arrangement, however, a wide-mouthed bottle filled with water, with a sponge in its mouth, will answer the purpose, and will be much better than the plan pursued by many dentists of picking up a sponge and moistening the wheel whenever it becomes dry.

The keeping of the hands in a presentable condition or the ability to make them so at a moment's notice is of considerable importance to a dentist, who may be called at any minute to leave the dirtiest work of the laboratory and go into the presence of a lady patient. While a dentist should not be too fastidious about such matters, the use of an old pair of gloves when handling dirty flasks and doing other disagreeable work will do much towards keeping the hands clean and preserving their natural softness. Almost any stains of the laboratory, however, can be removed by the use of a little baking soda, followed by a good rubbing with soap; and stains which cannot be removed in this way will always yield to a thorough rubbing with warm oil and powdered borax.

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### An Old Dentist's Advice to Students.

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By "ANTIQUITY."

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I remember when I was a dental student in the dark ages of the profession, my tutor was giving some good advice to a patient about the care of the teeth, showing her how she might manage to preserve her natural teeth to old age. Suddenly, the young lady laughingly said, "Now, why do you give such advice if it is perfectly correct, because if everybody followed it, 'Othello's occupation' would be gone, and you'd have nothing more to do in dentistry?" "I will tell you frankly," he replied, half jokingly; "just because I know it is perfectly certain that the advice you get in one ear to-day will be out of the other before you're a day older."

Now, in the gossip of an experienced practitioner I here purpose

to give students, I will do them the justice of believing that the majority are animated by a sincere desire to quit themselves like men for the difficulties and drawbacks of the profession of their choice, and that they do not intend to be satisfied by shirking or sluggishness.

First of all, my boys, just start out with the determination to serve your tutor as a matter of duty, and not of slavery. If you've got the notion into your head that laboratory work is menial, and that it is not your business to clean up the dirt you must necessarily make; if you imagine that your tutor should hire a boy to run after your heels with a dust pan and a broom, give up studying dentistry, and go into poetry, or perhaps theology. You are altogether too high-toned *in your fingers* for a laboratory, and unless you buckle down to business seriously, be just as much of a blacksmith, moulder, carpenter and tinker as every student must be who is determined to master mechanical dentistry in all its meanest as well as magnificent details; unless you do this, you may count upon occupying a back seat in practice. I rejoice at the change which exacts a matriculation examination; which insists that the laboratory shall be something more scientific than a jeweller's bench; which forces students to understand the why and the wherefore, as well as the way to produce a result. But after all the theory in your head, and the science in your mind, you must have the manipulative skill in your finger ends. Whatever then of detail you can learn of any branch of mechanism which has any bearing upon mechanical dentistry, grasp it. You'll be a better student and a better dentist.

I have had much experience of students, and I know so well just what to expect, that I confess I prefer a poor boy to a rich one; a lad who is more anxious to get work, than one who is anxious to shirk it. In fact, boys do not seem to me nowadays to have the common sense of boys half a century ago. They are more frequently insolent and neglectful, and have little idea of the duty they owe to their tutors. It is impossible for a student to become proficient in the laboratory unless he repeats again and again any work he attempts. Too many imagine that because they can pack and vulcanize a set they need not continue doing it; but that is pure nonsense. Under the customary method in England of indenturing apprentices to trades for seven years, and dental

students for four, better mechanics are made in the one and better mechanical dentists in the other than our college systems produce. We give more smattering ; they grind students from the A, B, C of mechanical dentistry, and, as a rule, they do more laboratory work in four months of their first year, than our graduates have done in the course of a whole college career. In my next I hope to say something more practically interesting to "our boys."

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## Proceedings of Dental Societies.

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### The College Dinner.

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The sixth annual dinner of the Toronto School of Dentistry, held at the Rossin House, Wednesday evening, November 26th, was an unprecedented success. Mr. H. D. Boyes, the President, occupied the chair, and at his right sat Dr. W. T. Aikins, representing the Faculty of Toronto School of Medicine ; H. T. Wood, President Board of Directors of the Royal College of Dentistry ; Dr. J. B. Willmott, Dr. Luke Teskey, Dr. Stewart and Dr. W. E. Willmott. Immediately at the left of the chairman were Dr. Bingham, representing the Faculty of Trinity Medical School ; Dr. Basanko, Barrie ; Dr. Henderson, Dr. Branscombe, Dr. Roberts, Dr. McLaughlin, Dr. Webster, Dr. W. C. Adams, Dr. Frank Stowe, Messrs. C. H. Hubbard, S. B. Chandler, C. H. Riggs, F. Adams, J. G. Adams, and J. F. Chittenden, Hamilton ; Trinity Medical School, A. A. Sutherland ; Toronto Medical School, J. A. Cowper ; School of Pharmacy, W. T. Kendall. The officers and committee having charge of the banquet were as follows:—H. D. Boyes, President ; C. W. F. Lennox, First Vice-President ; H. Darling, Second Vice-President ; H. C. Lake, Secretary ; and Messrs. William Richardson, G. A. Harrington, Geo. S. Martin, W. M. McGuire. Besides these about one hundred young and bright students sat down to dinner, after Dr. Aikins had asked a blessing. The excellent spread was worthy of the guests, and when the physicians and students had eaten and were satisfied, the chairman proposed the first toast on the list, "Queen and Royal Family," whereupon the company joined heartily in singing the National Anthem: President Boyes delivered the annual address. He

urged the students before him to appropriate the excellent opportunities offered them by the Ontario School of Dentistry. He eulogized the grand work of the Royal College of Physicians and Surgeons, and of the Royal College of Dental Surgeons. This latter institution imposed the highest and hardest course of study of any in America, and for this all present should be proud. The doctors and dentists of Toronto were most fraternal, but regretted that the latter were under great obligation to the former.

Dr. Aikins, in responding to the toast, "Sister Institutions," said that ten thousand people in Ontario were at present dying of consumption. Two thousand five hundred succumbed every year to this dread disease, and he was not surprised that our people were looking toward Berlin. In many instances the origin of consumption was in the teeth, and he could not agree with the President that the dentists were indebted to the doctors. However this might be, it was gratifying to know that the two professions were closely linked together. He hoped it would continue, but he feared for the dentists, when he considered the great work of the Christian Scientists in extracting teeth. In conclusion, he urged the students to do everything as perfectly as fingers and eyes could do it. They should be proud of the connection between their school and the university. "Be careful of the poor," said the speaker, "those especially who can't pay you ; take care of them, and you will lose nothing."

Dr. Bingham, speaking for the Trinity Medical School, read a letter from Dr. Geikie, Dean of Trinity, expressing regret at being absent. The speaker congratulated the students on their appearance and standing. This was greatly due to their excellent faculty. To emulate their teachers would be a worthy endeavor.

The man who is most successful was the man who was not only master of himself but master of his profession. If the facilities of the medical college to which the speaker belonged could be of any service to the dental students in getting up their work, those facilities were open to them, and he was satisfied that the Faculty would be delighted to have them enjoy the advantages. This was loudly cheered by the students, and later on the President expressed the thanks of the school, for the very generous invitation of her sister school. The toast to the Faculty and Board brought much merriment to the students, especially the "freshies," who appeared

to think that their time for getting even with the lecturers had come. Notwithstanding this, the sound address of Dr. J. B. Willmott was cheered to the echo. He spoke of the standing of dental and medical colleges in Canada compared with those of the United States. Until recently, all that had been necessary for a medical or a dental student across the line to graduate was to be able to sign your name and produce a \$5 bill. He was glad to know that such a condition of things did not exist in Canada. Our institutions were the best on the continent. Here it required thirty-six months of hard work in order to be admitted to practise, while in the United States little more than half that time, with comparatively little work, was required to place a student in either the medical or dental professional ranks. In closing, he said he was proud of his students, and he hoped that in after years they would be proud of the institution whence they had gone.

Drs. Teskey, Stewart and W. E. Willmott followed in happy speeches, much to the delight of the students. The speakers were of opinion that the preceding gentlemen had given the students enough logic to permit of a little hilarity.

The other toasts were responded to as follows:—Dental Profession—Dr. Bosanko, Barrie; Medical Students—Mr. A. A. Sutherland, of Trinity Medical School; Graduating Class—Dr. McLaughlin; Freshmen—Mr. J. Billings. During the evening Messrs. Holmes, Robertson, Richardson and others, excellently accompanied by Corlett's orchestra, sang rousing college songs, which were much appreciated.

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### Union Dental Meeting in Boston.

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By J. A. BAZIN, L.D.S., Montréal.

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The Union Dental meeting in Berkeley Hall, Boston, October 28th to 31st, comprising members of fourteen organizations, visitors from distant localities, together with an extensive and valuable collection of dental supplies, with all the latest novelties, was exceedingly attractive and well attended. The President, C. W. Clement, D.D.S., formerly of Canada, but now of Manchester, N.H., called the large assembly to order, and to the "cracking of the nuts and

picking out the meats," and Dr. Bartholomew, of Springfield, opened one of fine flavor, "Professional Ethics."

The Doctor was accorded close attention, and many points presented were received with due appreciation. He dealt with the subject under various heads, defining "Ethics" to be "a system of morals formulated out of unwritten laws that are accepted as *best* by common custom. It recognizes the fact that character develops by what it feeds upon. A dentist can rise and remain no higher in his professional life than the weakest link in his moral chain can lift and hold him. It is a good plan for a man, however well fixed he may be, to sit down for an hour now and then and examine himself as to method and motive in his daily life, and decide whether or not he is moving along on a sound and healthy plane toward the things that make for a broad-minded and Christian character. He was exceedingly happy in his interrogatives. Do you speak of nearly all your professional acquaintances as below par? Are you in the habit of circulating everything you hear to their disadvantage? Do you say I *guess* that will do, when you feel certain it will not do? Are you cleanly as to your office arrangements and instruments? Is the odor of your breath laden with tobacco or whiskey? Is the perfume of your lady patient's hair, mingled with greasy odor of her cook on your headrest? and the refined and gentle "instincts" of your patrons violated by the "outstinks" of your person? Finally, the dentist should be among the foremost outside his office in all things that make for the public welfare.

This paper was followed by a pleasing account of the Dental Section of the Medical Congress at Berlin, by Dr. Shepard; 33 dentists were registered as present—thirty from United States, nineteen from England, twelve Americans settled on the Continent, and many others holding American diplomas. Many notable men were present, and valuable papers were presented; 6,000 M.D.s added to the interest and enthusiasm of the gathering. On Wednesday morning, Clinics by Drs. Young and Blackstone, of New Hampshire, in rapid filling with soft gold combined with cohesive, the latter putting in a large filling in about four minutes. Implantation, treatment of fracture of inferior maxilla, and others.

The principal paper for the evening was by Dr. T. Fillebrown, on "Vitality as a Germicide," presenting citations from prominent

scientists and medical men, as well as cases under his own observation, which seemed to him to call in question some of the conclusions of Dr. Miller as to the germ theory. Considerable discussion followed, in which Drs. Pierce, of Philadelphia, Bracket, Andrews, and others joined.

Dr. Townsend's paper on "Abrasion of the Teeth" and treatment, was given close attention, and some good points offered.

In the evening, the "Rights and Duties of Dentists at Common Law," by B. S. Ladd, Esq., of Boston, was ably presented; the rights being quite offset by our duties. Thursday morning was routine work by the various societies, such as election of officers, etc., followed by papers on "Copper Amalgams," and "Pulp Caps." In the afternoon, Dr. Harlan, of Chicago, secured the hearty approbation of the large company present, by his able and exhaustive paper on "The Dental Pulp; its destruction, and methods of treatment of teeth discolored by its retention in the pulp chamber or canals." It would only be mutilation to make extracts, we hope to see it in some of the journals shortly.

But, even with such an excellent and attractive paper, it remained for Dr. R. R. Andrews with his photo-micrographs of the "Development of the Enamel," to enthuse and electrify his audience. Those slides must be seen as they appear thrown on the canvass, to in any degree realize the careful and exact labor that this earnest student has given to this subject. It seemed to be the opinion of the meeting that the Doctor has fully established his position as against the New York triumvirate.

As an easy let-down from the high plane we were lifted to, Dr. Cooke, of Boston, read a paper, and illustrated in a similiar manner the "New Formations in the Pulp Cavity." He had had under examination upward of five thousand teeth, and had found about thirty per cent. with secondary dentine deposit in the pulp cavity, and in the canals; some loose, more attached to the walls, and often intercepting access to the canals. This large percentage was a surprise to all, and many were of the opinion that failure to save teeth might be due to this cause.

After this, Dr. Bonwill presented charts and diagrams illustrating what he called "God's plan in constructing the dental arch." He has given years to this study, and feels sure that he has found the absolute rule governing all mechanical construction for artificial dentures.



And with the next morning's clinics, where the great trouble was to get sight of the skilful things being done, closed the best meeting that has taken place at the "Hub" within my recollection. It is a good place to go to at any time, but when you can catch on to such a whole-hearted lot as get together at a dental train, you may be sure of one thing, you will be awful sorry when you let go.

I cannot refrain from expressing my astonishment at one thing which was allowed at all the sessions of the Convention, and that was the want of intelligent ventilation. Usually the air was allowed to become so offensive that it almost loosened the teeth to get it down, then when vitality had been reduced almost to a state of "coma," the windows were opened and those nearest to the riviving current, moved by a spirit of self-preservation, and possibly not quite in a sound mind, from the poison inhaled, protested. Now, I would propose that at future gatherings a committee be named to ventilate the rooms, as well as those to ventilate methods and ideas.

There was a little side-show for a few of us outsiders in the shape of a collation at the "Brunswick," sandwiched between the afternoon and evening meetings on Thursday. The toast-master was that genial and thoughtful spirit, Dr. L. D. Shepard (by the way, those initials ought to give him free admission to Canadian practice), who made us all feel at home. The Doctor evidently has the soft side of Father Time, as he has all the vigor of twenty years ago.

Between the courses various speakers were called upon for wit or wisdom. Chicago was there in the person of our old friend Harlan, who has broadened out in body as well as mind, doubtless preparing to do his part to occupy that annex to the city, or is the State that is largest? and impress his knowledge upon the savans at the coming Fair. It was a very pleasing sight to look upon all the happy faces and listen to the reminiscences of the gray heads. It was exceedingly gratifying to an old Boston boy, like myself, to hear her praises; and Dr. Rhein, New York, touched a responsive chord when he said that it made him a better man, and therefore a better dentist, to visit Boston and consider her history. And good things were said by others, and time went at lightningspeed till all too soon we left for the hall, compensated in part that we were to hear *our* Andrews. And among all those that helped to give pleasing

color to this Union I cannot forego saying a word in (Brackett) of him, of Newport, who always has such a kindly smile and whose presence is as a "Day in June." His grace of diction is a delight, and he never took part in discussion but he kept the attention of all. May we often meet and hear such as he.

The convention as an influence for good cannot be doubted ; aside from the exhibit of professional skill and investigation, there is a golden thread that mingled with it all. The kindling eye, the hearty hand-clasp and considerate inquiry, the button-hole talk of old friends long parted, all told that the mercenary, for a time at least, had no place, but we "Brithers be and a' that."

Do not such unions add to our years, lend vigor to our frames, and give us a store of pleasant memories that shall make the after-glow of our closing days ?

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### Odontological Society of Quebec.

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By J. S. IBBOTSON, L.D.S.

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The annual meeting was held in the rooms of the Medico-Chirurgical Society, Montreal, Oct. 8. E. B. Ibbotson in the chair. The President opened the meeting with a short address, recapitulating the work at the past year, and expressing regret that the attendance of the monthly meetings had not been larger. The retiring Secretary, Dr. F. A. Stevenson, had been very diligent in his labors, and it was a matter of regret that he could not accept any active office the present year.

The election of officers resulted as follows :—President, A. S. Brosseau ; Vice-President, J. Lantier (Three Rivers) ; 2nd Vice-President, H. Berwick ; Secretary, J. S. Ibbotson ; Treasurer, P. Brown. Committee—J. H. Brazier, L. I. B. Leblanc, Geo. W. Throwsly, I. B. Vosbrugh, E. B. Ibbotson, C. H. Wells (Huntingdon), S. J. Andrews, F. B. Stevenson, J. Fitzpatrick.

Monthly meetings will be held during the winter.

## Editorial.

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### Original Matter.

We are infinitely too modest to indulge in self-praise, but do not our Canadian subscribers appreciate the fact that, circumscribed as we are, this Journal has published in its two past volumes, mostly original matter, and with one or two exceptions, the production of Canadians? That is one of the chief objects of its existence—to develop latent talent in Canada. Brother Jonathan, as a dental contributor, is always full and generous; but we aim to waken dry bones in the Dominion, and we venture to believe we have succeeded. Fire away, Seven Provinces. We have lots of able men with pen as well as plugger, if they will only help. And a bi-monthly needs them now more than ever.

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### Advertisers and Publishers.

The advertisements and the notices of new books should never be overlooked. Whether the reader may or may not want anything referred to under these heads, it is well to be posted. But progressive men can no more do without replenishing their stock of instruments and books than without new ideas.

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### Old Numbers of "Canada Journal of Dental Science."

If any of our readers have extra copies of Vols. 1, 2 and 3 of the *Canada Journal of Dental Science*, and do not want them, we would be glad to get them.

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### Death during Inhalation of Nitrous Oxide.

We are indebted to Dr. J. D. Thomas, of Philadelphia, for a personal account of the death of Mr. Cresswell, from apoplexy during the inhalation of nitrous oxide gas. There is, perhaps, no man in the profession who has more experience and ability in the administration of nitrous oxide than Dr. Thomas. Enjoying, as he does the confidence of his confreres in Philadelphia, among whom he

makes this department a specialty. During a conversation with the Doctor in his office a few months ago, we obtained full particulars of the death of Mr. Cresswell; and from the report of the inquest, it was clearly proven that in no way was the anæsthetic or the operator to blame. The fact is, every operator in the course of an honest practice is exposed to such coincidences, and we should be charitable in our judgments, not knowing when "Curses, like chickens, may come home to roost."

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### Prof. Garretson on Anæsthetics.

In Prof. Garretson's revised edition of his "Oral Surgery," there are two chapters (73rd and 76th) of more than ordinary value; the philosophical nature of which must make them classical in dental literature. The first chapter, entitled "Medical Diagnosis," is preliminary to the study of anæsthetics and anæsthesia, and appreciative of disease in general. A simple glance at the divisions will be suggestive:—Definition of disease; disease a generic term; foundation of diagnosis; ability to diagnose proportional with knowledge; study of diagnosis; suggestions in diagnosis; diagnosis a matter both of principle and detail; treatment founded on diagnosis. Physical condition—external and internal; surgical diagnosis; medical diagnosis; process of exclusion; consideration of common expressions. Diagnosis as applying to anæsthesia and anæsthetics—requirements of an anæsthetist; tripod of life; diseases of the heart and lungs. Physical diagnosis—differentiation between sounds in health and disease; rales or ronchi; pleural frictions; vocal fremitus and resonance; pathological conditions. The chapter on inflammation is a new addition to the work addressed solely to students, and embraces a careful discussion of the subject.

The chapter on anæsthetics is valuable as giving the opinions of an experienced surgeon. Prof. Garretson, referring to the idiosyncrasies, says that he has never yet met with a person who might not take ether, or ether in combination with chloroform, having administered ether under every possible variety of circumstances as to age, condition, time, etc. The depressing effect of fear on the heart's action is never to be lost sight of in the use of chloroform. The author recommends the inducement of a preliminary artificial

courage by means of a stimulant. Chloroform may be given in a sitting posture, unless there be a deficiency either in quality or in amount of the vital fluid. Excitement in chloroformization should be subdued by pushing the anæsthetic. Danger is, however, present; let it not be overlooked. Chloroform is more treacherous than is Mephistopheles. The author declares his conviction that chloroform, "if one feel justified in using it, is far to be preferred in oral surgery to ether." Deaths occur "from a direct and unforeseen paralysis of the heart."

Discussing nitrous oxide, the author shows that fresh gas is to be accepted as being better than old. Spasm of the glottis and syncope are the commonest of interruptions. In both cases immediate attention is required to the tongue; the organ to be seized with a dry napkin and drawn forward. In spasm, the placing of the tongue, combined with a few inhalations of air, is sufficient for relief. In syncope, place the patient in a reclining position, admit fresh air, dash water in the face, apply salts of ammonia fortior to the nose, blow into the ear. The conditions demanding caution are plethora hypertrophy, fatty degeneration and valvular obstruction of the heart, temporary or permanent systemic depression, as existing, the first in the over-fatigued, the second in drunkards.

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## Reviews.

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*Transactions of the New York Odontological Society*, 1889. The S. S. White Co., 1890.

The S. S. White Co. have again produced a handsome volume of 208 pages; the proceedings of a Society whose discussions are world-wide known in dental science. Dr. Bogue's paper on the visible changes that take place during the development of human teeth, and their alveoli, is a beautifully illustrated and classical paper.

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*Transactions of the American Dental Association*, at Thirtieth Annual Session, 5th August, 1890. Publication Committee, DRS.

GEO. N. CUSHING, E. T. DARBY, E. NOYES. Chicago : H. D. Justi, the Dental Review Co., 1890. 209 pages, beautifully printed, and full to overflowing of the good things which our American cousins manage to spread for themselves every year.

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*The Micro-Organisms of the Mouth* : the local and general diseases which are caused by them. By W. D. MILLER, D.D.S., M.D., Professor at the University of Berlin. With 128 illustrations, one chromo-lithographic and two photo-micrographic plates. Philadelphia : The S. S. White Dental Manufacturing Co., 1890. E. M. Renouf, Montreal, and any Toronto bookseller.

At last ! There is no sound reason why we should have been impatient to receive the English reprint of Prof. Miller's valuable work, issued in Leipzig, in 1889 ; but the knowledge that it was in existence in a foreign language for over a year sharpened English anxiety to possess it, and the White Dental Company is to be congratulated on "at last" giving us the most palatable professional literary treat of the season. It was our pleasure during the last year to review a number of important additions to our literature, each one of which occupies its special place ; but this work of Prof. Miller's fills a gap, to which the consensus of professional opinion unanimously elected him. In the preface the author states his position as follows : " It has been established beyond all question that myriads of micro-organisms are constantly present in the human mouth, and that these, under favorable circumstances, are capable of manifesting an action of the utmost significance upon the local as well as the general health of the patient. Not alone are they responsible for the vast majority of those diseases of the teeth and contiguous parts which the dental surgeon is called upon to treat, but they also give rise to other local and general disorders of the most serious nature.

" It has been my endeavor in the following pages to bring about a better understanding of the nature and extent of bacteritic growths in the human mouth, of the disastrous effects of which they are capable of producing, and accordingly, a more proper

appreciation of the importance of dental surgery and dental hygiene as a branch of general medicine."

We consider this work of such importance that we will review it more extensively in our next issue. In the meantime, it would pay our readers to purchase it, and spend the winter reviewing it for themselves.

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*Descriptive Anatomy of the Human Teeth.* By G. V. BLACK, M.D., D.D.S. Published by The Wilmington Dental Manufacturing Co., 1413 Filbert Street, Philadelphia. \$2.50.

There is, perhaps, no more earnest and honest student of the science in our profession than the author of this timely work. He is distinguished for going to the root of everything he investigates, and this book is the result of defects he discovered, and which have been apparent to many observers, in the teaching of the details of the anatomy of the teeth, and in the systemization of the terms used in their description. The attempt to supply a systematized nomenclature of the several parts of the teeth in detail, similar to the fine work of Gray in his description of the bones, will revolutionize the teaching of dental anatomy in our colleges. It will make its study, perhaps, more difficult, but it will make it more perfect. Our American cousins are apt coiners of new phrases, and it has been frequently a great annoyance in dental literature over the border, that among much good verbal coinage there has been much counterfeit, and no sort of unity in nomenclature. Dr. Black has simplified as well as systematized the description of the teeth, and by aid of original illustrations, has pictorially expressed his propositions. In addition to the detailed naming of the hard parts of every tooth, the author has carefully described the anatomical characteristics of the pulp chambers of the teeth. The anatomical arrangement of the teeth, the alveolar process and alveoli, the peridental membrane, and the gums are each in turn dissected and discussed. It is a genuine treat to study this work which, no doubt, will become a standard text-book of our colleges. The Wilmington Dental Manufacturing Co. have published it in very handsome form. No student can afford to be without it.

*The Dental Laboratory.* A Manual of Gold and Silver Plate Work, for Dental Substitutes, Crowns, etc., Regulating appliances for Irregular Teeth, Repairing, etc., to which is added Manipulations in Vulcanite and Celluloid, Laboratory Hints, Suggestions, Fixtures, etc. By THEO. F. CHUPEIN, D.D.S. Published by Johnson & Lund, 620 Race Street, Philadelphia.

However much we may claim to be professional men, no finished dentist can pretend to despise the purely mechanical in dentistry. Since the introduction of vulcanite—a boon to the poor, but a degradation to the higher art in mechanical dentistry—mechanical education has deteriorated, and while we have thousands of mechanics, we have hundreds of botches. Nothing, perhaps, has helped more to fatten the conceit of the average junior dentist than the fact, that because he can run up a set of vulcanite he imagines his laboratory education is complete. The constant practical work in the laboratory ought not to go unattended with the study of theory, and we know nothing in our literature so likely to be useful in that line, as well as in directly teaching practical ideas, as this capital work of Dr. Chupein's. Its author should have given us an index; but from start to finish it deserves to be so thoroughly studied, that the student will have an index in his own memory,



1. *Progressive Exercises in Practical Chemistry.* By LAFFMAN & BEAIN. Illustrated.
2. *Quiz' Compend of Anatomy.* By DR. SAM'L. O. C. POTTER. Fifth edition.
3. *The Latin Grammar of Pharmacy and Medicine.* By D. K. ROBINSON, Ph.D., with introductions by L. E. SAYRE, Ph.G. Philadelphia: P. Blackiston, Son & Co. Montreal: Wm. Drysdale & Co., 232 St. James' Street, 1890.

. Three very useful books for students.

1. Is intended to encourage the study of laboratory work in chemical principles, giving not only illustrated ideas of the apparatus and manipulations, but the general chemical principles and



exercises in important elements, etc., etc. Any student can thoroughly enjoy following the progressive suggestions embodied in this little book.

2. This compend is an established success. It has 117 engravings. It is concise and clear. It is invaluable to students.

3. A unique addition to elementary works for students in pharmacy or medicine. It is not intended to supplant school study of Latin, but to co-operate with the studies of pharmacy and medicine, the declensions, verbs, etc., bearing directly upon the special professional knowledge the student aspires to reach. For instance, in the declension of nouns, the old familiar "*penna*, a pen ; *pennæ*, of a pen ;" is replaced by "*pilula*, a pill ; *pilulæ*, of a pill." Among the exercises : (1) "Name the ingredients in the tincture of capsicum ? (2) I don't know. (3) Is there any one present who knows ? (4) There is a certain boy present who remembers. (5) He is the same boy who told us yesterday about the tincture of aconite," etc. The Latin-English vocabulary embraces the terms and words used.

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*Dental Review*, November 15.—Dr. Thompson draws attention to the value of the study of comparative anatomy to dentists, recognizing that the comparative method in any study is the only scientific method. There must be breadth as well as depth of knowledge, and to insure breadth, a given branch must be compared with collateral branches. Dr. Semms pleads for use of gold fillings with a layer of amalgam at the *cervical* margin. A matrix is necessary and should be narrow, but little wider than sufficient to cover the meeting-place of the two materials. Having cavity ready, matrix firmly fixed in place, and instruments selected, prepare the amalgam quite dry. Place a small quantity against the cervical margin and burnish well, then another small piece *lightly* packed upon the first, as gold does not readily unite with a burnished surface. Now quickly condense a piece of Williams' crystalloid gold upon the amalgam until the gold color is lost, and follow with more until the mercury ceases to show, when the filling can be finished with any form of gold desired ; but *don't* smear the amalgam over the matrix into the cavity, or your filling is spoiled.

In packing amalgam a well-fitting and immovably fixed matrix should be used ; the material packed with strong rotary motion or with the mallet, and matrix left in place until the filling is fairly hard.

At the first District Society New York fall meeting Dr. Atkinson referred to the new pus-killer, Pyoktanin. There are two colors, purple and brown. Every dead animal will reveal plainly which color killed him. They will either have the blues or the yellows. As usual with all new remedies, this has its enthusiastic advocates, who rush to conclusions not justified by the limited time for experiment. Perhaps it is the *ultima thule*, and perhaps it isn't. Time will tell.

The increase in the cost of platina has been greatly affected by electric lights. No substitute for it has been found. Five years ago it was worth \$6 an ounce. It is now gone up to \$20. It has been discovered in New Granada, San Domingo, California, Borneo, and in portions of Canada.

Dr. Gay recommends as a root-dryer ordinary copper wire in three coils upon a metal point, cone socket or other, in a wooden handle and drawn out into a point. Apply first some antiseptic oil to the root canal and vaporize them with the dryer. Anneal the copper wire thoroughly. Take an instrument of the desired size to hold the point, allow two and a half inches for the point, and then coil around the instrument until the desired size is reached, then coil back to the point again, and then over again to the end. Retain this end in place with silver solder. The copper wire each time it is used is annealed and always remains flexible.

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*Western Dental Journal*, October.—A young woman has died at Lille from the effects of cocaine injected into her gums by a dentist. To match shades of teeth at night view them, for comparison, through the flame of a gas burner or lamp, and it will be found that all the varying shades become plainly perceptible. The Editor writes of the dangers of anæsthesia as follows : " There are conditions rendering general anæsthesia dangerous, and the practitioner, whether medical or dental, should be well assured before administering ether or chloroform that none of these are present. They are fatty degeneration of the heart, valvular lesions, kidney

disease, brain tumors, respiratory obstructions from enlarged tonsils, thoracic tumors or aneurism and chronic alcoholism. An anæsthetic should never be administered on a full stomach, as sickness would likely follow that would interfere with the operation, and anæsthesia of the glottis prevent the expulsion of vomited matter in case it enters the larynx by regurgitation; neither should it be given after long fasting, as an absence of nutritive would tend towards cardiac paralysis; excitement should be avoided, instruments should be kept out of sight, and too many spectators should not be present. A painful operation should not be commenced before the stage of complete anæsthesia is reached, or it may cause death from shock, as the result of peripheral irritation.

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*International Dental Journal*, November.—Dr. Bryan approving of the combination filling of gold and amalgam, is not in favor of a matrix which requires screws, wrenches, threads and clamps. The ideal matrix should consist of a simple ring, so thin as to pass readily between the most crowded teeth, flexible and springy, not liable to stretch when force is applied to it. He recommends the steel used by clock-makers for the support of pendulums, gauge six-one-hundredths millimetre, equal to twenty-three-ten-thousandths inch. A mandrel similar to that on which jewellers measure rings, but smaller, is a necessity.

Dr. I. Morgan Howe's paper. "What is the essential basis of professional ethics, and the proper relation of trade?" covers questions of morality in professional life, the relation of business and trade, of dental manufacturers and dealers to patents. Some very acrimonious discussion occurred last year on these subjects over the border. "Many dental manufacturers claim a certain sort of professional standing because they have been dental practitioners, or hold diplomas. They attend society meetings and clinics to show their wares in a quasi-professional way, and not unfrequently read papers and perform clinics with more or less business suggestions." Altogether the article is almost an exact echo of an editorial in No. 18, Vol. IV., of the *Canada Journal of Dental Science*, and for which we received, at the time, considerable criticism from journals published by depots. Every one must, however, recognize the fact that the depots are conducted like any other commercial

interest, purely for money-making purposes, and that they are, as a rule, quite as obliging to their customers as other commercial concerns. It is not always possible, however desirable, to introduce professional ethics into the commercial atmosphere, and the question occurs, "Were professional men to give up practice and enter into purely commercial interests, would they not consult their immediate instead of their past position? would they not do the best they could to make money as manufacturers, without remembering their feeling when they were practitioners?" As to the tricks and devices of trade, and the relation of societies, journals, etc., to business concerns, we see little prospect of reformation, except by absolutely refusing manufacturers any society privileges, and treating them as very disagreeable necessities, which may be patronized at a distance, but carefully ignored in society meetings. The profession would then be the chief losers. It is a question difficult as well as delicate to discuss.

Dr. Bruce, of Melbourne, Australia, spent a short time with Dr. Herbst, and gives a description of the Herbst method of filling with glass, which, however, cannot compare with the porcelain work introduced by Dr. Land, of Detroit, and brought to Canada by Dr. Hipkins, of Toronto.

In the Report of the American Dental Association, August 5th, Dr. Pierce states that there are thirty-three dental colleges in the United States. The number of graduates during the past six years was 3,605. Dr. Pierce, speaking of the rapid multiplication of dental schools in the United States, said it "involved a question which is menacing the future prosperity of the dental profession. The results in all probability will be similar to the results attained by the medical schools of this country, which turn out annually to prey on an unsuspecting public, a number of men which largely exceeds the number of graduates in Great Britain, France, Germany, Italy and Austria combined! This has been carried to such an extent that the medical graduate of the United States is the laughing stock of his transatlantic *confere*. One out of every six hundred in the United States is a medical graduate!"

A good deal of space is given to the banquet to Prof. W. D. Miller—a worthy testimonial to a worthy brother. The editor, Dr. Jas. Truman, has put his heart, head and hand into the Journal.

*Dental Cosmos*, November.—The Editor reprints from the "American System of Dentistry," his interesting monograph on "diseases incident to the first dentition." A finely illustrated article on the correction of irregularities, by Dr. Jackson, of New York. Dr. Milton writing on obtending sensitive dentine, advocates the introduction of oil of cloves into the valve of the hot-air syringe, placing it over the lamp, and thus vaporizing the oil, and blowing it into the cavity being prepared for filling. Remove the oil from the cavity with alcohol. The peripheral tubuli and contents become embalmed. In all cases of inflamed and aching pulps the vapor of chloroform gives immediate relief. After extracting a tooth having an abscess, the same vapor blown into the socket gives relief. In removing calculus, the same vapor is useful. The monthly bibliography of dental literature continues to be a most interesting feature of the *Cosmos*.

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*Dental Record*, London, Eng., November.—A case of alleged swallowing of artificial teeth is reported, the plate consisting of a complete upper set. The patient, who evidently had a lively imagination, began to suffer from dull aching pain in the umbilical region. The pain persisted; food could only be taken in small quantities. There was obstinate constipation, and the patient lost flesh. Sleep was only obtained by opiates. Vomiting occurred about ten minutes after food. The suffering increased. Laparotomy was performed; the abdomen was opened by median incision above the umbilicus. The pylorus was found perfectly normal, no foreign body could be detected. The surgeon attributed all the subjective and objective symptoms to the domination of a great fear, of which the operation relieved him. This seems a rather far-fetched excuse for the operation. Any fool ought to be made to understand that a full upper set could not be swallowed, and if a fool persists in believing he actually did swallow such a set, he ought to be fooled out of it in some other way than by a surgical operation. If a fool worried himself into illness under the belief that his skull had no brains in it, would you trephine it to give him proof? The editor puts in a plea for ambidexterity in dentistry. A correspondent discussing the ethical question of dealing with another man's patients, makes several good points. A

lady presents herself, an old tooth having given way. D. P. Q.—“Very bad work; this filling also very roughly done; this one abominable,” and so on. Patient only replied, “Will you kindly attend to the broken-down tooth first.” This finished, paid her guinea, and went to her family dentist when she returned home, who found everything in order. Patient, to his surprise, renewed the request for a careful inspection. Dentist of excellent and deserved repute, assured her that everyth<sup>g</sup> was in perfect order; and then the patient related how this usurious “brother” wanted to remove all his fillings in order to make money, knowing that he could only do this by first ruining the reputation of a highly respected practitioner. The writer quotes instances of dishonorable and unprofessional dealings in this way with other men’s patients that can be paralleled in Canada.

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*Items of Interest*, November.—Succeeds each month in crowding in a lot of useful items about all sorts of things from all sorts of sources, mostly extracts from all the journals. Dr. J. C. Story says there is an inconsistency in a State granting a charter to a dental college, embodying the power to graduate students and confer the degree of D.D.S.; and then, in the very face of this Act, pass another authorizing the appointment of a dental examining board by the governor or a district judge, whose duty it is to pass on the qualification of all who desire to practise dentistry. This board may be composed wholly, or in part, of men who never saw inside of a college, and who are as innocent of the great fundamental principles which underlie the science of medicine, as ignorance well can be.

*Platina*.—Many suppose the termination of this word should be *um* instead of *a*. This is a mistake. It is a Spanish name, meaning small silver, and not a Latin word, which would be indicated by *um*.

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*Odontographic Journal*, October.—The visit of Dr. W. D. Miller, of Berlin, to the United States is duly honored by our genial friend, the editor, Dr. J. Edward Line. Dr. W. C. Barrett tendered Dr. Miller a reception at his residence in Buffalo, inviting medical

gentlemen, microscopists, pharmacists and dentists—a thoroughly representative body. We regret that Dr. Miller had to leave Canada out in the cold, but Canadian dentists warm to him all the same, and claim a proprietary right to honor one who has done so much for the profession of two continents.

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*Archives of Dentistry*, November.—*Impressions* of the mouth for full or partial dentures should always be taken in plaster. Where difficulties arise, as they often do in partial cases, Dr. Angles' plan is unique in its simplicity, viz.: Oil the impression cup before pouring the plaster, in order to facilitate the removal of the former from the latter; then divide the outer portion of the impression into three pieces, when the whole can be easily removed and replaced in the cup.

*Moustaches*.—If you have ever been exasperated by a heavy moustache obstructing your view of the lingual aspect of the oral teeth, while endeavoring to remove deposits of calculus, a piece of rubber drawn over the lip and held back in the usual manner will make you happy.

Suspicion is being aroused that some of the State Boards are antagonistic to some dental colleges. This is freely expressed with reference to the California Board, whose influence has been decidedly opposed to the State Dental College.

*Dr. Ivory*, formerly of Toronto, Ontario, is making a good reputation as an inventor. His broaches are very useful. They are made of very thin steel, finely tempered, and twisted so as to form a corkscrew; they are fine enough to enter the smallest root canal; cotton can be wrapped on them, and will not remain in the canal, but can be easily removed from the broach by a reverse turn of the instrument.

*Dark stains on the teeth*.—Add a drop or two of aromatic sulphuric acid to your paste of pumice and water. Use with soft rubber disk. Floss silk with this is effective to remove stains between the teeth.

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*Dental Office and Laboratory*, November.—Dr. Theo. F. Chupein continues his interesting articles on operative dentistry, and leading

questions and answers for dental students. An extract from the *Cosmos* on securing immediate suction in dentures escaped our notice. It is an old idea, as we remember the late Dr. C. M. Dickinson, of Montreal, using it. The plate is moistened, and then simply sprinkled with fine powder of gum tragacanth. The plate is then pressed into place. It will, bad or good fit, hold firmly for a day. As an assistant with troublesome patients, it is capital.

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*British Journal of Dental Science*, November 1.—Mr. Colyer illustrates the various methods of introducing gold fillings. Dr. Roughton publishes a very interesting paper on the "Early diagnosis of surgical affections of the mouth," in which he draws attention to some of the commoner affections of the parts near the teeth. A great responsibility rests upon the dental surgeon, by recognizing early cases of malignant disease of the mouth before they are a cause of much trouble, he may by advising suitable and adequate treatment justly claim to have diverted his patient's steps from a road leading to death. Cancer of the tongue may begin in a very trifling deviation from the natural, to which the name "precancerous" has been applied. Under twenty-five or thirty years of age it is very rare. Over forty, it is well to remember that any sore place on the tongue, if continually irritated, is extremely likely to become cancerous. One of the commonest conditions is an abrasion, or small ulcer at side of tongue, produced by rubbing of a ragged tooth, or a badly fitting plate. If it remains untreated and be constantly chafed, it will increase; sooner or later will become indurated, so that when the finger is lightly passed over it, it will give the sensation of an actual little lump on the tongue. The surface of the ulcer will become foul and sloughy-looking, being devoid of granulations and exuding a thin discharge with a very offensive odor. When the sore has reached this stage it is cancerous. The next precancerous condition is leukoplakia, produced by excessive smoking; very easy to diagnose, presenting a silvery white coating over more or less of front part of tongue. As to syphilis of the mouth, dentists may recognize it before the patient knows it. It is possible for dentists to convey syphilis from one patient to another by means of imperfectly cleaned instruments. Dentists should be particular to cleanse and



disinfect extracting and other instruments. Epithelioma, beginning in the socket of a tooth—in these cases the patient, as a rule, will not complain that he suffers from a tumour or growth of any kind, but will seek relief on account of toothache or looseness of the teeth. A careless or ignorant dentist will simply extract; a well-educated one will insist upon patient submitting to prompt surgical treatment. Dr. Barnes thinks that copper amalgam would give more satisfaction if it had less mercury. Mercury should not be added to the amalgam to insure its plasticity. Heat until the mercury is thoroughly expressed. Do not be afraid of burning it, as overheating seems good for it.

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*Journal of the British Dental Association*, October.—The Annual General Meeting of the Association held in Exeter was very successful. We can only make a few extracts from the continuation in the October issue of the Journal of the proceedings. In the discussion on "Crown Bar and Bridge work," Mr. Lennox prefers an English plate-tooth to any all-porcelain crowns. A better case can be made with a plate-tooth than with all-porcelain crowns, with the additional advantage that the backing of the plate-tooth can be used as an abutment for a bridge, when an all-porcelain tooth is useless. Mr. Lennox spoke highly of the ingenious method of Mr. Gartrell of inserting a removable bridge; objects to hacking good teeth to get abutments; better to use a plate. Mr. Cunningham believed that where it was possible, removable work was better than fixed. Dr. W. C. Barrett felt confident that the evil which had been done by an extreme adoption of bridge work far exceeded the good; did not condemn bridge work. Crown work he believed to be extremely useful. Foundation of the whole process was the correct treatment of the root. While the dentists of the United States claimed to be in front in regard to the practical work of operative dentistry, in much of the mechanical work they were far behind.

At the Annual Meeting of the Central Counties Branch, the President, in his address, referred to the progress of the profession. No science, or art, or industry has, within the last thirty years, afforded more relief to the suffering than dentistry. It is only just

and fair to our American cousins that they should receive a large share of the credit for this happy state of things, and I believe every dentist thanks America for the help she has given us in the development of our knowledge, and for the numerous inventions she has given us to help us in our work. At the same time we must not forget how much credit is also due to our brothers in England.

Among the original communications, Mr. J. Howard Mummery's valuable paper "On the Agency of Micro-Organisms in caries of the Teeth," is continued; a paper by Dr. Geo. Cunningham on "A Method of adding Gum to ordinary Artificial Teeth," which, however, is not entirely new to this country. Deaths are reported during the administration of methylene bichloride, of chloroform; a case of death following an injection of cocaine—a gramme of twenty per cent. solution injected into the uretha.

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*British Journal of Dental Science*, October 15.—Mr. Linnell writes favorably of "Immediate Torsion" of a tooth into its right position in the dental arch, having performed it from the seventh to the fourteenth year. Mr. Tomes records a case in which he successfully operated at the age of fifteen. [Reference to page 1, No. 1, volume I., of this JOURNAL will show an illustrated case successfully performed at the eighteenth year]. It can only be undertaken in cases in which an upper lateral or central incisor is standing rotated on its axis. Ascertain if there will be room for the crown when it is turned by taking a model, cutting off the misplaced tooth and placing it in the position you wish it to occupy when twisted. The apex of the fang remains nearly fixed while the crown will move in an arc of a circle; so that if we find the root points in an abnormal direction, we would not gain a very satisfactory result. Curved roots preclude torsion. Wrap blades of forceps with lead foil, turn slowly; having the tooth in the position you wish it to occupy, make patient bite into gutta percha; this forms a good splint, to be worn for twenty-four or forty-eight hours, removing at meal times. Paint gum with aconite and iodine.

*Dental Review*, October 15.—This is a splendid issue—quite a remarkable one. A report of the whole of the scientific work of the last meeting of the American Dental Association occupies the bulk of the number. Dr. Dickinson's lecture, "Reflex Neurosis with which the teeth are associated," is in the same direction as that dealt with by Dr. Brubaker in the "American System of Dentistry." He draws attention to the mistakes liable in diagnosis where pain is reflected from the teeth to the brain, the ear, the stomach, etc., as well as to reflected pain in the teeth in affections of near or remote organs. The editor insists upon the importance of thoroughly drying root canals before filling. Desiccation is best secured, perhaps, by electrical assistance. Alcohol and chloroform, or glycerine cannot be relied upon without the further aid of heat or hot blasts from syringes. If root-drying is faithfully performed, there will be fewer cases of pericemental inflammation and still fewer of abscess following the filling of roots.

From the *Memoranda* we extract the following: The new dental law of Italy requires that a dental student should be a Bachelor of Arts and Doctor of Medicine, before he can become a dentist. Two hundred dentists are practising illegally in Philadelphia. Peroxide of hydrogen in pound bottles deteriorates after one-half or two-thirds is used, and is useless for treatment of pulpless teeth and abscesses. Use it then, mixed with pumice-stone, for cleaning teeth, with engine points. The acid reaction, which has taken place, together with the traces of oxygen remaining, make it excellent for this purpose.

From a series of experiments made in Professor Botkin's laboratory, in St. Petersburg, Dr. S. Klikowitsch (*Virchow's Archives*, xliv. 2), draws the following conclusions:—

1. Nitrous oxide gas is incapable of supporting respiration in animals and plants, and, like other different gases, leads to death from asphyxia. The asphyxia produced by this gas, however, presents points of contrast to the asphyxia produced by other means.

2. Nitrous oxide gas produces no chemical or morphological changes in the blood of animals, but is dissolved in it, and again eliminated, according to physical laws, without apparently being broken up into nitrogen and oxygen.

3. Anæsthesia with laughing gas is so closely associated with insufficient oxidation of the blood that it cannot be regarded as absolutely without danger, especially in diseases of the heart, lungs or blood-vessels.

4. The association of laughing gas with twenty per cent. of oxygen completely removes the possibility of asphyxia, and produces a number of results capable of therapeutic application.

5. Under the influence of the mixture of laughing gas and twenty per cent. of oxygen, in the majority of healthy subjects, the heart's pulsations are increased, the pulse-wave diminished, and the respiratory movements decreased in number and increased in depth; these effects pass off in from three to five minutes.

6. In six cases of weak heart action the above gaseous mixture produced no unfavorable results; on the other hand, the pulse was decreased in frequency and increased in strength. These effects lasted from one to two hours.

7. In cases of disturbed respiratory innervation the mixture of laughing gas and oxygen regulated the respiratory rhythm, and rapidly removed the subjective and objective signs of insufficient oxidation of the blood.

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Dr. Miller, of Berlin, says the idea is fallacious that the combination of tin and gold is antiseptic, and that the supposition that it destroys micro-organisms by galvanic action is unscientific and unsound. It is a well-known fact that strong currents of electricity are required to exert any marked action upon the development of bacteria. An ox might be killed by a shock of electricity without doing any harm to the bacteria that might be in him.

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*The Physician's Visiting List* (Lindsay & Blakiston's) for the new year, 1891, just to hand.

Strength, compactness, convenience and durability are the essential qualities which a good Visiting List should possess to resist the unusual hard wear it receives. These qualities are all combined in Lindsay & Blakiston's Physician's Visiting List, which has now been published for forty years. It is the most convenient for the pocket, and its contents are arranged in the most advantageous way, including many useful tables and specific information.

The November number of *The Old Homestead*, a literary and domestic monthly, published by Davis Bros., Savannah, Ga., U.S.A., is now ready. It contains forty large pages of original stories, sketches, poems, essays, etc. Its household department, handsomely illustrated fashion pages, children's corner, select music, and premium list, together with its complete and serial stories, make the publication eagerly sought by people of all nationalities and sections. There is not one line in its columns that will offend delicate tastes, and the matter throughout is carefully freed from sensational effects. The subscription price, unlike the costly magazines, is very low, being only \$1 a year. Send for sample copy, free. Davis Bros., publishers, Savannah, Ga., U.S.A.

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*Disinfect your instruments* in a five per cent. solution of carbolic acid, or oil of eucalyptus.

*Campho-Phenique* should never be mixed with water or glycerine, It will mix in all proportions with alcohol, ether, chloroform, and all fatty substances. In dentistry it will seldom be necessary to dilute it.

To make gutta percha adhere perfectly to the walls of a cavity, wipe out first with a pellet of cotton moistened with copal ether varnish or with chloroform.

Dr. Green, of New Albany, suggests that in setting porcelain inlays in cement, the piece of tooth be made as hot as can be held in the fingers before pressing home in the cement. The cement will set much harder.

Ash's Quarterly Circular, published by C. Ash & Sons, London, England, is a well-arranged condensation of useful articles from the journals.

### Interesting Notice.

The next number will contain a portrait of Dr. W. D. Miller, Berlin, and a sketch by his friend and ours, Dr. W. C. Barrett, of Buffalo, N.Y. This will be the first time Dr. Miller's portrait has been published in a dental journal. It will alone be worth the subscription, and will be sent only to subscribers.