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CANADA

Journal of Dental Science.

VOL. IV.—NOVEMBER, 1877.—No. 2.

ORIGINAL COMMUNICATIONS.

A REPLY TO "USERS OF AMALGAM."

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

I take exception to the gist and tenor of the selected article. "To Users of Amalgam." I do not know how many years the writer has been in the practice of using amalgams, or to what extent he has been able to follow and observe the real test—use in the mouth; but my experience of twenty-five years, and a considerable amount of what the Scotch call gumption lead me to present a different view of what will be found "a better, method.

In the first sentence he says, "the best form of instrument is a small ball-headed plugger, &c. Now he must have had in his mind only one type of cavity, and in this country, a type rarely filled with amalgam—a round small hole. But, Mr. Editor, how about the hundreds of jagged, irregular cavities, having almost no form and certainly no comeliness? I think I shall become bald-headed, before I can make a ball-headed burnisher do first class work in such cases. When it is remembered, that amalgam is *filings*, more or less coarse, in combination with mercury forming a *granular* mixture, it ought to be obvious to most, that the *best* way is to pack a filling with points almost square or eight-cornered, much after the way we make a mould in sand, from circumference to centre, layer upon layer. Plugs put in in such a manner will be found perfect in their adaption, and less likely to discolor the dentine, than when

rubbed round the cavity with the instrument advised. *The more friction of the amalgam upon the walls the more certain of discoloration.* To sum up this matter, I say the best way to fill with amalgam is to work exactly as if you were building up a gold plug, and with similar instruments. Again, this matter of a wet pack; *that* will not go down here, even with something stronger than water. It is well known that many dentists are glad of an excuse for bad work, so it will be difficult perhaps to persuade them, if they be readers of your Journal: but is it not possible to dry, and *keep dry* a hole in a tooth long enough to put in *part* of the plug, and then dry *it* and then finish. I believe it is, and oppose any other idea. We used to have that told us about gold fillings, and also that *all* the decay need not be removed, but when we take up our work with a feeling like as if a brother dentist was looking on while we worked for his favorite child, we will hardly follow such foggy doctrine.

The writer draws it fine indeed upon the testing question, rather more than upon the more important using of it in the mouth. We heard a good deal about the tests that his 'Enamel' had, and the wonderful things it would do, when after all it was the old thing with a little clay. Good work is desirable and ought to be striven for, and our public teachers should try to avoid any advice savouring of the slip shod. Trusting this maiden effort will have the good effect I earnestly desire, I wish you success.

PRESERVATION OF THE CUSPIDS IN MECHANICAL DENTISTRY.

BY J. R.

No artificial substitute can ever take the place of the cuspids, and for this reason I always save them if sound, or even when decayed if they can be preserved by filling. It often happens that they, standing like the pillars of an arch, are fixed and sound when all the others have come to grief. I have frequently found the hard tissues of these teeth under the microscope to be of denser and better structure than the others in the same mouth. Nature seems to have implanted them with a design which no artificial substitute can fulfil, viz: that of preserving the contour of the lips. The length and fulness of the root towards the front cannot

be replaced, and an ugly depression of the lip under each nostril make a defect impossible to be remedied.

A nice fitting block of four gum teeth, such as the beautiful sections made by Justi, cannot be improved upon. I think no full upper permanent set can compare to such a piece, where the natural cuspids are preserved, and the shape of the mouth kept as nature made it.

TWO CASES OF EXTRACTION.

BY M. D. T.

Some time ago, a stout labouring man called in the evening suffering from a left lower first molar, desiring to have it removed. Upon feeling with my finger I found it quite moveable in the socket, and the gum considerably lacerated. I at once saw that some one had tried the tooth before, but I asked him no questions. I seated him as usual, and took the usual forceps, expecting to have an easy task. But after pulling for about a minute I had to stop. I left him for five minutes expecting that it would be looser, but upon the second trial it was still a standing rebuke to my muscle, as I thought. For the third trial I wrapped a napkin round my forcep; got my patient down on a low chair, and after *lifting him* from his seat, and doing my very best I had again to give it up. The fourth trial was a repetition of the former three, and I felt that my hand was getting the worst of it. My patient looking me in the face with the serenity of a seraph, then told me that I was the third dentist who had tried that tooth during the day. I suggested to him the pity of parting with it; that he ought to travel the country and put the profession from Gaspé to Sarnia to a test, and that after they had all failed he could return to Montreal, and get his jaw broken by our city quack. But he was bound to have it out; so I split off the crown and after a good deal of work succeeded in removing the two roots, which were spread like an A.

Last week I tried five times, twice in the morning and three times the same afternoon to extract the first upper molar, right side, for a cast-iron jaw gentleman. I would have defied any one to extract that tooth without serious fracture of the alveolus, and possibly the removal of the adjoining

bicuspid. The next day under chloroform administered by a physician, I tried three times again, and finally had to split it in pieces and remove the roots, which were something of the shape of a three-legged chair curled like Italian columns.

SALIVATION FROM PREGNANCY.

BY L. D. S.

A well-known lady in Montreal, called upon me with a profuse discharge of saliva, which ran out of her mouth day and night, until her strength was completely exhausted. It began about the second month, and continued for about two weeks before her confinement. Nothing seemed to arrest the flow. The cause of it was very clear, as her teeth were in perfect order, she having only had three cavities filled—one with tin foil which was as black as ink, and two with gold.

As a specimen of diagnosis, a dentist whom she consulted when in company with a friend, accused *the one amalgam filling* in her tooth as the sole cause of the discharge. The poor woman not knowing the composition of the black filling, and having been solemnly told by this gentleman that it was "poison," returned to her own dentist to have it removed. Of course he showed her that it was tin, without any mercury in it, inserted as foil. This is a fair specimen of the depth of research and diagnosis of the "discoverer."

Any student ought to know mercurial salivation (*ptyalism*) by its fœtor, and by other indications not exhibited in salivation from any other cause. But if a bigot cannot establish his bigotry upon a rock of truth, he will build it upon the fickle sands, rather than not build it at all.

PLAIN WORDS FOR DENTAL MANUFACTURERS.

As a profession we are deeply indebted to our dental manufacturers. As manufacturers they are quite as deeply indebted to us. They have eased and facilitated our labor, and have been hand-in-hand with,—often ahead of—the thought and progress of the profession. But they have naturally

enough sometimes been over-zealous in their zeal, until it is questionable whether the profession dictates its wants to the manufacturers, or the manufacturers impose their ideas upon the profession. It is likely that truth lies mid-way between these two extremes. They have been a great boon to us, and those who have become millionaires deserve their success as well as successful men in any other sphere. Many depots are struggling for business, and all of them have their peculiar advantages: no one monopolizes the inventive genius of the day or controls the purity of gold, the temper of steel, or the honesty of the human race. Yet, an impartial person reading many of their advertisements would be struck with the fact, that each one lays emphatic claim in most cases to possessing the *ne plus ultra* of everything the dentist requires, and that simple assertion has got to be the final arbiter of simple facts.

It is a fact that our dental journals are mainly advertising mediums for manufacturers and colleges who own them; that while they are in a measure exponents of professional thought, they are first of all monthly advertisements for their proprietors. We find no fault with the enterprise of these gentlemen. It pays. But we do think that a body like the dentists of the United States, out of all the Journals they possess, might have at least one, as independent of any manufacturer, college, or other such business interest as this unpretending Canadian venture. Naturally no advertising medium of a manufacturer, where the bulk of the book is occupied with his own productions, and other manufacturers are deterred by excessive rates from advertising, can or will do justice to the good in other Nazareths. We have plenty of able men competent to conduct independent Journals, quite as well as those conducted by our friends the manufacturers. In no sense would this be a slight; because a profession like dentistry ought to have its independent Journals, where impartial examination would be made of every so-called "improvement," and we would know what to trust and what to reject.

We have been turning over the advertising pages of many of these periodicals, extending back many years. It is a suggestive fact that a long array of exhaustive puffs and extravagant statements made to the profession, present themselves about articles which were never worthy of honest consideration, and of many which were arrant impositions. Every new article to-day is boosted into notice in the same way. All the superlatives in the English language, together with the standard classical quotations, and modern illustrations, are brought to bear in defence as

well as defiance. Everything new is a "great improvement"; every modification is like the last ditch of difficulty; each chair is "superior to all others," and the height to which they are extolled by their producers is only equalled by the depth to which they can sink their rivals. Where are all the "unrivalled" articles which were to be the acme of dental desire? Mostly in the dental lumber room!

Progress must necessarily make old fogies of improvements once young. But the modern rush in competition is producing such a host of unprincipled humbugs that we pant for breath at the prospect. There is not a modern dental chair from its head rest to its footstool, as comfortable as some of the old fogies of thirty years ago. There are modern chairs by the dozen with ingenious nonsense enough about their head rests and machinery to perplex any operator. They are more showy and handsome, and expensive. But many of their movements are not needed. A man who tries to keep up with the so-called "improvements" would need to re-furnish at least once a year.

We recall the days of gutta-percha, aluminum, various metals, pyroxoline, celluloid, etc., as well as a host of lathes, vulcanizers, flasks, articulators, syringes, engines and "improved" engines, hand-pieces for engines, amalgams, white cements, gold, instruments, *every one superior to every other*, even where a dozen at a time of some, and at least four of all were in the market. They could not all have been "best." Every chair, engine, and instrument to-day cannot all be best. Somebody must be bragging most outrageously. Possibly some of the braggarts may be lying. They can't be blind.

It is time that the profession should cease to be held by the nose by every new thing introduced. Some have been of incalculable benefit—such as the rubber dam, the dental engine, etc., but "testimonials" are now-a-days strown about by the score in favor of any new thing a depot displays, and the only safeguard is calm examination for oneself, *taking every extravagant claim on suspicion*. We accumulate stores of useless stuff in our offices. We are bored by the loudness of advertising assertions. An instance in point. Several years ago, a dentist bought several pairs of forceps from a manufacturer. Four of the five were so brittle that they broke at the edges. Upon mentioning this a few years afterwards in a letter, the reply came back "*Our forceps never fail. Return them, and if they are ours we'll exchange them.*" The agent of the firm happened to call on business one day on the purchaser, and the latter

proposing to take him at his word produced the forceps. "Oh, those aren't ours. Those are ——— make." "Yes, but your name is on one side of them, and by your advertisement of that date you guarantee these very forceps as "superior to all others." "Yes, but ——— makes for us now. Any with his name we will exchange if defective."

Another instance, "If you buy instruments made for our engine by any other maker, they are inferior." Why? Do you monopolize the simple art of tempering a bit of plain steel?

An accident happened to a lot of burs for the engine. They had to be re-tempered. They were sent back so brittle that they had to be sent to their original maker for re-tempering. The excuse got from the first party was that, "our steel is not inferior. That steel is inferior and cannot be better tempered." Yet the original maker tempered them after this to perfection, and made no fuss about it.

We could instance half a hundred such cases. We ask is this *honesty* among honest men? Some one nudges our elbow and says to use the orthodox proverb, because of the excessive charges for bits of steel. For instance says our elbow friend, there is over three hundred per cent profit in dental engines, and look at the price of steel excavators, and pluggers a dozen. Do you remember too when we paid twenty-five cents a tooth for porcelain teeth, when labor and material were cheaper than now. Yet better teeth are sold for ten and fifteen to-day! What is the inference. That we were being charged a very large per centage too much for twenty years. We will have our eyes opened as a profession bye and bye.

[We are warned that the publication of the above will cost us the loss of many advertisements! The more's the pity. *Ed. C. F. D. S.*]

A UNIQUE CASE OF REGULATING TEETH.

BY W. GEO. BEERS, L.D.S., MONTREAL.

In a paper read before the New York Odontological Society, in December 1875, I ventured to give one of the quickest cases of regulating the teeth on record, done without plates or ligatures, and comprising ideas as old as Hunter and as modern as Tomes. The case was a unique one, inasmuch as it was one where the patient a young man eighteen years old,—had determined to have the teeth extracted, and artificial substitutes inserted. I am aware that other modes of treatment might have been

used by those who could command a large fee, but as the case was one which I volunteered as an experiment, and for which no reasonable fee was expected, I made choice of two evils—the one I choose having proved to be a blessing in disguise. Through the courtesy of the publisher of the "Cosmos" I am able to present the illustrations.

Fig. 1 shows the normal centrals lying outside of the arch, five-eighths of an inch apart, the left lateral behind the left central, three-eighths of an inch distant, with one side against the back of the canine, while the right lateral is crowded to the rear by the cuspid and central. On the left side of the median line is implanted a malformed supernumary lateral: on the right a supernumary central, perfectly formed on the lateral but concave and irregular on the lingual side. Its lateral surface is turned towards the supernumary lateral, thus lying obliquely and touching the lateral. Evidently these supernumary teeth had displaced the normal dentition. This is somewhat analogous to a transposition of the dental germs in position, and owing to the distance of the normal centrals from each other, it was utterly impossible to bring them into juxta position or into any sort of harmony. The transposition of teeth might cause just such a result as the separation of the centrals. Fig. 1, well illustrates the case as it came to me first.

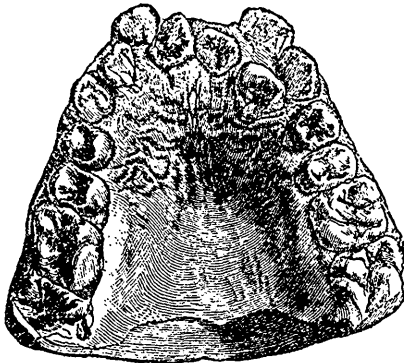


Fig. 1.

I first extracted the right normal central. It was too far out of the proper line and too far from the median line, to be brought into position by any mechanical means. Immediately afterwards I slowly turned the supernumary central on its axis, as suggested by Tames, bringing it to

the "front face." Having previously prepared a plate fitting the roof of the mouth, I attached floss-silk to the intruder, and drew it back in one day into line with the lateral. The gum was painted with aconite and iodine, and the patient instructed to keep the lips and gum cool with ice. In two days the tooth was firmly in line, and the ligature was removed. The case then presented the appearance seen in Fig. 2.

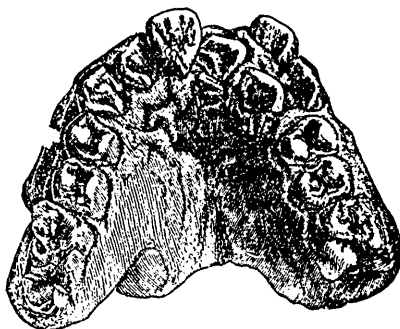


Fig. 2.

Members of the Quebec Dental Society, will probably remember a case presented by Dr. H. D. Ross of Quebec, in which he replanted a dislodged central incisor, and which he afterwards, when regulating the teeth of the same patient, found he could not move by any mechanical means he used. It was firmer than nature had originally put it. Something similar occurred in the socket of this supernumary twisted central, for ever since it has been singularly solid.

In Tomes' Dental Surgery, edition 1873, page 197, is seen a somewhat similar case of irregularity in appearance, though from transposition of the permanent teeth, instead of from displacement by supernumeraries. The canine is placed between the central and lateral; the teeth being otherwise quite regular. Referring to it the author says. "In a practical point of view no great interest is attached to this form of irregularity, as it does not admit of remedy." Garretson's System of Oral Surgery, page 480, says "Instances are met where certain teeth have completely changed position. A lateral incisor appears in the situation of a central, the central occupying the place of the lateral. Here there is no correction possible except it be in the extraction of the teeth, and their re-arrangement upon a plate or through the pivoting process." Salter in his Dental

Pathology and Surgery, page 51, in writing of the transposition of teeth, supposes a case almost identical in appearance with that shown in Fig. 2, and says, "*Still no remedy is available.*" Fox mentions a case like Fig. 1, where two supernumary teeth were situated partly behind and partly between the central incisors, which were consequently thrown forward. The centrals were half an inch apart and formed one row with the cuspids, as in Fig. 1, and the laterals and supernumeraries another. Fox saw three cases of the kind, but it is considered very rare. The one of which I write had this appearance, but instead of the supernumeraries being of a conical and therefore useless form, the central was perfect on the lateral side and as seen in Fig. 1, turned towards the median line.

My patient was now treated as follows: It will be remembered that Fig. 2, was the result of the first operation. A few days afterwards I extracted the supernumary lateral, on the left side of the median line. I then extracted the left normal central which was so high on the upper part of the alveolus, that the lip entirely concealed it, (see Fig. 1). After excising the apex of its root I pushed it slowly up into the socket of the lateral I had just extracted, fortunately securing the beautiful relation and contiguity seen in Fig. 3. In two days the transplanted tooth was apparently as firm as its neighbour which had undergone torsion; and there they are to-day, after over four years, as comfortable and as alike as if they had grown into the regular harmony they now present.

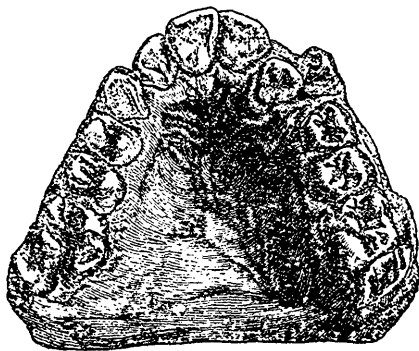


Fig. 3.

The cuspid was drawn by ligatures back to the bicuspid, and the irregular central brought easily into place. The latter was a very easy matter as any one familiar with regulating teeth is aware.

Both operations were done in presence of my friend and former colleague Dr. Chas. Brewster, who has himself admirably succeeded in some cases of both torsion and transplantation. The patient kindly allowed several other confreres to see the case.

I may add that I shall not be amazed some day to learn that the teeth are loosening in their sockets. I do not here stop to consider constitutional conditions which should dissuade any one from attempting a case like this. These conditions have been well discussed elsewhere, and are familiar to the profession.

THE ADJUSTMENT OF LOWER PLATES.

BY W. GEO. BEERS, L.D.S., MONTREAL.

The dental profession, on this continent once contained some of the most remarkable men to be found in the world. Once they were as thick in every convention as flies in sugar. Of late years they are receding before the scrutiny and common sense of an intelligent profession, and David's opinion of "all men" will in time possibly have less application to our profession. I refer to the men who never make mistakes, who never have failures, whose efforts are always successful, and whose practice operative and mechanical flows on with rhythmical harmony and joy serene. Yet I am constrained to doubt if even these imperturbable people would solemnly swear, that they have had invariable success in the adjustment of such simple things as partial and complete lower sets of teeth. In the days of beeswax for impressions, it was no wonder that bad fits were common, but even in these latter days of plaster, and the impression-compounds, such as prepared by Jamieson, Ash, etc., of England, and by manufacturers in the United States, there is with many dentists ten times more trouble in fitting lower than upper plates. Those who visited the Centennial, could have seen a full lower plate in the mouth of an exhibitor, held in by soft rubber attachments, and which was certainly very secure, whether it would remain so or not. Air chambers are rarely if ever feasible. A set may be *loaded* with metal, so as to be kept down by their weight. Springs will keep lower sets in place: so will rivets through the lower maxillary, clamped on the outside, under the chin. But there are some serious considerations which may often help us in difficult cases.

The *absorption of the gums* must be complete ; more so than for upper sets. This starting point is too often overlooked, and a few weeks will make the set an annoyance, even if it was a good fit when inserted. The *impression* can now-a-days be obtained perfect, with plaster or the impression-compounds. Before the cup is pressed into place finally, the finger should be inserted in the mouth, and the lips and loose integuments of the cheeks drawn away from the ridge : the cup then pressed down and the patient instructed to raise the tongue upwards and to hold it there tight till the material hardens. Bees wax should be utterly abandoned for impressions as a thing of the past. A good impression may be spoiled in the removal. If of the compound it must be kept in several minutes till perfectly hard, and it must not be forgotten that the mouth retains the warmth, and that the hardness of the surplus is no safe guide as to when the part next to the gum is hard enough not to suck itself out of shape. A perfect impression is a harder thing to get than many imagine. It may even be dislodged and spoiled in the act of swallowing, by the elevation of the tongue and its frœnum. After the model is made the most careful trimming is now required, and those parts above the symphysis, and on the right and left of the frœnum slightly scraped ; and particular attention paid to making the pattern plate just narrow enough to avoid the motion of the loose integuments of the mouth. Most lower plates are made too wide near the mental foramen, and too deep at the frœnum of the tongue. For many difficult cases even of vulcanite, a pattern plate ought to be made and fitted in the mouth ; the patient instructed to raise the tongue upward and an exact amount cut away. The plate should then be replaced on the model, and a deep line drawn to correspond on the plaster. This line will of course be seen as a ridge in the vulcanite, and any surplus trimmed accordingly. Of course too, the articulation must be very perfect.

Somewhere or other I published a system adopted in my office by an old practitioner who was interested in some patent, and which in several cases worked well, viz., that of taking the impression over the mylo-hyoid ridge on both sides of the inferior maxillary, by pressing the plaster down with the forefingers and holding it till it hardened, and then adapting the plate on the inside with wings over these ridges. These wings may be warmed and bent closer to fit, and if the ridge above the symphysis is scraped a little, it would seem that a good fit might be secured. So it might if the mouth was cast-iron. I only succeeded in one case with these wings. I had to clip all the others.

EDITORIAL.

DENTAL COLLEGES IN THE U. STATES—A NEW DEPARTURE.—A split has occurred in the Missouri Dental College, of St. Louis, and under the lead of Drs. Spalding and Chase, the Western College of Dental Surgeons has been organized with a novel departure in education. Just when other institutions are demanding longer attendance upon college to qualify for the degree of D.D.S., our western friends jump to an extreme of their own, and in substance say "If you are able to pass our examination in anatomy, chemistry and mechanical dentistry, you can get our special degree of Master of Mechanical Dentistry. If too, you are a good anatomist, well qualified in physiology, materia medica, pathology, therapeutics, operative and mechanical dentistry, why should we compel you to attend the routine of our lectures before being examined? Whatever you are deficient in, you must become proficient, and then, no matter where, when or how you got your knowledge, you can pass us, if you can, and get your full degree." It is a fact that "there are hundreds of practitioners in this country who have no degree, and many of them superior to hundreds of others who having complied with the rules have obtained degrees." The W. C. D. S. therefore proposes perfect freedom of study: that these "hundreds" can avail themselves of any opportunity they think best, and pass without attending lectures—if they can. "Learn your anatomy when, where and how you like. But you must pass a good anatomical examination. It will be for you to judge how best to prepare for the trial. If you choose the lectures, we provide them for you, if you choose to learn in any other way, and think you can pass, we will let you try."

Dental education as it has existed in colleges on this continent, has not deserved much esteem. Saving the purely operative tuition we would infinitely prefer the dental curriculum established in England. It is more solid and disciplinary. We have met scores of leading dentists who would admit the advantage a college may possess in epitomizing time, and giving the student more practical information than he could get in the large proportion of private offices, and yet who hold the degree in contempt. It is a fact that young men have passed through college by the hundred, more filled with conceit than knowledge. It is just as true that a college course has done many hundreds real substantial good. Graduates themselves over-estimate their advantages: they have no right

to be the sole judges, or the arbiters of the standard of education needed to raise any dental degree to equality with a medical degree.

Now if the scheme inaugurated by the W. C. D. S. is to do harm, it can only be by the unfaithfulness of its professors, and the superficial character of the examination. We believe the professors are honest, and we think they are able. It is not an unlikely thing that hundreds who passed other colleges after attendance upon lectures, might ignominiously fail to pass the Western. It will be seen in time how well or ill it works. It has a chance at least of promoting renewed study, and application, among a large class of qualified men in active practice who could not attend lectures, but who would be glad of the prospect of getting a degree to which they might feel they were entitled by virtue of their knowledge.

We have had good reason in Canada, for many years to hold dental degrees very cheap; and in conversation with many of the best and wisest practitioners over the border, we found a similar feeling. The trouble among our cousins is that no one is bold enough to take the bull by the horns. The profession in the United States has always appeared to us bound hand and foot to some vague idea of impossible regeneration or to some leaning upon an indefinite future. They see and know the superficiality of dental education. They seem paralyzed when its regeneration is approached; and the *ipse dixit* of men who have led under the prevailing idea of education, is looked upon as fixed as the laws of the Medes and Persians. A great revolution must take place in dental education before dental degrees can be respected. The good a college does may be separate from its degree and this without any inconsistency, because few deny but that these colleges can do practical good, but the good they do is by no means the highest standard, or the true qualification for an educated practitioner.

We have known young men go to Philadelphia from Canada, having had scarcely one year's pupilage, and barely two years practice for themselves, and after one course of lectures return full-fledged D.D.S's. The Dean declared that they had represented having had five years practice: the candidates as solemnly declare that they represented nothing of the kind. One candidate could scarcely speak English, but he attended English lectures, passed an English examination and we suppose wrote an *English thesis*, (though to-day he cannot write an English letter), and returned a D.D.S. No blame to him.

Another glaring instance. A student who when assisting his father, had several actions for mal-practice entered against him by citizens—one

action was settled by arbitration to the tune of about \$400,—appeared for examination before the Dental Board of Quebec, *after his graduation* at Philadelphia. The Quebec Board is not a teaching body: its legal functions merely extend to the examination of candidates and the bestowal of a Licence (L.D.S.) to practice in the Province of Quebec. It had not until lately any legal power to compel students to attend dental or medical colleges. It merely had power to demand three years studentship. Of course under legislation like this, it did not assume to demand such an examination as a college. Yet it found some graduates much more ignorant than the students who had never seen the inside of a college!

The following is a verbatim copy of a few of the answers of this model graduate:

Q.—What carat gold would you use for base plates?

A.—Oh! *twenty-four*.

Q.—Would you not find that *rather stiff*?

A.—Oh! that's just what we want. But in the States we used twenty-four, but for the French Canadians here, they don't pay, we use *about eight*.

Q.—What is the distinction between inflammation of the pulp and that of the periosteum?

A.—No difference, just the same.

Q.—What is the chemical composition of saliva?

A.—Oh! oxygen, water and *nitrate of silver*!

And so on to the end of his examination, with the sole exception of some elementary questions in operative and *rubber* dentistry.

So frequent were the "accidents under his care," that he attached the following to a card giving his name and address. "No responsibility in extracting teeth, or injuries accidentally inflicted in mouth!" There's a gem of grammar and graduated science for you. But a crowning gem, a very Kohinoor is to come. One of the victims entered an action for damages against him, upon which he wrote the following letter, which we copy verbatim from the Montreal "Witness," to which paper it was addressed.

"The following letter will, we are assured, speak for itself—(Ed. Witness):

The action of damages which is said to have been taken in Superior Court, by Mr. ———— is false, there is no grounds taken.

In attempting to extract a tooth which was very bad for him, it accidentally broke of which could happen to most skilful Surgeon Dentists. I

offered to take out the remaining root, but he refused and went out of my office in very grossly way. Know doubt he went afterward to jealous confreres or to *jaw Brokers* which from their fractured his jaw in extracting root.

Mr. _____ confess to several of my patients stating that he had root extracted, an in so doing the dentist told him that there was know danger of ketching cold from wound, from end of that week after having root out had suffered for month cause by poor advise of Dentist.

I am, your truly,

A graduate of philadelphia Dental College.

Signed, _____

We do not cite this as a specimen of a class of graduates. We cite it as a fact, and leave our readers to form their own opinions.

Dental colleges as they have existed, have been better than most private tuition: but that isn't saying much. They undoubtedly are useful, but it is a hollow farce under existing curriculums to turn out men with a D.D.S. as if it *represented ability*. That is the point. Let a college teach its worst, but do not let its curriculum be cast in our faces as something superior, something infallible, when we know for a fact that it is no superior qualification, and that a large per centage of graduates do not get more than a mere smattering of knowledge. We have known dozens of young men pass by at once such a curriculum as that of Harvard, for the speediest road to a degree elsewhere. Others want to give their whole time to operating at college and expect a degree.

There is a serious fault somewhere in the colleges. We believe it is mainly in the curriculum, but it must be partly too in the examinations, and largely too in the want of one or more General Board of Examiners. How many who have passed the examinations in their own college, would have succeeded before an impartial central board?

No doubt the Western College will have many applicants who want to get a degree easily. But *if they are qualified* to get it easy, they deserve it. If not qualified, it is expected they will not get it any easier there than elsewhere. We would as soon possess its degree, gained by a fair examination, as that of any other dental college. We do not touch at all upon its curriculum, or upon its facilities for teaching—whether it affords better scope for students than other colleges or not. We are moved to these remarks by the new principle it proposes to establish, without for a

moment supposing that the professors are insincere in the full requirements they intend to demand. Until the bare D.D.S. means more than it does now, it is not worth holding.

It is suggestive in this connection to add that the very men who most strongly defended the rule of making "five years practice inclusive of pupilage, as equivalent to one course of lectures in dental colleges," are getting their eyes opened to the fact, that those of us who ventured to condemn the principle were not so obtuse after all, and scarcely deserved the bitter, even personal abuse some of its upholders bestowed upon us.

To be continued.

THE FEE QUESTION AGAIN. —We have always considered the Fee question one of those pivots upon which the honor or dishonor of dentistry in Canada must turn. If the practice of dentistry in this country is to rank with a trade in the valuation to be set upon its worth; if our services are to be weighed in the same balance with those of shoemakers and plumbers, where material and mere time are the only standards of charging, and there is little or nothing to be credited to skill, study and science, then it is a black look-out for the Canadian profession, and a glorious prospect for the charlatans. Respectable men, skilful men, studious men will leave its ranks: it will become a reproach to be called a dentist, and the social and professional standing attained within the last ten years will be utterly lost.

Forty years ago in Montreal, dental fees were fifty per cent higher in proportion to the cost of living, than they are to-day. The same fee for extracting a tooth is charged by ninety-nine per cent of dentists, as was charged then: while in other services such as filling teeth and the mechanical branch, the fees are lower! Yet dentistry in Canada has risen since then to the rank of a recognized and legal profession: its best practitioners are better educated, possess better facilities, and can do more for the preservation of the human teeth than the dentists of the olden times. Why should all this be given as a premium to patients? why should not the brains, culture, science and progress in modern dentistry be entitled to higher pecuniary consideration, than the mere mechanical adroitness of thirty years ago? We do not disparage the operations of the best of the

olden dentists. We believe in the aggregate they were faithful and successful, though necessarily working in a more circumscribed sphere. We see their fillings of soft foil to-day putting to shame the boasting of adhesive gold extravagance. But they were largely mechanical and much that was legitimately our work passed out of their hands.

We fully recognize the fact that we must have cheap dentistry ; but we do not recognize the fact that a skilful conscientious man is to give ten dollars worth for one, or to put his skill and conscience on a par with the roughness and roguery of the charlatan. Good men should aim to elevate their inferiors, not to degrade themselves, and give quacks weighty argument for their practice. Of course if any reputable man voluntarily falls into the ranks of the "cheap Johns" of our profession, it is his own look out. But his reputation will suffer. He cannot serve two masters : he cannot long charge one class of patients double what he charges another : he cannot fight against the inevitable. We challenge any one to name a single instance in Canada, where success—even pecuniary, followed the voluntary descent of a first-class practitioner to the rank and charges of the "cheap Johns."

While in all the other professions larger fees than ever are obtained, and men are stamped by their fees as well as by their talent, why should not dental fees ascend? One Surgeon in Montreal, recently got \$500 for an operation : others \$250 and \$200. We have known Surgeons to receive \$100 for an operation which did not involve half the skill, patience and experience required to perform the ordinary branches of dentistry. Among the increased fees we think now necessary and timely we would suggest the following :

1. Consultations without operation \$1.00. In this matter we need a change. If time is worth money to a physician and a lawyer, why not to a Dentist? Regular patients might be exempted from this fee ; but we have often been amused at the cool cheek of perfect strangers, who after occupying ten or fifteen minutes in consultation, getting valuable advice and escaping operations, would walk out with scarcely a "thank you."
2. Professional visit at Residence, \$5.00. If a physician's visit is worth \$2.00, a dentist's is worth \$5.00. Why? Because it is the business of a physician to visit : he is out at certain hours doing that expressly : he has his horse and carriage, and may visit one patient many times in a week. But a dentist's business is to be in his office : he disappoints somebody and may lose a large fee during his absence. We are speaking here of

first class fees, because there are circumstances which may induce a dentist to pay a visit for nothing and hire his own carriage. 3. Extracting teeth, \$1.00 each. If the ridiculously low fee prevalent in the Canadian cities for extracting is not apparent to the profession we sorrow for them. Few of them will ever build terraces and own much bank stock on the strength of the present tariff. 4. Administering condensed Nitrous oxide, \$3.00. Of Mechanical Dentistry we almost fear to speak. It is being degraded by respectable dentists to the level of boot-making; and the charlatans in their low fees for inferior services, seem to be guiding the action and ruling the minds of men who sneer at them for this very fault. The man who can afford to do his very best when poorest paid has yet to be born. We would rather trust a man who will serve us for nothing, than one who will serve us for a song or a sixpence. The "cheap dentist" voluntarily attaches a stigma to his name which undoes all honor he may have received. Every dollar he goes down he makes it the harder to go up again. When fees go down so do ambition and honesty. A mis-fitting coat may be worn out and last as long as if it fitted, but imperfect dental operations are a delusion and a snare from beginning to end. A man who has not enough respect for his own name, present and posthumous, ought at least to have some for his family, whose social standing, happiness and comfort he lowers by the degradation of his fees. There are more successful and less meaner ways of stealing than by cheap dentistry.

NORTH-LIGHT OR SUNLIGHT.—An exhaustive paper by Dr. Tarra, of Brooklyn, on this subject ought to have commanded more than the flippant discussion reported in the Journals. The Dr. held that steady attention to work in a north-light produced weakness and disease. The Sun was the very life-blood of nature. He recommended a south-west bay window. The discussion elicited some stormy opinions *pro and con*. The objectors to the south-west light seemed to overlook the fact that the patient and not the dentist faces the light; that the eyes are less strained the clearer the light, and that no class of professional men suffer more for want of sunlight than dentists. The brightest light from the south-west shining directly upon an operating chair can be toned down by the use of proper shadings. Simply exposing one's face, arms and chest to the influence of the sun, for a few minutes if the sun is strong, or for an hour if not too strong, is beneficial.

TO OLD "DEAD BEATS".—If we could have afforded to devote our entire time and attention to this Journal when it was a monthly, it would have never been late. But as we could'nt, it was always late. But at any rate our subscribers got all we promised them—twelve numbers a year. The principal grumblers about the lateness were those who have not to this day paid their subscriptions. They could afford to be particular, and we could'nt. Editing a Dental Journal has its elements of pleasure sometimes. In the routine and monotony of active practice, it is joyful to sit down and read a few of the wrathful letters from subscribers who never pay, and who never intend to, but whom, these wrathful ones—we would not cut off, because of the amusement they afford us. Commend us to your "dead beats" for virtuous indignation. They are the aroma of cool impudence, and the very quintessence of cheek. Probably like fleas and mosquitoes they have their hidden destiny.

ARE OUR DENTISTS LAZY FELLOWS?—They must be, or perhaps so busy that they have neither time to read nor to write. We have been a good deal among our confreres in Canada, and seldom met one who could not *in conversation* interest us, and often afford us some valuable hint about his practice. As a rule our dentists in Canada know more than they show. Now, why are we not flooded with contributions? We do not expect labored essays: we want practical hints in operative and mechanical dentistry; cases worth recording met in every day practice. Will not our readers pin this to their memory?

OUR ADVERTISERS.—We wish to direct attention to the gentlemen who have favoured us with advertisements. It is only fair reciprocity to ask our subscribers to give them the preference of their patronage. Manufacturers who come to Canada to get everything and to give nothing, are helpful to themselves only. Those who give as well as get are the best friends of Canadian dentists who want a home Journal to succeed.

A DENTAL COLORADO.—Our medical friends have an immense advantage over us. When a patient's health is declining, and he will neither recover nor die, but nevertheless worry the wit and wisdom of

his physician, he can be ordered to Colorado. "Go West, young man." If he recovers, so much credit to the physician: if he die, no discredit.

Now we want a climate where we can send the puzzling cases in dent practice. We have a few patients of our own whose obituaries would rejoice us. They are specially commissioned to bring us to an early grave. They have mysterious conditions of their teeth which able physicians and able dentists can neither diagnose nor understand. We have dead beats too, whom a Colorado climate might reform. It would save a good deal of mental profanity which even angels may feel, if we had a Colorado to which we could send some of our patients. We have often wished some of them in a hotter place India, for instance.

HEAD RESTS.—Uneasy lies the head that rests on modern dental chair. The narrow showy things now imposed upon us for head-rests are a nuisance. Patients bob their heads about feeling for the centre of the pad, wishing they had eyes in the back of their heads for the nonce. A strong leaven of common sense is needed among our manufacturers. We have never met an apologist for the small head rests, yet how is it that they are accepted by the profession? The rest should be nearly as broad as the back of the chair.

KNOTTY POINTS.—A lad has certain bumps of constructiveness, firmness, destruction and form, and one of the phrenological wise-acres who spin out cheap morality and flattery at seven dollars a head, pats him on the bumps, and recommends his parents to make him either an engraver or a dentist. When possibly all his inherited tendencies and early training show that nature has cut the youth out for a forger or a burglar.

Another lad is fond of driving tacks and shingle nails in the household furniture, chiselling the chairs and planing the doors, has a genius for hitting a nail on the head every time, building a hen roost and neglecting his school, when forsooth, the prophets tell us he is designed for a dentist.

A simple old farmer called upon us a few weeks ago; with his son, a youth of twenty summers. He wanted us to take him as a student, because "Jack's an awfully handy boy about the farm, fixing the fences, and the house, and is *as natural with tools as a dentist*, so we thought we'd let him have a try." We assured the old gentleman that Jack would be far more at home on the farm, and that it would be a pity to spoil a good agriculturist in a poor dentist.

JOURNALISTIC.—We think the *Canada Journal of Dental Science* is the first Journal a Canadian dentist should take. It isn't as bulky as some of its confreres, but it is a home journal, the only one we have, and if our confreres will not sustain at least one, it speaks very bad for them. This is intended for those who have not already subscribed. But we are not uncharitable or jealous. If our friends can add any one or all of the following to their list, it will do them good. *American Journal of Dental Science*, Baltimore, \$2.50. *Dental Cosmos*, Philadelphia, \$2.50. *Johnston's Dental Miscellany*, \$2.50. *Dental Office and Laboratory*, Philadelphia, 50c. *Dental Advertiser*, Buffalo, N.Y., 50 cts. *St. Louis Dental Quarterly*, St. Louis, Mo., \$1.00. *British Journal of Dental Science*, London, Eng. *Monthly Review of Dental Surgery*, London, Eng. *Le Progrès Dentaire*, Paris, France. *L'Art Dentaire*, Paris. *Corresponding Blatt für Zahnärzte*, Berlin, Germany. *Giornale di Conispendenza pei Dentisti*, Milan, Italy. The latter would do just as well for those dentists who never read.

We do not know if the *Dental Register* of the West, and the *Missouri Dental Journal* have come to grief, as we have not received them in exchange. Will be glad to receive them.

LYING FALLOW.—We ask our subscribers to “read, mark, learn and inwardly digest” the article in this number on “Rest” by Dr. Darby. The extreme monotony of dental practice; the lack of variety; the sameness, has very much to do in connection with the in-door life to make dentists “insane or dissipated.” Most of our dentists are prematurely bald or grey: suffer from headache and nervous disorders. They get old before their time. The physician enjoys out-door life amid the variety of the streets, and the short visits among his patients. Advice and visits are not much strain upon the nervous forces. But the dentist is “cabbined, cribbed, confined” in one room for the greater part of the time, in awkward positions, breathing foul atmospheres at times. Dr. Darby strikes a key note of warning which ought to re-echo throughout the land. Fagged bodies and nunnery-like complexions distinguish every dental convention. Our American cousins have more than their share of ill-health. They deserve it. We have seen delicate people in the United States, eating mush, mess and hot cakes enough to ruin a cast-iron stomach. Our cousins want more roast beef, and food upon which they can use their teeth, as well as more sunshine and physical exercise. The Anglo-Saxon race across the lines will die out, or be ridden over roughshod by aggres-

sive European emigrations, if this matter for baby, boy and girl, as well as man and woman is not looked into better.

We have made it a strict rule ever since we began practice to play every Saturday afternoon in the year, besides taking at least six weeks holidays in summer, and occasionally roughing it after ducks. In 1875, we spent four months in Europe; last year over three months in Great Britain and Ireland, and managed this by getting a confrere to take full charge of our office. Of course it is not as profitable to the pocket as keeping one's nose to the grind-stone of work. But it gives tone and tonic to body and brain, and that is better than money. A good deal might be said too about the opportunities it gives one to visit confreres and institutions abroad and to compare notes. We know several of our confreres in Canada who have enjoyed such long vacations, and many who go off at a tangent from business after duck, or deer or fish. They are sun-burned and hardy. There is no reason why every dentist should not do the same: and strange too, to say, those who play the most, seem to succeed the best. Instead of lying in bed they are early risers and accomplish a day's work before breakfast if needs be. A horse-back ride, a long stiff walk upon a raw egg, a hard crust and a glass of water, a swim, a row before breakfast, and most scrupulous cleanliness of body ought to keep any ordinary dentist in good condition. Of course we include a clear conscience and a paid subscription to a Dental Journal.

Just as we were writing this in came Dr. Wells of Cowansville, looking like a hunter of the old time with two dogs and two rifles, off for the Ottawa Woods after deer. No wonder he looks like a voyageur.

PRACTICAL PROGRESS.—It is very gratifying to note and know the progress made since the profession was incorporated, and Associations, a college, and a journal first gave life to the work of reform. We have seen operations in gold from the hands of dentists in Ontario and Quebec, equal to anything ever done elsewhere, and in many cases by men who previous to the reform movement, had practised for ten years without knowing, or at least practising the first principle of operative dentistry. We need not go outside of Canada to find skilful operators. But it is too bad that many of our best men are going out of Canada to get a living. The great cry is against the lowness of the fees.

BOOK NOTICES.

AN INDEX OF DISEASES AND THEIR TREATMENT. *By Thos. H. Tanner, M.D., F. L. S. 2nd Edition, Revised by W. H. Broadbent, M.D. Philadelphia, Lindsay & Blakiston, 1877. Price \$3.00. For sale in Montreal, by Dawson Bros.*

Tanners "Practice of medicine" is one of the standard works of the day. The index of diseases in these busy days ought to be as useful to the practitioner in busy life as the practice of medicine is to the student. The tabular synopsis comprises the various branches of Abscesses, Bladder, Blood, Bone, Brain, Breast, diseases, &c. ; all varieties of Cancer, Deformities, Degenerations of Tissue, Dropsy, Ear and Eye Diseases, diseases of the male and female organs of generation and in fact all the ills to which flesh and bone are heir.

Under the head of toothache, it is treated as from Caries, from inflammation of the Pulp, from Necrosis, and from Neuralgia. The treatment proposed is such as suggest themselves to medical men, who do not assume to take the place of Dentists. With the exception of some vague and some erroneous treatment in inflammation of the pulp, the advice given is good. The work also includes a large appendix of formulæ ; references to the use of electricity, climates for Invalid and Mineral Waters.

THE PHYSICIANS VISITING LIST FOR 1878.—27th year of its publication Philadelphia, Lindsay and Blakiston. A well-known Annual which has become so popular during the last few years that the publishers have it ready as early as September, to meet the demand from booksellers and druggists throughout the United States and Canada. It contains a table of signs, Halls method in Asphyxia, Poisons and their antidotes ; the visiting list for twenty-five patients a week, memoranda, addresses of patients, nurses addresses : bills and accounts asked for : memo of wants obstetric engagements, vaccination engagements : obstetric cases, &c.

By the catalogues received, we notice that Messrs. L. and B. have made a very considerable reduction in the prices of many of their books.

SCRIBNER'S MONTHLY, ST. NICHOLAS.—Scribner & Co., N. York.—In the whole range of Magazine Literature, there has never been the first

attempt to rival these splendid monthlies published by Scribner & Co. The wealth of illustrations, the variety of subjects discussed, the high-toned character of editorials, and the quantity as well as quality of matter in the *monthly* have given it the leading place, acknowledged so by the best critics of two continents, and an impartial public. St. Nicholas brings a Monthly Christmas Feast to every household. It is a sort of successive hint to our youngsters that Santa Claus is coming. Both magazines are the finest accession to the dentists table, and we strongly recommend our subscribers to give their patients and themselves this monthly treat. The monthly is only \$4.00 a year, or 35 cents a number. St. Nicholas is \$3.00 a year, or 25 cents a number.

CANADIAN MONTHLY.—Hart & Rawlinson, Toronto, \$3.00 a year, or 35 cts. a number. This is undoubtedly the leading magazine of Canada, discusses subjects more purely Canadian; is one of the principal centres for Canadian literati, and deserves much better support than it is given. The English race in this country must learn to be more faithful to the grand responsibility of maintaining an English Canadian Literature. Our French speaking fellow-country-men have done well. We have not done half well enough.

ST. LOUIS DENTAL QUARTERLY. Edited by Drs. Spalding & Chase St. Louis, Mo: October, vol. 1, No. 1. Price \$1.00 a year. The editors are leading men: the Journal is neat and filled with good matter. We wish it every possible success: but we venture to think our friends claim too much when they claim it to be an *Independent* periodical. From a good deal in it we should judge it intended to represent the Western College of Dental Surgeons, of which the senior editor is the worthy Dean, and the junior as worthy a professor. We claim this Journal to be the only *independent* dental Journal on this continent. When we cannot say anything else, we can at least say that. Having said what we think about the "independent" claim, we will do our friends a good turn by saying in another place what we think of their new departure in dental education.

EPITOME OF THE PROCEEDINGS OF DENTAL SOCIETIES.

AMERICAN DENTAL ASSOCIATION, AUG., 7.

Dr. L. C. Ingersoll read a paper "Is the Dental Pulp essential to the integrity of the tooth structure?" To restore a diseased pulp to health is among the highest arts of professional skill: it involves a knowledge of the pulp-structure and functions, and the conditions of its life.

Oxychloride of Zinc appears to have been considered superior to all else. From reports there is great uniformity of results: if these reports are reliable it must be wrong to extirpate a pulp. They do not appear reliable. Is the exposure always the same in degree? Is the condition of it always the same? but it is treated all the same. Is it certain that the pulp will live and form its covering under the cap? How long after exposure may it be thus treated with success, and in what does success consist? Is it merely a comfortable condition of the tooth? is there not often deception in the tests applied? There are two unknown qualities in every case—vitality and idiosyncrasies: practice must vary in its results. There are "epidemics of opinion as well as of disease."

Reference was made to supposed remarkable remedies which flourished awhile, then collapsed. (*Hear! Hear!* Ed. C. J. D. S). The effort to save the pulp is good. Often too confident that we have succeeded. Most of cases are failures in from one to three years. Many succeed for that time; then result in abscess.

Many cases called exposure are only slight irritation, without inflammation. Another class involves simple inflammation readily relieved. Still another class involves exposure caused by violence in mastication, or in the cavity. These may be all treated with permanent success by care and capping. Where the exposure is of long standing, and is undergoing elementary decomposition, the oxychloride only helps it to die easily and embalms it after death.

Is the tooth-pulp essential to the integrity of the tooth-structure, and to its continuance in the mouth in a useful state? No! the soft tissues must have vitality to protect them from decay; but the teeth will last hundreds of years after the soft tissues are decomposed. Enamel, the most durable animal structure, has little vitality. Children's teeth are more vital, yet they decay more rapidly than adults. The pulp is chiefly a formative organ, and in that function it exterminates itself; in advanced life only a shriveled skin remains. Having completed its formative work

the indications are that it has nothing more to do. The question to settle is when do its legitimate functions terminate? The teeth probably mature in ten years after eruption, though this period may vary. Here the pulp takes its rest. The question is not the preservation of the *pulp* but of the *tooth*.

Dr. Rawl's considers the presence of the pulp necessary to preserve the entirety of the tooth. The paper says, the pulp was only intended to last till consolidation takes place; but when calcification is complete the teeth are of little account, and nearly worn out. Might as well say that when the muscles are formed, the vessels should be cut and the tissues left to support themselves. The dentine is intended to be supported by the pulp, and when it is removed the tooth will disintegrate.

Dr. Barker. If the pulp had been intended to remain only ten years, nature would have removed it. His own teeth had become softened after a fever, but had again hardened, which was affected through the pulp. If the pulp is removed, the periodontium takes on hyperæmia and goes into abscess. The action of carbolic acid, which forms a protective pellicle and acts as an anodyne, has not been considered in the paper.

Dr. Robertson. The pulp has no connection with the dentine, and therefore cannot supply it with nourishment. Any person who claims that the pulp is of no use has not studied the anatomy of the tooth.

Dr. Ingersoll said he had been misunderstood. He did not deny to oxychloride of zinc and creasote the effects ascertained to them. We have over-estimated the value of the pulp. Twenty-five years ago the practice was to devitalize upon exposures, and if it was thoroughly done the teeth are doing good service to-day. In ordinary cases it might be good practice to use oxychloride, but in bad cases of suppuration it was not best to tamper too long with the pulp.

Dr. Allport. Thirty years ago there was a doubt whether an aching tooth could be saved. It is important to save the pulp, but we have over-estimated its importance. It may sometimes be a nuisance instead of a benefit.

Dr. Atkinson. When men say that the fibrils of the root are not supplied from the pulp, while the crown is, they are ignorant. The fibrils can be drawn out of the dentinal canals. Instead of saying that we have over-estimated the importance of the pulp, it would be more modest to say that we make too little of being able to treat pulps that are in a pathological condition. Dr. Allport asked of what use was the pulp where

abscess exists? he mentioned two cases of abscess while the pulp was alive. Dr. Atkinson said those cases were so few that it was not worth while to inquire.

Dr. Crouse, had never seen a live pulp in a tooth when there is an abscess. He would rather cap than to take the chances of extirpation.

Dr. Rhewinkle. In simple exposure of pulp always save. Where inflammation with some sloughing exists it is different. Oxychloride is deceitful. Pulp treated with it appear to be alive when they are dead. Frequently you have no pulp but an Egyptian Mummy there which may give trouble at any time, especially if the foramen is open and fluids get in there. Would prefer to risk his reputation on a tooth by devitalization instead of capping.

Dr. Morgan. There might be abscess with a live pulp in a three-rooted tooth only. However much we estimate the pulp we cannot over-estimate it

Dr. McDonald. All tooth-structure tends to deteriorate after loss of pulp. Every attempt should be made to save the pulp, and then we can resort to extirpation. Conservatism is the thing for the dentist.

Another Argument for Teetotalism. — Dr. Ed. Palmer, in a paper on alcohol and its effects upon the teeth, treating of its effect upon the membranes, concluded that it contributed largely to the degeneracy of the dental organs.

Dr. G. H. Cushing. — Chairman of the Committee on *Operative Dentistry* read a report which spoke of the materials used in filling teeth, and stated as the result of an extensive correspondence with leading dentists, that the use of tin in combination with gold had been very little resorted to, and that the use of amalgam, as well as non-cohesive gold, had largely increased and was still increasing. Operative dentistry to-day occupied a conservative position, running neither to one extreme nor the other as regards method. In conclusion the report stated that one of the great needs of the present day was the organization of one or two institutions liberally endowed and independent of the tuition of pupils. *The last sentence received great applause.*

SELECTION.

REST.

BY PROF. EDWIN T. DARBY, D. D. S.

The average American, engaged in the active pursuits of life, needs, and his system demands, periods of rest and recreation.

It is impossible for man, constituted as he is, to follow incessantly one train of thought or toil continuously in a given direction without injury to both the physical and mental system—nay, without insanity. The fact that we are an overworked people, both in mind and body, is proverbial, and with each year the truth is becoming more apparent.

That nervous diseases are upon the increase, no one who has given the matter a moment's thought can deny. Consider for a moment the sudden deaths from heart disease, from apoplexy; the wrecks of mind and body which meet us on every hand; the care-worn faces and tottering gait which we see in early manhood, but which belong only to later life. Is this because we are physically and mentally inferior to other nations? No, on the contrary, experience has shown that under favorable circumstances the American people are both physically and mentally equal to any of the old world, and that the impaired health of our people is due almost entirely to the rush with which they pursue their business callings—accompanied with high living and insufficient rest and recreation. There seems to be something in our climate which incites men to activity, and activity so intensified that we rush through life, keeping (as it were) the engine of our being at the highest rate of speed for the time, not considering that the machine which runs fastest must of necessity wear out soonest. There are few subjects upon which men engaged in active business life will not talk with more reason than that of rest as the means of promoting health. The excitement of business becomes almost a disease, and it is not until the system begins to succumb to the strain put upon it that men realize or admit that it is possible for them individually to fall victims to this disease of overwork.

What has been said of general business life is eminently true of professional life, and especially so of the profession of Dentistry. There are few men in the profession, who have been in regular practice for ten or more years, who are healthy men. Do you not, by a moment's reflection, recall a score of professional friends who are dyspeptics? whose mind is

just a little off balance ; who, in short, is a little the worse for his ten year's service ?

Is Dentistry an unhealthy occupation ? Followed as it ought to be, it is not. Followed as it is by the majority of men who are so fortunate (or unfortunate, perhaps,) as to have a full practice, it is.

The dentist who works an hour or two at the chair in the morning, and an hour or two in the laboratory in the afternoon ; who takes ample time for his meals, and rests after they have been eaten ; who leaves his office at three or four o'clock in the evening and drives in the park or digs in the earth, may plod on for years, perhaps a score of them, and show no signs of nervous disorder, nor experience any symptoms indicative of failing health. To such an one, and followed in such a way, the practice of Dentistry is not unhealthful. But look again ; in yonder city is your professional brother who enters his office at eight or nine o'clock in the morning, and stands at his chair incessantly engaged in the most delicate of manipulations, and upon the teeth of the most sensitive organizations. until four or six o'clock in the evening, only stopping to partake of his mid-day meal, which ordinarily is but a light lunch. He does this not one day only, but every day from Monday morning until Saturday night, week after week, and month after month. Followed in this way, Dentistry is an unhealthy occupation.

But, you ask, is it the close confinement that breaks him down in health ? The mechanic, the watch-maker, the tradesman is confined within doors equally as much, and yet shows less signs of failing health, Is it the hours spent in work that makes the dentist so tired when night approaches ? The farmer may commence an hour or two earlier in the morning, and keep it up an hour or two later in the evening, but he is not fatigued to the same extent. He works equally hard, but he works in a different atmosphere ; he works in the sunlight, surrounded by the beauties of nature. His work in the open air develops muscle, affords an abundance of oxygen for his lungs, and makes him a healthful, happy man. It is not work that kills men ; it is the incessant strain upon our sympathies while inflicting pain upon our voluntary victims. It is the responsibility, which every conscientious man feels, to do the best thing possible for those who seek his services. It is the work of hands, and mind, and heart. It is the effort to keep one's self in one grand equipoise—the effort to be courteous, and gentle, and kind, when we feel nervous, and cross, and perplexed. It is the daily routine of care, the cons-

tant thinking of the same things day after day, week after week, and year after year.

It has been estimated that one-fortieth of the dental profession become insane, and as many more dissipated ; and at times I do not wonder that such is the case. I recall at this moment the history of two men, eminent in their day and generation, who commenced the practice of Dentistry within a few miles of the beautiful lake upon whose borders I sit to-day. The first, after an eventful life, a large and lucrative practice of many years, became dissipated and insane, and died by his own hand. The other, removing from a country village to the metropolis of our nation enjoyed for years the confidence of many, and secured to himself a large and wealthy practice. Of a highly organized nervous temperament, he felt his health giving way under incessant work, and resorted to stimulants, which with him soon became a necessity. With bad habits once formed, he went from bad to worse, and finally died a miserable drunken pauper in that city's alms-house.

Nor are similar histories rare.

That the practice of Dentistry is peculiarly trying to the nervous system I think none who have given it a few years' trial will deny. It is a constant drain upon the nerve force, and requires on the practitioner's part the best care to avoid disastrous consequences. Each day takes from us more than night can give, and by this exhaustive process we soon approach the night of death.

How, then, is the dentist to preserve his health and render himself best fitted to perform his work and prolong his life ?

First : By a systematic arrangement of his time, and, when once arranged, not to deviate from it. I have the profoundest admiration for the man who has courage enough to lay aside his instrument and cease work at three or four o'clock in the afternoon. In my opinion such an one will reap a larger harvest in the end than his neighbor who stands at his chair an hour or two longer each day. There should be periods for rest, and these should be daily. The dentist should spend an hour or two at least of each day in the open air, and, if possible, in the sunlight. He should walk, or ride horseback, row in a boat, dig in the earth, play base ball, or do something which will be as complete a change as possible from his daily work. He should engage in something which will change the current of his thoughts ; something that will bring into action different muscles of the body ; something, in short, totally and entirely different from his professional life.

Second : The dentist should have an annual vacation of at least a month. Eleven months is long enough to pursue one train of thought, one round of duty. He should, if he be a city practitioner, go to the country, where new scenes will be presented to his eyes, new thoughts occupy his mind, and new food delight his palate. Let him spend a few weeks in the Adirondack wilderness, sleeping on hemlock boughs in her forest of pine and hemlock and spruce ; fishing in her limpid streams ; chasing her bounding roebucks, and eating her delicious venison and trout. Or let him go to old ocean, and sail on her restless billows, bathe in her ceaseless breakers, and sleep that sleep which is restful.

When once the careworn, nervous, dyspeptic dentist has gone forth amid scenes like these ; when he has mingled with nature in her grandest forms, he has put himself in an atmosphere of health ; and, whether sleeping or waking, he is drinking in that which rejuvenates his wasted energies, restores the balance of his mental capacities, and refits him for the duties of future years. After a month thus spent, he returns with new desires and new purposes. He enters upon his practice better prepared to perform his operations thoroughly ; a better man, physically, mentally and morally, for they rest and recreation he has taken.

(Dental Office and Laboratory.)

HINTS AND QUERIES.

Answer to T. H. in August No.—The Eureka rubber is tough, rather dark, but vulcanizes at 220 in 15 or 20 minutes. I have used it for the entire base plate as well as for repairing.

A. O.—Put some cotton wool in a wide mouth bottle, and saturate it with as much carbolic acid as it will take up. By dipping your pellet of wool in this, you can get all you want at any time. There is no *spilling* if the bottle upsets. Other therapeutical agents used can be kept from spilling in the same way.

R. T. L.—In cold weather you should not even use cold fingers about the teeth of your patients. You should also warm all steel instruments an instant before inserting them. In all cases forceps should be warmed. Somehow or other it hurts less to have a warm than a cold instrument run into you. Try a cold forceps yourself around a sensitive tooth of your own.

R. W. D.—The article on Phosphates is delayed until next number, also the question as to the overcrowding of the profession in Canada.

L. M.—Walker's Vulcanizer can be seen in use in our laboratory, as well as in the laboratories of two confreres in this city. It is invaluable.