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DOMINION DENTAL JOURNAL.

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[No. 4.

Original Communications.

Vermont State Dental Association.—Address of the President, Dr. W. H. Wright.

Gentlemen of the Vermont State Dental Society:

Custom has made it a part of the duties of your presiding officer to make a formal address at the annual meeting. This must be my excuse, if one is needed, for occupying any portion of your valuable time in listening to me, which might be more profitably given to others. But we are here to exchange ideas about our profession, and to advance its power as an aid to the welfare of our Any contribution, however small, which may be made to this object, from the experience and reflection of years of practice, will be in the line of a promotion of the object of our meeting. I am fully aware that your kindness in electing me as your President confers neither the right nor the ability for me to assume to lecture you on your duties, or to speak to you as from the height of superior wisdom. Nor does the place nor the occasion call for ambitious discourse. I can only speak to you as a brother, interested with you all in whatever may promote the good of our chosen profession, and make it more deserving of public confidence. Much of our time here is necessarily taken up with the discussion of the scientific details of our work. This is right, for a closer attention to these secures perfection of results. But it is also well in any work to keep in mind its broader aspects, and to cultivate in ourselves that professional spirit which dignifies detail with the largeness of a worthy purpose.

In all scientific work in our day there has come a recognition of the fact that the prevention of disease is equally a subject for investigation as well as its cure. In medical science the labors of a Pasteur or a Koch have excited universal interest because they have sought to anticipate the inroads of disease, and to fortify the citadel of life from its attacks. Political economists are no longer. content to deal with social and economic evils with a view of alleviating their effects, but, if possible, to prevent their recurrence. And statesmen are asking for that which shall keep the body politic in a healthy state, and thus avoid the necessity of empiric This is nothing but the application of common sense to the affairs of life, and the attempt to carry out in practice the old proverb, "that an ounce of prevention is worth a pound of cure." Certainly the professional man is fully aware of this, as he is continually asked to fight evils after they have become desperate, and when all he can hope to do is partially to restore diseased parts to health, perhaps to be blamed that he cannot effect a perfect cure. How often it is to our regret as well as to the patient's permanent loss that our aid was not earlier sought, when good results could have been attained. Both we and our patients would then have a satisfaction which fatal delay has now rendered Even from a selfish point of view it is important to impress those who seek our aid to do it in time. In China, where everything is reversed and done just opposite to what we do, it is customary to pay physicians while their patients keep well; when they fall sick the pay stops. How it would work with us, I do not know. It looks as if our fines would be heavy, indeed, if we were fined every time a patient had a toothache. But, perhaps, it would work the other way and render us more alive to the importance of seeking to prevent in those under our care the great American disease of bad teeth and of no teeth. The time might. come when he would be most honored in our profession who could show the greatest number of sound teeth in the patients under his care, rather than the man who had best succeeded with desperate cases; or who had best supplied, by artificial means, a permanent loss of the natural apparatus for the mastication of food.

The laws of heredity and congenital defects may be trusted to furnish cases enough which will test our skill and scientific ingenuity to the full, and the perversity of human nature is such that do what we may a large number will neglect the proper care of their bodies, and continue to furnish cases enough of a desperate character.

I venture, therefore, to call your attention to the subject of the care of the teeth in childhood as a matter where neglect is almost universal, and where prevention properly begins.

We have all been surprised at the neglect of intelligent parents

about the temporary teeth of their children. It is only when this neglect has ended in suffering that the advice and help of the dentist is sought. I once had a little girl from a good family who had a fistulous opening under the inferior six-year molar, when, if the parent had been sufficiently intelligent on the subject, the child would have been spared an unsightly scar, and the loss of a valuable tooth from the dental arch. Few are aware of the importance of care for the temporary teeth. If insisted upon, we are met with the question. "Of what use is it to fill these teeth when they will so soon be replaced by a permanent set?" It is not understood that they have a great value in keeping the arch in its proper shape for the reception of the permanent set. Nature intended that they should remain until the time comes for their successors. And in addition to their early loss the suffering that their neglect entails is no small matter. Again, the mouth is the gateway through which the needed supply of food enters the body, and in which it undergoes its first preparation for digestion, and this is as important to the child as to the adult. The presence of disease with resultant filth and dangerous pus in the very beginning of the process of nutrition is a great evil, which may affect the general health. We insist upon the necessity of clean and wholesome food. We are careful about the utensils in which it is prepared, but singularly indifferent to the cleanliness of its first receptacle, and do not exercise the proper care that it may reach the stomach free from unnatural defilement. Much suffering might be avoided, and also permanent injury to the digestive apparatus, if children were taught not only to wash their faces and hands, but to purify and cleanse the teeth, at least twice a day. It is a clear duty resting upon us to disseminate information on this point, and thus to contribute to the prevention of a large amount of needless suffering, as well as injury to the masticatory apparatus.

The subject of the best food for the building up of the dental process is one also that needs presentation. We all know how universal is the demand for the flour which will make the whitest bread, when that whiteness is only secured by the elimination of the nitrates and phosphates so essential to the body, leaving only the carbonates, which abound in other foods. Our grandparents were more fortunate, whom necessity compelled to be content with coarser flour, and to use their teeth more in efforts to overcome its hardness. It may save time and labor to bolt this modern soft bread unchewed into the stomach before it is properly prepared and mixed with the saliva, but we pay for it dearly in poor teeth and in indigestion. I am a believer in the use of oatmeal and other cereals, which have not suffered from this artificial removal of some of their most valuable constituents.

Dr. Johnson, in his dictionary, defines oats as food for horses in

England and for men in Scotland. If he had known a little more about comparative physiology, he would have seen that what is good for horses is good for men. Scotland has no need to be ashamed of her national ciet of oatmeal; it has reared a hardy race. And as Lincoln said of Grant's whiskey, oatmeal may be good for other people as well as for the people of the stout little isle. These things, I am aware, are commonplaces with us, but the amount of existing ignorance upon them demands that, as far as we can, we seek to dispel it and let in the light of simple facts upon the very beginnings of life. The proper care of the young is considered among all civilized people as their first and highest duty. The State has interfered with the cupidity of employers to protect the young from hours of labor which inevitably, and permanently, injure the growing bodies of children. This is not only in the interest of humanity, but is designed to furnish the State in the future with able-bodied citizens, and to prevent the creation of a stunted race unfitted for the battle of life, to become a burden upon society. And the same principle applied here, and to all who have the care of the young. It is carrying out in practical ways that love of children, and disposition to labor for their interests, which is the most beautiful sentiment which a wise Creator has instilled in the human breast. And it appeals to us with stronger emphasis, because of the helplessness of childhood, and the knowledge we have that some of the ills which attend it are removable by a more intelligent care.

In regard to ways and means for the carrying out of these obvious principles, it is perhaps sufficient to say that much must be left to the good judgment and professional spirit of those who are in active practice. We can at least recognize the duty incumbent upon us, and seize every opportunity to increase information on the subject. Certainly we ought to feel in honor bound to. enlighten those who seek our aid and trust our wisdom and skill. There is no better way to disseminate knowledge than for those who know to tell those who do not. It is one of the best features of our age that those who have the scientific spirit, and give their lives to the study of any branch of it, feel impelled to throw aside concealment, and the effort to surround their work with a halo of mystery which may glorify themselves, and to undertake the needed work of popular enlightenment. Tyndal and Huxley are shining examples worthy of imitation, in that they have devoted so much labor to popularize science and bring it within the range of ordinary minds. Science has not lost but gained by throwing aside the robe of necromancy and the veil of occult language. She has been exalted by stooping to serve, and by shedding light upon the mysteries of life. Every lover of our profession will share in this spirit and aid as he can the explication of those laws

which control huma: life and happiness. The need of effort in this direction has been abundantly shown in England and this country by men eminent in our profession, in the collection of facts bearing upon it, by such men as Dr. George Cunningham, D.M.D., and Dr. Carpenter, in his "Principles and Practice of School Hygiene," goes so far as to say: "Large schools should always have dental officers attached to them, who, by a periodical inspection of the teeth of children, will be able to prevent decay, remove loose fangs before they produce general disorder, and this may be the means of preventing much dental mischief." Such information, simple as it seems to us, is yet of invaluable importance when placed in a text-book for study in our schools, such as the following, in a text-book prepared by C. H. Stowell, M.D.: "The importance," says the doctor, "of the teeth to the personal appearance as well as their relation to the digestive function is so evident that it is a matter of surprise that so little attention is given to their care and preservation. The teeth should be cleansed at least once a day, and it would be much better to cleanse them both morning and evening. Use a small soft brush and only the best powder or washes endorsed by some responsible dentist. dentist as soon as a cavity is discovered, although a better plan is to have the teeth examined every few months." There can be no doubt that the placing of such simple information before the young will be a means of preventing the general neglect of this subject until it is too late to be remedied.

The seventeen thousand dentists in the United States are surely able to exert an influence here which would reflect credit upon the profession, while at the same time enlarging their business and The more intelligent people are, and the more impressed with the importance to health of attention to their teeth, the more will they seek the assistance of those qualified to render them aid. Our best patrons, and those for whom we can do the best work, with the best results, are those who are intelligent, and therefore disposed to give care to their teeth; while the ignorant remain away altogether, or only seek our aid in desperate and hopeless cases. It is also a question how far we owe it to ourselves and the public to utilize more than we do that greatest of organs for the disseminating of intelligence and the influencing of public opinion, the Press. The newspaper goes where books and pamphlets seldom Those read newspapers who read nothing else. The quack understands this, and our papers are filled with advertisements in which disease is described, but so evident is the purpose to make market for their cures that it deceives none but the unintelligent; yet it does beguile many into the purchase of their nostrums. The use of the Press for the purpose of disseminating information that is preventive in its nature and purpose is not open to the objec-

tions of advertising a business which no one who has the credit of the profession at heart can advocate or practise. It is redeemed from all appearance of selfishness by the dignity of its motive, the relief of our fellowmen from needless suffering. especially be the case if those eminent in the profession and enjoying the reputation of being experts undertake the work of enlightening the public. Their names will carry weight and give validity to their advice. They may be trusted to carry out that article of our code which says in substance: "It is our duty to enlighten the public mind so that it will properly appreciate the beneficent efforts of our profession." What I would insist upon, however, is not this or that method of reaching so desirable a result, but that we should cherish this purpose as a part of our professional duty, and be ready to lend our influence to all plans for the remedying of the evils which certainly exist. It is not so much the well-to-do and intelligent who need our assistance in this matter, as it is those whose poverty renders them unwilling to incur expense which seems to them unnecessary. may well afford to provide this large class with the means of ascertaining this need by the aid of the State, and through the schools. as a part of the debt the State owes to herself and her children. I cannot better conclude than by adopting the words of Parkes: "Such work seems whoily good, a work free from the error and frailty that clings to so much that we do; a work unselfish, devoid of wish of personal gain, and instinct with the love of man."

Non-Cohesive Gold Foil as a Filling Material.*

By C. H. GERRISH, Exeter, N.H.

Mr. President and Gentlemen of the Vermont Dental Association:

I wish to thank you for the invitation to be present at your annual meeting, also for the honor you conferred upon me at your last meeting by making me an honorary member of your association.

It would be presumption on my part to offer anything in the way of instruction. I will simply relate to you my experience for the past twenty-five or thirty years in the use of non-cohesive gold foil as a filling material, and possibly some thoughts or suggestions may be of benefit to you in your practice, and if you receive what

^{*} Read at Vermont State Dental Association.

I have to say in the same spirit as it is offered no offence will be given.

There are teeth that cannot be saved by filling. You, as well as I, have met with them. Whatever material you use you will ere long wish your choice had been different; but, granted that the quality of the teeth is such that filling will preserve them, you choose from the many materials some one.

In their order of merit I consider Hill's stopping, or some form of gutta percha (the pink gutta percha, such as is used for base plates, is an excellent one) at the head; nothing equals it. Next in value comes tin foil. Third in the list I place non-cohesive gold foil; and last, cohesive foil, or any of the preparations of gold which require welding in their manipulations, while the plastics, such as oxychlorides and phosphates of zinc, are uneven and uncertain in their results, yet, nevertheless, indispensable. The amalgams come in to cover for us a multitude of sins, tiding us over many a troubled sea, and probably saving more teeth than any one of the above-mentioned materials, and possibly more than all of them put together.

For the present I will ask your attention to some advantages that non-cohesive gold possesses over the sticky form as a permanent filling, as the gutta percha and tin foil respond too quickly to the wear and tear of mastication. It is a better stopping because it is a softer one. Why does the farmer plug the taphole of his cider barrel with a spile made of pine instead of hardwood? Simply because he loses no cider, there being no leakage. The plug must be as soft or softer than the material into which it is driven. when you put a non-cohesive filling into a tooth, you have similar conditions prevailing. I think you will agree with me that it is not the most solid filling that preserves, but rather the one that is the best adapted to the inequalities of the cavity, especially the marginal walls, the one which excludes air, moisture and bugs, and yet hard enough on its surface to withstand the action of mastication. In all these desirable qualities soft foil stands foremost. Beyond a certain point you cannot make it hard. Though you will secure a very dense filling, it is like putty; though you work it ever so long, when you have finished your labors it is still putty. You have not changed the character of the material; you cannot pound the life out of it.

Again, the mechanical arrangement of the cylinders is more conducive to a perfect stopping.

Will you bear with me while I describe briefly my method of preparing the foil and working the same? I use both Nos. 3 and 4, nothing heavier Take a sheet and fold two edges together, once, twice, three times, making a ribbon of eight thicknesses of foil, about one-half inch wide, then twist or roll this ribbon,

being careful to keep the surface smooth of the coil. Now, with the scissors, cut the same into pieces just long enough to suit the cavity; by that I mean that one end of the piece shall touch the floor, the other projecting beyond the orifice. You begin your filling by inserting one of these pieces into one angle or corner of the cavity, so placing the same that the cut end of the gold shall be at the bottom of the cavity, and condense into or towards the distal wall, another piece is placed alongside, and so on until you reach the opposing angle or corner. This reduces the size of the cavity. Continue in this manner until the cavity is full. Up to this time you have been using the sides rather than the point of your plugger, but now the point or end of the instrument comes into play by condensing your surplus gold, keeping the same well over the cavity. This is important.

Now, with a wedge-shaped instrument you begin your hunt for the weak places, sending the instrument well to the bottom of the cavity, using lateral wedging pressure. This act sends the gold towards the walls of the tooth. Fill up this pit, and look for another soft spot. After this, take your burnisher and condense, as only a burnisher can; and right here, gentlemen, is the saving qualities of soft foil seen, for under the burnisher your surplus gold in a great measure disappears. What becomes of it? Every piece of foil composing the filling presents its edge or end to the action of the burnisher, and that instrument has forced, swayed, moulded or moved the plug in the same manner, but to a less degree, than the warm burnisher does your gutta-percha filling, bulging the gold outward toward the walls of the cavity, filling up every inequality, and secures for you a perfect stopping, for the more pressure you bring to bear on the filling the more perfect it becomes.

With a cohesive filling, how different is the effect of this instrument. You can make some impression upon the surface, the outside layers of gold; but the mass of the filling does not yield, and your work is finished for good or bad.

A bunch of asparagus will illustrate.

Again, non-cohesive foil can be used with a minimum loss of tooth substance, especially in approximal surfaces of the incisors. I believe and practise a free use of chisels and files. Soft gold requires it as much as cohesive, but the principle of wedging enables you to fill without cutting a direct opening to your cavity. Then you may maul and abuse your soft foil, not changing the working qualities thereby; but not so with cohesive, for it responds as quickly, resents any abuse, virtue goes out of it at the first impact of the instrument, and if it is hammered long enough you can get a spring-tempered filling, beautiful in itself, not easy in its surroundings. All this requires room or space, which is obtained in many

cases by cutting through from the outside, thereby affording the operator a chance to advertise his skill, and fills his heart with pride.

This is not true art, for she conceals her methods, and the operator whose patients are recognized by their friends after a sitting is the true artist. Don't try to advertise your skill in showy work, but, as much as lieth in you, conceal it.

Personally, I regret that the methods of working non-cohesive

gold foil are not taught in our dental schools.

I admit that it requires much time and practise to become an expert worker in soft foil, but think the benefits to be derived from its use warrant my calling your attention to it, and that you will encourage the young men who come to you as students to take up some method of using the same. The virtue is in the gold itself, not in any particular method.

One other point: as to the make of foil. I began with Abbey's soft foil some thirty years ago, use it to-day, and have always used it; and may I put some stress on this point: whatever foil you may select, continue its use, if it suits you, till you get acquainted with it. It takes about ten years to become real social with any make of foil, and twenty to make a lifelong friend of it. Please consider this seriously; there is much truth in it.

Finally, when you consider the difficulties under which the pioneers in dentistry labored—no rubber dam, no engines, no tools to speak of, and those without serrated points, no gold but noncohesive—and see *such results* as many of them achieved, it is fair

to presume that the principal merit lay in the gold itself.

Cohesive gold is used to obtain results not possible with the soft foil. They are beautiful in the extreme, enduring in all that goes to make a filling useful, enlarging our practice, and will not and cannot be given up. But, gentlemen, I firmly believe that the time is coming when non-cohesive gold will share equal honors with its sticky brother.

A Few Notes on Dental Prosthetics.*

By S. GLOBENSKY, L.D.S., Montreal.

Although we must regard the necessity for artificial dentures as great a reproach to dental practice as the necessity for surgery is to the general practitioner, yet we are forced to admit that prosthetics and surgery are indispensable, and that it is our duty to raise them to the highest possible perfection.

^{*}Read at the Vermont State Dental Society, March 21, 1895.

There are two sides to the question as to whether or not the introduction of vulcanite has been a curse to our profession. I am disposed to believe that students are made now in more haste than when artificial substitutes were confined to the more difficult bases of gold and platinum; and I am also disposed to believe that there is a much larger percentage of rude and unskilful work put into the mouths of patients. It is a bad sign of the times when cheapness is the chief object of attainment. We know that in all other branches of industrial art mere cheapness is followed by inferior production. Yet it must be recognized, on the other hand, that vulcanite has brought artificial substitutes more within the reach of the middling and the poorer classes; and yet, for this very reason, I am disposed to believe that it has made them more indifferent to the preservation of the natural teeth.

However, we cannot escape the fact that the public demand this class of dentistry, and it occurs to me that I may be permitted to suggest a few points mainly directed to the treatment of the mouth

before inserting sets.

First of all, I would ask your attention to those cases where the alveolus has undue prominence, sometimes so as to cause positive disfiguration, protrusion of the lips and excessive projection of the teeth. It is a well-known fact that after extraction and the usual absorption of the alveolus, extending over a year, there remains an ugly exhibition of structure, to which it is sometimes impossible, and at all times difficult, to adapt an artistic set that will conceal its own art. Especially is this true, whether we use plain or gum teeth. If it is impossible to use the latter, or clevate the lip under the nostril by pink vulcanite—which, of course, turns dark and is a poor substitute for porcelain gum—then the depressions under and on each side of the nostrils, due to the removal of the long roots of the cuspids, make a permanent deformity. What shall we do in these cases?

I. As a rule, the cuspid roots are perhaps the most solidly fixed in the maxillary. As a rule, they can be easier treated for their preservation, because nature seems to resent their removal. I see no reason why it would not be wiser to excise than to extract their crowns, treat and fill them, and insert the set over the roots. As a rule, I think that the need for gum-teeth would not then be so urgent. Of course, to every rule there are exceptions. In case of such treatment, the patient should be instructed to have the roots examined once a year, for fear of elongation and bearing too much upon and weakening the plate.

2. There are very prominent protrusions which would be better treated surgically. After the teeth are extracted, and the gum-line and alveolus border still hang below the lip, there is no reason why the former may not be dissected from the alveolus, and the latter

excised or cut down by forceps. In fact, the prospect of any undue protrusion after entire absorption can be effectually prevented by this precautionary surgery, and no possible injury inflicted upon the patient.

You will observe that I have not introduced any reference to the opportunities for crown and bridge work, as my object is to deal exclusively with the average demands upon the average practi-

tioner and the means of the average patient.

- 3. It is not by any means a novel treatment to take an impression for a number of teeth before their extraction, cut them off the plaster model, set them up, and have them ready for insertion the moment they are extracted. But this has been largely limited to partial dentures. There is no reason why it may not be extended successfully for entire sets, if a good impression is secured, and the plaster teeth carefully cut from the model. It enables you also to replace the teeth, one by one, on the model, precisely in the position where nature puts them, and, after some experience, it will be easier to do this than to work upon the ragged plaster impression of wounded gaps, left after the forceps have been used. will, too, be observed, that here again this is an advantage in the case of the extra-prominent mouths of which I have spoken. It is a fact that a set made in such a way may be inserted a few minutes after the teeth are all extracted, and worn without alteration for four and five years.
- 4. I attribute most fractures of the alveolus to hasty and rough attempts to extract. Of course, there are cases of distortion of roots, of exostosis, of osseous union with the socket, which make the exception. But it is not difficult to learn, by previous examination, the condition of solidity of the teeth in the maxillary. cases where this is very marked, it will follow that if the cuspids have to be extracted they will likely be the most difficult. Now, in order to avoid fractures, either of the teeth or of the processes, it is a wise precaution, if an anæsthetic can be prolonged, to begin at the cuspids and rapidly follow to the others, especially the first and second molars, and firmly twist or shake these teeth. You see, the object is to loosen the pericementum, which instantaneously inflames, and within a minute the firmest tooth will much easier yield to the applied force of absolute extraction. It is a wrong principle to persist in tugging at an extremely difficult and solid tooth, risking its fracture and that of the surrounding alveolus. It is wiser to be slow and sure.

My attention has been drawn to these facts by observing a good deal of butchery in the human mouth, caused by ignorance and want of skill. Students get the idea that anyone can extract a tooth, and, for some curious reason, anyone seems at liberty in the United States and Canada to do so, whether they do it with a piece

of cord or a pair of tongs, and no matter whether they break the tooth, the alveolus, or the jaw! The result is that scientific surgery in this branch is rare, and as Heaven seems to take care of the fools who do not know enough to take care of themselves, much of this dental butchery has no serious result. On the other hand, the mouth is often disfigured for life. We find patients, who have been in those abbatoirs, with splintered sockets, torn gums and lips or tongue, inflamed mucous membrane, and, instead of a uniformly healed ridge, one of depressions and deformity. For this reason, I do not favor the use, in cases where extraction is seen to be difficult and prolonged, of anæsthetics which oblige us to hurry the operation.

I regret, Mr. Chairman and gentlemen, that I have been obliged to limit my remarks to these few pages, as I feel sure that they must touch upon the daily observation of each one of you, as well

as of myself.

Lycoperdon for Alveolar Hæmorrhage.*

By C. Brewster, L.D.S., Montreal.

I have been requested this evening to address to you a few words on the subject of lycoperdon as a styptic for arresting alveolar hæmorrhage Like a great many other things, this material is not "new under the sun." It is a growth of nature, to whom we owe so many of our best remedies, and is found in most countries. It is one species of a very large family, however; and though most of the different kinds of the lycoperdon are useful as styptics, there is one special kind that is better than all others. It, however, takes considerable experience to discern the good from the indifferent. Lying in the fields for any great length of time, exposed to the various changes of atmosphere, it is subject to a certain deterioration which is only detected by careful examination. Fully a fourth of what I have had collected for me I have been obliged to throw away as useless.

As quinine in its own department—itself one of Nature's own special remedies—stands pre-eminent for its curative powers over all competitors; so, too, lycoperdon will be found supreme in its curative powers over all other styptics for the arrest of alveolar hæmorrhage. One of its peculiarities is its healing power. Plugging the alveolar cavity with any of the other known styptics, such as perchloride of iron, tannin and many other well-known

^{*} Read at Vermont State Dental Association.

remedies, too numerous to mention, is invariably followed, after the bleeding has been arrested, by much inflammation and severe pain. When, however, we use the lycoperdon for plugging the cavity, we find the very opposite effect is produced, the wound instead of presenting an angry, irritated appearance, and healing up very slowly, shows every inclination to heal by first intention, and not only that, but it shows a decided tendency to heal more rapidly than under ordinary circumstances. This can be easily proved by taking a case where two teeth have been extracted from the same mouth at the same time, and plugging one of them with lycoperdon and leaving the other to the usual process of nature. It will be found that the cavity that has been plugged will heal the fastest. Fortunately alveolar hæmorrhage is not of very frequent occurrence, but unfortunately it has a bad habit of springing itself on a dentist at the most unexpected times, and often when he is not prepared with the proper remedies to meet the case, his perchloride of iron has evaporated or looks as though it has gone bad, his tannin he can't find, and so on, and so on. Somehow these bleeding cases have a bad habit of coming on in the night, or some other awkward time.

I have forgotten where I met the historical statement that when Cæsar landed in Britain the soldiers staunched their wounds with the puff-balls they found in the fields. In 1853, Dr. Benjamin Ward Richardson experimented with the form of fungus called lycoperdon giganteum, having been led to do so by witnessing its use to stupefy bees before robbing hives, a custom in use centuries ago in England. Dr. Richardson found that, exposed to heat the fumes produced anæsthesia, and from 1853 to 1860 he thus narcotized more than one thousand animals, also making himself unconscious by its use. He recommended its revival as a styptic in alveolar hæmorrhage, but, for some reason unknown to me, it was not popularized. I am disposed to believe that it may have been due to the fact that the species of fungus with which he experimented, the lycoperdon giganteum, was not the best; and it is possible, too, that the decrease of want of contractility in the bloodvessels, and especially of alveolar hæmorrhage, due to the more general use of fruits and better hygienic knowledge, made the matter of less importance to him than it was thirty years ago. There are still, however, very frequent cases of hæmorrhage. all cases of anæmia, where the fibrin is in inefficient solution, and the blood itself is of feeble coagulating power, the vascular trunk will have feeble, contractile power, and hæmorrhage is apt to occur after tooth extraction.

Of course in marked hamorrhagic diathesis, or when excessive bleeding depends upon some previously existing disease, it is wise to avoid or defer surgical operations in the mouth, if possible. The regulation of diet and the constitutional precautions are outside the province of the dentist, and should be relegated to the family physician. However, when we meet with persistent hæmorrhage in our office, one of the first things to do is to discover if the flowing blood is a blood that will coagulate. If a little is caught in a spoon, and the fibrin is seen to clot in three minutes, the vascular or mechanical cause will disappear of itself. But if the blood will not clot, we can rarely, if ever, fail by plugging the socket with the lycoperdon. I have seen failures from perchloride of iron, tannin, and the other styptics of the pharmacopæia. I have known perchloride of iron to be used at the boiling-point with no effect; and not long ago a case occurred in Montreal, one of spontaneous bleeding from the gums, in which no extraction had been performed, and notwithstanding the ligaturing of the carotid by one of our best surgeons, Dr. Roddick, the patient died.

Before passing altogether the anæsthetic properties of this fungus, I may mention that some years ago experiments were performed in Montreal, by Dr. Beers, by placing kittens in a chamber, to the outer surface of which there was a small iron box perforated beneath, and having a pipe opening into the box above. After freely distributing the fumes through the chamber, a kitten was put in. In six minutes it was insensible; remained thus for twenty minutes, having its ears clipped and otherwise treated without consciousness, and afterwards recovering and enjoying a good drink

of milk.

If you inhale the lycoperdon through a hookah pipe, letting the fumes first pass through potash water, to clear them of carbonic acid, its effect is more lasting than chloroform. As a styptic in alveolar hæmorrhage, its effect is instantaneous. By removing anything in the way of thickened blood from the alveolar sockets, and opening the cellular tissue integument which invests them, bits of the fungus can be easily pressed in with the finger, and a piece of cork, spunk, lead or even cotton placed on top of it, and the jaws closed, and the patient kept quiet, cool and erect. It is wrong to let the patient lie down, or to give any alcoholic stimulant, as the object is to quiet the system.

I wish to draw attention to the fact that I have found the greatest virtue to lie in the genus lycoperdon bovista. The genus giganteum is the largest and easiest obtained; the bovista is small and scarce. The former is considered a distinct species, but the styptic properties of the bovista are much superior, containing a large proportion of phosphate of soda. It occurred to me to select the bovista, and medicate it with carbolic acid and camphor, by which means I have removed certain objections to it, and made it antiseptic as well as

styptic.

I am indebted to Mr. Hoffman of the Geological Survey of Canada, for assistance in obtaining the following analysis of the ash of bovista gigantæa. Mr. T. Nettleford, F.C.S., England, who made the analysis speaking of the peculiar stalklers fungi growing close to the ground, infers that they collect the mineral matter from the soil:

l'	er cent.
Dry substance at 100 C	8.35
Water	91.65
Ash	0.571
Ash on dry substance	6.36

Analysis of the ash. Calculated on plans calculated on residue.

	Per cent.	Per cent.
Resoluble residue in hydrochloric acid	0.000	
Alumina	0.107	15.66
Magnesia	0.000	2.93
Sulphuric acid (H. 2 So. 4)	0.060	8.79
Silica (Sio 2)		9.44
Lime (Cro.) mere traces		72.18

It is noticeable that phosphate of soda was once largely used to arrest hæmorrhage, and it appears that the styptic properties of the puff-ball is due to the excess of this substance.

Dr. A. G. Johnston presented a very interesting paper at the December meeting of the Odontographic Society on the subject of "Arsenic." He prefers to use in devitalizing pulps the following formula:

Arsenious acid.......... gr. xx. Hydrochlorate of cocaine.... gr. xxv. Lanolin......q. s. ft. paste.

Keep the preparation in a large, open-mouthed vessel.

He emphasizes strongly the necessity of seeing that inflammation is reduced as much as possible before applying the devitalizing agent. This he accomplishes by puncturing with a sharp-pointed brooch, after having applied the dam, dried the cavity and applied cocaine (20 per cent.) until sufficiently obtunded. As an anodyne he then applies a pledget of cotton saturated in eugenic acid. In applying the devitalizing paste he covers it with bibulous paper, and flows over this a thin cement so as to produce no pressure. Dr. Johnston points out that arsenic should not be used in temporary teeth, and protests against the abuse of the drug in our dental colleges, where, he says, it should be applied only under the immediate supervision of the demonstrators.—Dental Review.

Translations.

From French Dental Journals.

By J. H. BOURDON, L.D.S., Montreal.

Man is born without teeth, hair and delusions; dies without delusion, hair and teeth.—Alexandre Dumas, Art Dentaire.

A nurse taking "Bob" to a Zoological Garden, in presence of an elephant he became anxious to know what the elephant's teeth were made of. The nurse answered, after reflection, "of old pianos."—Art Dentaire.

NEW IMPRESSION CUP.—Mr. J. D'Argent, at the Odontological meeting in Paris, presented a new impression cup. It is double in its construction, leaving a vacuum between the upper and lower flooring. In taking an impression with compound a current of cold water is passed; in twenty seconds the impression is hard. With this new device the operation is done quickly and there is less drawing.—L'Odontologie.

Mr. P. Dubois gave a very interesting clinic in the way of filling teeth with melted glass. He proceeds as follows: The cavity of tooth is prepared as usual, less the undergroove. An impression is taken with a piece of William's Platinized Gold, No. 60; it is pressed into the cavity with absorbent, then burnished with rotary burnisher. If it happened that the foil would burst in burnishing, it would be of no importance, because the heat given by the Bunsen burner does not lignify the mass intended for the obturation, but comes as a soft paste, therefore it cannot pass through the fissure. When the impression is taken, it is carefully brought. out, having the shape of a capsule, into which you place a piece of broken glass. Instead of using Richter powders, Mr. P. Dubois uses white glass as used for enamelling clock dials or jewelry. He claims that with this he makes the work in less time than with the Herbert or Richter systems. The capsule held over the Bunsen burner, the glass will soften readily and take the form of the impression. When cold the gold foil is removed from the glass, then adjusted into the cavity—if it were too large, it is ground of. Being satisfied that the inlay is well placed into the cavity, the undergroove is made, then the glass is held in place with cement. Mr. P. Dubois claims that this operation can be done in fifteen minutes from the time the cavity is prepared. At a meeting he inserted in a lateral incisor a glass filling, all those present were delighted in seeing the work; also for its application and similitude compared with adjoining tissues.—L'Odontologie.

Proceedings of Dental Societies.

Vermont State Dental Society's Nineteenth Annual Meeting, Brandon, Vermont, March 20th, 21st, 22nd.

The regular annual meeting was this year held in Brandon, and as usual was an unqualified success. As it was an all-day journey to reach the little Paradise of the hills, there were not as many "Canucks" as was expected, and quite a number of the members were absent nursing doses of la grippe in bed.

The President, Dr. Wright, called the meeting to order.

After the various reports were read and passed, the papers were

taken up successively as follows, and were well discussed.

We are glad to be able to give most of our space in the "Original Communications" to several of the papers, though we believe that the complete official report will appear in our worthy contemporary, the Ohio Dental Journal.

On behalf of the Dental Association of the Province of Quebec, Dr. Globensky invited the Society to hold the Twentieth Annual Meeting, March, 1896, in Montreal, which invitation was accepted.

On the evening of the 21st the annual banquet was held at the Hotel Brandon, when the most delightful reunion of many years occurred, doing justice to the splendid liberality of Mr. F. E. Towne, the proprietor of the hotel, and showing that he did not need to send to Paris for a *chef*. In fact, Mr. Towne personally vied with Dr. Wright and the other officers of the Society, in making the visit to Brandon ever memorable. The music was voluntarily supplied by the Brandon Orchestra, of which Dr. J. B. de Lafleur is leader, and rendered several pieces with exquisite taste.

Dr. and Mrs. Wright showed a very handsome bit of hospitality in a general invitation to their charming home, between the hours of six and eight, on the evening of the banquet. The scene was one of richness and refinement; a memory of many lovely flowers and several lovelier faces, and a bright, warm welcome. There are cold critics who never want to let in social sunshine upon the dull routine of a convention. They would have been cured forever if

they had been at Brandon.

The following were elected officers for the ensuing year: President, Dr. S. O. Blanchard, West Randolph; 1st Vice-President, Dr. F. P. Mather, Chester; 2nd Vice-President, Dr. C. S. Campbell, St. Albans; Treasurer, Dr. W. H. Munsell, Well's River; Secretary, Dr. Thos. Mound, Rutland. *Executive Committee*—Drs. I. A. Robinson, Morrisville; K. L. Cleaves, Bennington; H. Turrill, Rutland. State Prosecutor, Dr. G. W. Hoffman, White River Junction.

Abstracts.

By GEO. S. MARTIN, D.D.S., Toronto Junction.

BLEACHING TEETH.—Saturate the dentine with strong sodium peroxide, followed by treatment with dilute hydrochloric acid to neutralize the alkali. Wash with hot water.—E. C. Kirk.

Hot water, injected drop by drop into the socket, will often arrest obstinate hamorrhage. Water so warm that it causes pain to insert the finger in it will be tolerated in this way.—Julius Schiff, jun.

SHELL CROWNS.—In stamping the cusps of shell crowns with the "Morrison Outfit," use a lump of wax with cotton over it, instead of shot, as directed. This gives a better contour to the sides of the crown.—W. G. Brown.

SMOOTH MODELS.—After getting the impression in plaster, give it a coat of shellac varnish, not too thin. After the varnish is perfectly dry, instead of oiling sprinkle powdered soapstone (or French chalk, so-called) over the impression; then, with a soft brush rub every part of it thoroughly, finally shaking out the surplus. Mix the plaster thin and pour, tapping the cup gently until the plaster commences to set.—Ohio Journal.

"Within the last year I have changed my mind in regard to a banded crown. I once thought that the banded crown was much superior to the unbanded porcelain; but experience, the true teacher, has taught me that a root properly crowned with a Logan is far superior to any banded crown. I was helped to this conclusion not only by my own failures, but by the failure of others as well."—Dr. W. A. Cummings, in Pacific Coast Dentist.

Dr. J. Taft has an article in the *Dental Register* on the "Shedding of the Temporary Teeth." After citing the various theories by which this rather obscure process is accounted for, he gives as his opinion that absorption of the roots is a purely physiological process. Between the permanent crown and the temporary root is found an intervening, highly vascular tissue, these two hard surfaces never being found in contact in a normal condition. The root of the temporary tooth is not removed when the crown of the permanent is absent, or its growth arrested, or is situated far from the root. If this intervening vascular body or absorbent body be absent from any cause, the root is not absorbed.

A BROKEN PLATE-HOLDER.—A good method for holding a broken rubber plate in position while it is being waxed up, is to take a round tin box four inches in diameter and two inches deep, with a perforated bottom. Fill this box nearly full of very fine shot. Place the pieces of broken plate in position as they should be, then press down into the shot, drop on the hot wax, and hold box under stream of water to cool. The water will run out through the perforations in the bottom.—F. E. Buck, in Items of Interest.

To Deoderize Iodoform, Creosote and Guaiacol.—Attention is called by a German dermatological journal to the fact that the odor of iodoform, creosote or guaiacol upon the hands can be overcome by washing with linseed-meal. Articles having an odor of iodoform may be washed in tar-water, to which oil of wintergreen has been added. The taste of pills of creosote may be disguised by means of a little coffee. The odor of iodoform or guaiacol in rooms can be dissipated by burning coffee.—Western Druggist.

In a strongly-worded article in the February Dental Review, entitled "How Shall We Convince Our Patients that We Are Human?" Dr. M. R. Harned discusses the universal dread of dental operations amongst our patients. He claims that it may be counteracted by humane treatment to a very large extent. a little cocaine solution in very many operations will render them painless; for example, in applying the rubber dam where pain is to be expected, putting on a clamp, or fitting a band for a crown. In separating teeth, it is done very much more painlessly, in his opinion, by using a separator and filling at the one sitting. rubber dam, he says, is often applied unnecessarily in treating teeth, and applying arsenious acid where it would be far more humane to use a saliva ejector and do without the dam. In applying an arsenical dressing, he objects to the exposure of the pulp so thoroughly as to produce bleeding, as this is unnecessary, except in case of front teeth where there is congestion.

The ambition for a young man to cultivate is that which urges him to accomplish something for the profession that no other man has ever been able to accomplish. Let him take some problem which to-day is puzzling the profession, and let his ambition inspire him to labor unceasingly for the solution of that problem. If he succeeds, his name is linked indissolubly with the advancement of his profession; and if he does not succeed in whole, he will at least have left his imprint on the scientific progress of the question, and his work will eventually count for just what it is worth. No man may labor intelligently in a rapidly developing profession like dentistry without accomplishing something of real value to

humanity, and without bringing his name into fair repute. He may encounter disappointments, discouragements and moments of the most disheartening depression; he may be criticised unjustly, and even harshly; but sooner or later, if he sows earnestly and profitably, so shall he also reap.—Editorial in Dental Review.

COBALT AS A PULP DESTROYER.—Dr. C. N. Johnson, of Chicago, in a paper read before the New Jersey State Dental Society, and printed in the December Cosmos, advocates the use of cobalt as a devitalizer of tooth pulps. It is his custom to allow the agent to remain sealed in the cavity one week. In the case of anterior teeth, he usually removes it in twenty-four hours for fear of discoloration, although he believes cobalt will be less likely to discolor a tooth than arsenious acid. The pulp should be well exposed to the action of the agent, and care should be taken in sealing the cavity, preferably with a cement. Dr. Johnson believes in absolute alcohol for dehydrating pulp canals, and considers dryness a sine qua non to successful treatment. He is opposed to over-treatment, believing that continued operative interference often results in irritation, which prolongs the disease. He believes in economy of time, both to patient and operator, consistent always with the most thorough work.

WEIGHTS AND MEASURES.—The following rules for the conversion of ordinary weights and measures into metric weights and measures will be found useful in practice and in the reading of medical and pharmaceutical works or papers, says the American Weight equivalents: To convert grains into Therapeutist. grammes, multiply by 0.065; to convert grammes into grains, multiply by 15.5; to convert drachms into grammes, multiply by 3.9; to convert ounces (avoir.) into grammes, multiply by 28.4; to convert pounds (avoir.) into grammes, multiply by 453.6. Measure equivalents: To convert cubic centimetres into grains, multiply by 15.5; to convert cubic centimetres into drachms, multiply by 0.26; to convert cubic centimetres into ounces (avo'r.) multiply by 0.036; to convert pints into cubic centimetres, multiply by 473; to convert litres into ounces (avoir.), multiply by 35.3; to convert gallons into litres, multiply by 3.8.—Southern Dental Journal.

A SURVIVAL.—In Vienna an old man named Karl Edelmoser, the proprietor of a shaving saloon, and well known throughout the whole district also as a tooth-operator, has had to appear before a criminal court to answer a charge of malpractice. The indictment urged that Edelmoser had for many years been in the habit of extracting teeth on a very elaborate scale. The fee appears to have been 30 kreuzers (about one shilling). Edelmoser explained to

the judge that he felt justified in extracting teeth as he possessed a surgical diploma, which he then produced. The judge explained that the yellow document had been obsolete for some time in consequence of later legislation, and the defendant must have been well aware of this. The operator further urged that he had been in the employ of a certified dentist for twenty-three years, and thus attained great skill; but the judge held this did not qualify him to practise dentistry. The complaint of the police district dentist laid against the defendant was that he had extracted a decayed tooth with a dirty instrument for a cook, and this resulted in periostitis. The judge ordered Edelmoser to pay a fine of 15 gulden (30 shillings), or in detault three days' imprisonment, and the same sum as compensation to the patient.—British Journal of Dental Science.

Dr. William W. Belcher, in a paper read before the Union Dental Convention held in Buffalo in October, and printed in the Dental Practitioner and Advertiser, discusses the question of the relation of nitrous oxide and asphyxia. He has proved by many experiments that asphyxia and the effects of inhaling nitrous oxide are one and the same. This being granted, it is dangerous to anyone having heart or lung trouble. It takes less of the gas to produce unconsciousness late in the day, when the vital forces are low, than in the morning. The nice cloth-covered tubes on our gas apparatus serve only to hide leaks and imperfections in the rubber. This will often account for failure. "Gas, carefully administered, is the safest agent in use for producing unconsciousness. It is asphyxiating, and should be used with caution. Remember that life rests upon a tripod formed by innervation, circulation and respiration; and the reciprocal action of these functions are demanded for the maintenance of life—death ensuing upon their cessation. No man has the right to jeopardize the life of a fellow-being for a minor operation, such as the extraction of a single tooth." The late Dr. Atkinson once said of anæsthetics, "They are of the devil!" and he came very close to the truth. Remember that

"Sleep and death are twins of winged race,
Of matchless swiftness, but of silent pace."

FAILURES TO BE AVOIDED.—(1) Neglect to remove calculus and to properly care for the gums. Many, when they attempt to do this, fail to do it thoroughly, fail to remove all the deposits beneath the gums. Frequently they overlook deposits and pockets on the proximate surfaces of the teeth. (2) Neglect to study the lines of orclusion before building up to restore the lost portion of a tooth, that it is built too high, or not high enough, or not in proper form. (3) Occluso proximate fillings are subject to greater strain and require firmer anchorage where situated upon the mesial side

of lower teeth and distal side of upper teeth than when on distal of the lower or mesial of the upper. This, because of natural occlusion and backward movement of the lower on the upper in mastication. (4) Neglect to keep proximate fillings dry with rubber dam in place till well polished and closely examined. (5) The long-continued pressure of packing gold, to make a large filling, drives the blood somewhat from the peridental membrane, and the root of the tooth is driven more closely into its alveolar cell. The filling may be ground so as to just escape occluding force, or it may just touch an opposing cusp. Reaction setting in, the peridental blood-supply is restored, perhaps increased—consequence, the tooth is elongated (apparently), the filling "strikes" and the patient may have a "sore" tooth, or the safety of the filling may be jeopardized. (6) Neglect to grind off fillings on the occluding surfaces, from time to time, to correspond to the wearing away of the adjoining tooth substance. (7) Many fillings are closely adapted at the margins when finished but as they are worn or ground down in course of time they leak, because they were not closely packed against the walls all the way up.—Dr. Townsend, in Items of Interest.

Selections.

Rubefacients and Vesicants.*

By A. W. HARLAN, M.D., D.D.S., Chicago, Illinois.

When I was urged to present a short paper to the members of this gathering, I did not fully make up my mind to write upon the above topics, as I had something more practical on hand, but after a time I concluded that occasional practicability was all that was needed to make some subjects interesting.

You are asking of what value to dentistry a consideration of reddening and blistering will be to busy practitioners? I will try and answer your question. There are many conditions requiring the use of a rubefacient, and not a few where a blister is of immense value. It is not necessary, and it would defeat the effect of these brief notes, if an attempt was made to write a full paper on counter-irritation. My opinion is that rubefaction and vesication, as remedial measures, are not taken advantage of by dentists sufficiently often to make them familiar with their objects in medicine.

^{*}Read at the Union Meeting of the Fifth, Sixth, Seventh and Eighth District Dental Societies, held in Buffalo, October 30 and 31, 1894.

What is a rubefacient? This is the definition of Dunglison: "Rubefacient; producing redness, a medicine which produces redness of the skin. The action is called rubefaction, a gentle, local irritant. Vesicant; a blister, vesication, the action of a vesicant, the formation of blisters, vesicating blister, epispastic. Blister; vesicle or vesication, from vesicatories or other causes, also vesicant, vesicating; a blister plaster, substance which when applied to the skin irritates it and occasions serous secretion, raising the epidermis and inducing vesicles, as cantharides, mustard, ammonia, etc. Blisters are used as counter-irritants. A blister applied for a few hours to produce this effect is termed a fly-blister. petual blister is one kept open by appropriate dressing." The latter definition is also from Dunglison. Perhaps the simplest case of dental disease is pulpitis. Of what value would rubefaction be to the patient? Local anodynes and even local anæsthetics often fail to give relief, and the pulp is doomed to die from lack of appropriate measures. In many cases of this nature the application of hot water to the neck and above the ear on the affected side, by means of a few thicknesses of heavy towelling (six or eight thicknesses) soaked and partially wrung out, will prove efficacious, if continued from five to ten minutes. In nearly all cases of pain around erupting third molars, the use of water about 120° F. to 130° F., covering an area of from four to six inches from the focal point, will give the necessary relief in a few minutes. The direct application of a small jet of water in the mouth on the inflamed surface is both painful and injurious, as gentle unloading of the engorged vessels is not accomplished in this manner.

For minor ills of the gums (in pyorrhea), rubefaction may be accomplished without vesication by using a saturated solution of menthol in alcohol, or even less than this, down to a ten-per-cent. solution. Oil of peppermint, oil of turpentine or oil of cloves will produce reddening, and when used over a large area will often so alter the blood-current that there will not be anything more than swelling, without suppuration. Rubefaction may be produced with chloroform, camphor, and aqua ammonia. Mustard and capsicum are also used for this purpose. It must be remembered that the object of rubefaction is to draw the blood from a circumscribed inflamed area, and fill other unstimulated points, giving nature an opportunity to recover. I have been surprised and grieved to find that rubefaction is practised on too small a territory, not sufficient to give the desired relief. Estimated that an inflamed spot is one-half inch square, the rubefacient should cover ten times this area in a locality which will direct the flow of the blood elsewhere and relieve the tension on the arteries or arterioles. In acute pericementitis, in addition to rubefaction, it may be necessary to produce vesication-blistering. Many agents are used for this

purpose, none of them very nicely or in appropriate places. A blister to relieve pericementitis in a superior central incisor should be made over the roots of the bicuspids, and the gingival margin of the gum, around the central incisor, should be painted at the same time with compound tincture of iodine. The blood-supply will be deflected and the resolvent effect of the iodine will soon be. felt around the apex of the root. The gum must receive at least two paintings. This rule applied to all such cases will give much cause for congratulation from your clients. Ammonia, capsicum. cantharides or black mustard oil will produce blisters. Carbolic acid will produce a poor blister. Do not use zinc chloride for this purpose. A blister will do no good after the formation of pus around the apex of the root. Rubefaction may do something to alleviate the pain, but a blister increases it. Rubefaction and blistering for inflammation of the gums and the peridental membrane, facial neuralgia, as well as the pulp of a tooth, will be more efficient than leeching and purging.

A modification of Mayer's hammer may be used with good effect for rubefaction. Mayer's hammer is a steel disk dropped in boiling water before it is used on the mucous membrane or the skin. The one I use is about the size of a copper cent, and twice as thick, with a handle that is screwed into it while it is in the water; by applying this gently over three or four inches of space, great reddening

is produced.

What the patient needs is a new sensation; this he gets with a blister or a rubefacient. When you are about to produce rubefaction or vesication, do it with your whole soul. Do it well; do not be afraid. Use blisters in inflammation, and rubefacients in congestion or stagnation. An ugly blister is not needed, as it will cause sloughing, and this is unnecessary around the mouth or on the face.—Dental Practitioner and Advertiser.

Ambition.

Ambition in an individual may be either his bane or his benison. It may lift him to an honored niche in the temple of fame where his record will be written with that of the immortals, or it may smother him into oblivion or ridicule by the reflex of its own misspent energy. Ambition which is honorable, upright, unselfish and above-board is a laudable quality for one to possess and to cultivate, but ambition which seeks aggrandizement at the expense of honor, which attempts to lift up the individual through the process of pulling down someone else, is a quality that every professional man should spurn as beneath his dignity.

There are ambitious men of both kinds in the dental profession. There are men who work on year after year with a laudable ambition not only to make a mark for themselves, but to elevate thereby the dignity and reputation of their profession. There are others—more's the pity—hose sole aim seems to be to boost themselves above their fellows, irrespective of method or merit. And a lamentable phase of this matter reveals itself in the propensity some of these men have for attempting to belittle others. We have in mind men who apparently stand well in the profession, and who certainly do stand well in their own estimation, who never lose an opportunity of saying—or intimating—something derogatory to their fellow-practitioners behind their backs, more especially if those practitioners are men of reputation in the profession.

It is said that "death loves a shining mark," and so assuredly does the unduly ambitious man when he wishes to foist his own abilities before the world at the expense of someone else. will select men who are claiming the attention of the profession everywhere—men who are recognized for their ability and genius. and he will point out adroitly and insinuatingly to a choice coterie of friends some very serious limitations in the great men that he avers the profession generally are not astute enough to perceive. In this way he seeks not only to gain credit for greater insight than the majority of the profession, but hopes to himself rise on the wave which he has created for the submergence of his more worthy colleague. We have seen too much of this back-handed undermining by men who ought to be above it. Surely "ambition should be made of sterner stuff" than this. A man never yet built himself a worthy and permanent reputation based on the ruins of others—especially when those ruins were created by his own hand.

The ambition for a young man to cultivate is that which urges him to accomplish something for the profession that no other man has ever been able to accomplish. Let him take some problem which to-day is puzzling the profession, and let his ambition inspire him to labor unceasingly for the solution of that problem. succeeds his name is linked indissolubly with the advancement of his profession, and if he does not succeed in whole he will at least have left his imprint on the scientific progress of the question and his work will eventually count for just what it was worth. No man may labor intelligently in a rapidly developing profession like dentistry without accomplishing something of real value to humanity, and without bringing his name into fair repute. may encounter disappointments, discouragements, and moments of the most disheartening depression—he may be criticised unjustly and even harshly, but sooner or later if he sows earnestly and profitably so shall he also reap.—Dental Review—Editorial.

The Question Drawer.

Address all correspondence connected with this Department to Dr. R. E. Sparks, Kingston, Ont., Can. Matter for publication should be in the hands of the Editor not later than the 10th of each month, and must have the writers' names attached, not necessarily for publication, but as a guarantee of good faith.

- 7. Q.—A person comes to have a rubber plate refitted; it is very loose; has been worn ten, fifteen or twenty years; teeth all right; articulation all right. What will be the best to do in such a case?
- (a) After taking a perfect impression in plaster and securing cast, with a saw remove the palatine portion of the plate to within one-fourth of an inch of the teeth; then file down the outer margin as close to the teeth as possible; place the remainder upon the cast and wax. Invest in flask, and when hard, after washing out the wax, place over the stove of vulcanizer and heat up thoroughly, and, with a strong pair of pliers, grasp the one end of the old rubber and it will leave the teeth readily. If any of them draw out of the plaster, replace, and, after removing all traces of the old rubber, pack and vulcanize as usual. I frequently remove the teeth and cleanse by boiling in commercial nitric acid, which will remove all traces of the old rubber and any traces of organic matter or stains from them.

W. A. ROBERTSON, Crookston, Minn.

(b) Take impression of the mouth with plaster, and make a new plate, using same teeth.

R. H. ROBERTSON, Portage La Prairie, Man.

(c) Take a good plaster impression of the mouth (either jaw), and proceed the same as you would in making a new plate until you get your pattern plate. I prefer gutta-percha for the pattern plate. Try in the mouth and trim to the desired width; now take the old plate of teeth and file the old rubber off to near or quite to the gum sections on the labial side. If upper, take a fine saw and cut out the palatine portion to within one-fourth of an inch of the pins in the blocks; it will then look like an under plate; now clean and scrape the gum surface of the remaining plate containing the teeth, and drill shallow holes in various directions to assist in retaining the new rubber; now, if you wish to give a little more length, so that the jaw will not come too near, add another thickness of your pattern plate over the alveolar border; that done, warm your pattern plate on the cast enough to allow

you to press the prepared plate and teeth to place; and when your pattern plate is cold try it in the mouth and see if the occlusion be right. If not, note the defect, then warm carefully, enough so that the plate and teeth will move to their proper occlusion when replaced in the mouth; now place the plate and pattern on the model and wax up in the usual way. The balance of the work is the same as in ordinary casing and vulcanizing. Sometimes in preparing the old plate as above described it may be desirable to remove all the old plate before adding the new rubber; if so, I take a small burr and cut the old rubber down so as to expose the heads of the pins; cut around the pins as much as you can without injury to them; then, when the pattern plate is removed, heat the case to the boiling-point and you can remove the remains of the old rubber without injury to the blocks, and they can be cleaned and the joints protected as in new work.

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C. H. ECCLESTON, Oxford, N.Y.

- 8. Q.—What is the reason in some cases the bone wastes away in front upper jaw until it is as soft as the lip? Could a plate be made to remain steady in such a case?
- (a) Due to one of three causes: (1) Imperfect occlusion, wherein lower incisors do most, if not all, of the work of masticating, and the force is too direct upon the circumscribed part of the superior arch—a mechanical cause. (2) To absence of inferior bicuspids and molars, and mastication restricted for years to the circumscribed part of the superior arch between the first bicuspids mechanical cause. (3) Occurring as a constitutional cause from syphilis, rheumatism or struma. Have seen it in cases which I thought due to repeated pregnancies. One case associated with locomotor ataxia, ascribed to sclerotic changes in the nuclei of origin of the trigeminal nerve. In these cases, however, extends over entire maxillary. If the mucous membrane hangs in a soft and long fold, it may be sprayed with chloride ethyle and clipped neatly with surgical scissors, and treated like any other wound. The membrane has extraordinary power of resistance and heals by first intention. No reason whatever why plate would not then be easily fitted. A large flabby mass would impede good fit.

W. G. B., Montreal.

(b) This is usually met with in cases where the back teeth have been out for a length of time and the front ones have been used for purposes of mastication, the condition being brought about by the undue pressure. Yes; if the impression is taken as follows: With a spatula fill up the space between the lip and process with soft plaster, and then take the impression in plaster as usual, being careful not to leave it too stiff, and using pressure upon the outside

of the lip to resist any tendency to displace the soft fold of gum from a natural position.

W. A. ROBERTSON, Crookston, Minn.

- 9. Q.—Sir Benjamin Ward Richardson said, "Nitrous oxide only produces asphyxia, and that asphyxia is the first stage of death." Turnbull, Sansom and other authorities condemn it. What is the difference between anæsthesia and asphyxia?
- (a) By asphyxia is meant paralysis of the respiratory centre in the medulla, due to excess of carbonic dioxide in the blood. Anæsthesia is a condition of insensibility to feeling, or to acute pain. Some anæsthetics, as, e.g., chloroform, cause death by cardiac paralysis; while others, as, e.g., ether, by asphyxia.

KENNETH N. FENWICK, M.D., Kingston, Ont.

(b) Anæsthesia is deprivation of the sense of feeling from any cause. The body may at the same time be well supplied with oxygen. Asphyxia is deprivation of the tissues of the body of oxygen, one of the results of which is the condition of anæsthesia, when the asphyxia is carried sufficiently far.

L. TESKEY. Toronto.

- 10. Q.—Is nitrous oxide gas injurious to pregnant females?
- (a) Have never seen any ill results, and have administered it many times; prefer, however, to relieve pain without extraction in such cases, if possible.

 W. A. ROBERTSON, Crookston, Minn.
- (b) Nitrous oxide, of itself, is not known to have any effect upon the uterus; but the condition of anæsthesia, brought about by nitrous oxide, partakes largely of asphyxia, and this latter condition (asphyxia) is capable of producing active contraction of the gravid uterus. It therefore follows that it cannot be safe to produce the anæsthesia by nitrous oxide during the period of gestation.

 L. TESKEY, Toronto.

Questions for May.

- 11. Q.—A central incisor broken; persistent discharge through root; no fistulous opening; evidently a sac formed. What best treatment?
- 12. Q.—What is pus? and what difference between healthy and unhealthy pus?
- 13. Q.—What is blood poisoning? and can it occur from healthy pus?'

Correspondence.

To the Editor of the Dominion Dental Journal:

SIR,—In reply to query of "Practitioner" in the March number of your JOURNAL, re "the extraction of ulcerated teeth," permit

me to have my little say.

I certainly believe "Practitioner" has the correct method. have extracted a great many ulcerated teeth, and in no case have I hesitated on account of prospective "blood-poisoning" resulting from the extraction. It strikes me that some of the M.D.'s have a fad about "blood-poisoning," "heart failure," and a few other things, which serves only to cover up a certain amount of ignorance. When it is impossible to save by proper treatment, it is simply cruelty to suffering humanity to decline to remove an ulcerated tooth while it is causing its characteristic excruciating pain, and he who offers "blood-poisoning" as an excuse for non-extraction has either dirty instruments or does not know his business. I have never had a case of blood-poisoning from extraction that I know of. It is really dangerous to leave an ulcerated tooth that cannot be saved in the mouth, as the accumulation of pus is more liable to cause "blood-poisoning" than the extraction of the If instruments are kept clean there is not the slightest Yours fraternally. danger.

MALCOLM W. SPARROW, L.D.S.

Toronto, March 28th, 1895.

Reviews.

Catching's Compendium of Practical Dentistry for 1894. By B. N. CATCHING, D.D.S., editor and publisher, Atlanta, Georgia, U.S. Copyrighted 1894. \$2.50.

This work is almost as necessary to the wide-awake dentist as his eyes. Any one of us would think anyone else an idiot who deliberately closed his eyes at a clinic. A starving man who refused to eat, or a thirsty one who refused to drink, deserves to die, unless he is insane, and then he should be forced. It needs no surgical operation to put the contents of this valuable book into the mind of any ordinary reader, and we are sure that the advantages to the practitioner will be largely shared in by his patients. The index comprises operative and prosthetic dentistry, crown and bridge work, orthodontia, dental medicine, oral surgery, miscellaneous. The book can be ordered by mail direct from Dr. Catching. It contains 306 pages. It costs \$2.50. It is well worth, at least, a dollar a page.

Editorial.

Crowded Out.

Want of space has crowded out the "Code of Ethics" and other matter, which will appear in next issue.

Examinations.

The result of the examinations in Quebec will appear in the next issue, together with matter of special interest to licentiates.

Pyrozone Caution.

Several warnings have been given as to the risk of explosion in opening the pyrozone tubes. One of the 25 per cent tubes went to "smithereens" in our office last week, leaving not a drop to tell the tale, and making a report like that from a pistol. The tube had been in ice water for ten minutes, and exploded when held in a towel while the glass was being cut. Keep it cold, open it cold in a cold room, and look out for your eyes.

Post-Card Dots.

- 26. A correspondent from British Columbia asks for information of the *Wisconsin Dental College*, now defunct, and a list of the "graduates" who bought its diploma for \$12, without attendance at lectures.
- 27. Who was the first president of the Odontological Society of Great Britain?
 - Mr. Samuel Cartwright.
 - 28. Who is dentist to Her Majesty the Queen? Sir Edwin Saunders.

In last issue the number of dentists in Montreal was placed at 24. It was a typographical error. There are about 65, with more coming.

By the way, in the list of journals the DOMINION DENTAL JOURNAL is placed among the bi-monthlies, instead of the monthlies.