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ORIGINAL COMMUNICATIONS.

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EDITORIAL NOTES ON PRACTICAL SUBJECTS.

RUBBER TUBING FOR INSTRUMENT HANDLE COVERS

BY W. GEORGE BEERS, MONTREAL.

We find fine rubber tubing, such as that used for regulating teeth, a very soft and comfortable covering for the handles of steel excavators, pluggers, and pivot and other files. It can be drawn over the instrument from the butt to the polished surface, and may be slipped down towards the point in cases where the instrument has to touch the lips or cheeks in working at cavities difficult of access. It prevents the instrument from slipping around in the fingers; absorbs moisture; saves the steel from rust; is easily cleaned; and entirely obviates the irritating effect on the fingers from the prolonged use of steel handles. In every respect it is comfortable to the operator, and in no case unpleasant to the patient. Rubber tubing may be utilized for many such purposes, such as a cover for pen handles. &c.

Another little convenience may not be unworthy of mention in these days of labor saving, and luxurious economizing, viz: a half glove or mit, to fit over the back and the palm of the hand, with fingers cut away a little below the knuckles. I find this very convenient and comfortable when extracting a large number of difficult teeth at one sitting, when the cross-cut backs of the forceps irritate the palm of the hand, and the fingers. It gives one a safer grip too, and prevents slipping in the hand. An old kid glove, nicely fitting, is as good as anything else for the purpose.

SYPHILITIC AFFECTIONS WITHIN THE SCOPE OF  
DENTAL SURGERY.,

BY THOMAS NICHOL, M. D., M. C. P. S., PROFESSOR OF PHYSIOLOGY AND  
ETHNOLOGY IN ALBERT COLLEGE, HON. MEMBER OF THE ONTARIO  
DENTAL SOCIETY.

*Read before the Ontario Dental Society, at Belleville, July 21st, 1869.*

MR. PRESIDENT AND GENTLEMEN :—I noted last evening that a number of gentlemen spoke of “the profession” and “our profession,” evidently meaning those engaged in the practice of their specialty. To those phrases I decidedly take objection, there is no such thing as the “dental profession,” for you are surgeons practicing a specialty, and therefore you are legitimate members of the medical profession—said by Lord Bacon to be the most learned of all the faculties. Let me add that the dental art almost deserves to be styled a science, while the medical science hardly deserves to be called an art. I never send my patients to a “Dentist,” I always send them to a *Dental Surgeon*. Our President to-day spurned the idea of a “price for his work,” and—unconscionable fellow—wants “fees for his operations,” and I entirely agree with him. Away with the huckstering views which tend to degradation, and continue to advance the liberal ideas which tend to elevation and progress !

Compare for a moment the education of the dental surgeon with that of surgeons practicing other specialties. Say with the oculist, who is generally led like a stud-horse about the country, and who ekes out a questionable livelihood by peddling spectacles and glass eyes. Compare them with the aurists who are generally grossly ignorant of the very delicate and important organs on which they practice, and who do far more harm than good. *Don't* compare them with the venereal surgeon who gets his morals as well as his practice from his female patients.

There can be no doubt but that syphilitic affections frequently come under the notice of the dental surgeon, and, though this class of diseases may be familiar to most now present, it may be useful to review them.

Syphilis may be defined to be an infectious disease characterized by the presence of a virus which transmits it from one person to another by a period of incubation during which the poison is latent giving no external sign of its presence in the system, and by a certain degree

of order in the evolution of its manifestations, to this may be added that one attack *generally* confers immunity against a second.

There was a time, quite within the memory of all now present, when the doctrine of the unity of the syphilitic virus was tenaciously held by the vast majority of our profession; but during the last decade a rapid change has been coming over the minds of observing surgeons, and what we used to call 'soft chancre,' 'simple chancre,' and 'non-infecting chancre,' is now denominated *chancroid*, while the initial lesion of true syphilis retains the old name of *chancre*.

The differential diagnosis of the two affections is as follows: True syphilis has a period of incubation averaging about twenty-seven days; while pseudo-syphilis has no appreciable period of incubation. In true syphilis there is usually a single lesion, while in pseudo-syphilis the lesions are very generally multiple. In true syphilis the lesion is not re-inoculable on the subject of it, while in pseudo-syphilis the lesions are almost indefinitely re-inoculable on the person affected. True syphilis is always derived from a chancre or other syphilitic lesion, while pseudo-syphilis is always derived from a chancroid or virulent bubo. The primary lesion of true syphilis is a papule of greater or lesser size, which erodes and forms a superficial ulcer, not usually involving the whole thickness of the skin or mucous membrane; while pseudo-syphilis shows itself in the form of a vesical-pustule which terminates in an excavated ulcer, perforating the whole thickness of the skin or mucous membrane. The true chancre has edges which are *hard*, sloping and closely adherent to subjacent tissues; while the false chancre has soft edges which appear to be cut with a punch, and which are not adherent to the tissues beneath. In true chancre the induration is firm and cartilaginous, sometimes resembling parchment, and this induration remains for a long time; while in false chancre there is no specific induration, though a slight hardening may result from inflammation or the application of caustic, in which case the induration shades off into the surrounding tissues and is quite evanescent. In true syphilis the serous secretion is very scanty, and there is no suppuration unless it be during the period of cicatrization, the secretion is not auto-inoculable; in pseudo-syphilis there is an abundant purulent secretion which is auto-inoculable. In true syphilis one attack gives partial protection against a second, in many cases this protection is complete; while pseudo syphilis may affect the same individual an almost indefinite number of times. The true chancre is rarely phag-

edemic, and is usually limited; while the false chancre is prone to take on phagedenic action, and is usually disposed to spread. The true chancre is less indolent than the false, which is proverbially slow to heal. True syphilis is almost always accompanied by enlargement of the superficial inguinal ganglia of one or both sides, and these enlarged glands are indurated, distinct, moveable and painless, and, moreover, they rarely suppurate, and when they do suppurate the pus is never re-inoculable; while the pseudo-syphilis is accompanied in some cases only by an adenitis which generally suppurates and furnishes inoculable pus which produces a chancroid, *never a chancre*. True syphilis is a constitutional disease, and unless retarded or prevented by specific treatment, secondary symptoms appear in from six to twelve weeks after the appearance of the sore; while pseudo-syphilis is always a local affection and cannot poison the system.

Having thus briefly reviewed the two diseases, I will now proceed to discuss the forms of them which come under the notice of the dental surgeon. In the first place then, he rarely sees a chancroid, the characteristic lesion of false syphilis, for the very good reason that it is mostly seated in the neighbourhood of the genitals and rarely appears in the face. Out of 150 cases of venereal ulcers upon the head and face all, with the exception of 5, were true chancres. Four of these exceptional cases were so imperfectly reported as to be valueless; and Ricord admits that the fifth case, observed by himself, an ulceration at the base of one of the superior incisors, is unreliable. It is, however, a remarkable fact that the chancroid may be developed upon the head and face by artificial inoculation.

In a report of 471 true chancres observed in men, Dr. Fournier found that 445 were situated on the genitals, leaving 26 to be distributed over the rest of the body. Of these 26 extra-genital chancres, 12 were situated on the lips, so that after the genital organs the lips and the mouth are the most frequent seat of the primary lesion. The peculiar induration of the true chancre always presents the same anatomical composition. Chas. Robin considers that this induration resembles the development of a fibro-plastic tissue in the thickness of the dermis; while Virchow believes it to be of a nature entirely similar to that of the gummy tumours so characteristic of an advanced period of syphilis. Prof. Baerensprung considers that the specific induration of chancre differs from the exudation of ordinary inflammation, and that it is identical with the effusions which take

place under the influence of constitutional syphilis in the various internal organs.

The *dry papule* is the rarest form which syphilis assumes on its first appearance, and, so far as I can ascertain, has very rarely been seen on the lips or mouth. It presents the appearance of a small papular patch of a brownish red colour, firm and elastic, and sometimes covered with whitish scales.

The *chancreous erosion* has frequently been noted on the lips. It is the most frequent form of primary syphilis, having been observed by Bassereau 146 times in 170 cases. It usually commences as a copper-red spot, little raised, papular and dry, which becomes covered with a crust, and finally becomes eroded or slightly ulcerated on the surface. This ulceration, which is round or irregular in shape, presents a rose-coloured surface on a level with the surrounding parts. It discharges a small quantity of serous fluid, and the base is indurated rather than deeply. Dr. Lancereaux says that its variable extent is sometimes so slight, the discharge so little abundant, and cicatrization so rapid that in the absence of the characteristic induration, it is prudent to refrain from giving a positive opinion as to its nature until the appearance of secondary symptoms. According to Bassereau, the duration of this lesion does not usually exceed two months. It terminates by the resolution of the indurated point, and cicatrization of its surface.

The *indurated chancre* is the third variety of the primary disease. Formerly it was believed that ulceration was the first symptom and that induration supervened afterwards, but the more correct view, first promulgated by Dr. Babington the commentator of Hunter is, that the character of primary venereal infection is essentially an induration which afterwards passes into ulceration. Its first aspect is that of an elevation or papule which has the size and feel of a *split-pea*, and which, we know, is the result of a neoplasm in the cellular tissue. This papule is of a reddish or dirty yellow colour, rounded and hard to the touch, and covered with greyish scales, under which a cup-shaped ulcer is rapidly developed. After an average duration of six weeks, the hard chancre enters upon its last phase, its edges collapse, its floor becomes eliminated or absorbed, granulations form, and cicatrization takes place from the circumference towards the centre. Chancres are no where more indurated than on the lips, and they are often so bulky as greatly to disfigure the face. They are usually superficial, and are rarely deeply exc-

vated unless they have been irritated. When they appear on the labial commissure they are divided into two portions, separated by a deep ulcerated fissure. These chancres have also been observed on the gums, palate, tonsils, inner surface of the cheeks, and on the tongue, in which latter position they are small and more deeply excavated than those of the lips. Paul Diday believes that the chancrous erosion is due to inoculation from a secondary lesion, and that the indurated chancre is produced from a primary lesion. The ganglia connected with the seat of the sore become indurated; these ganglia are those of the anterior and posterior sub-maxillary groups.

Primary syphilis then is not very frequent on the dental surgeon's domain, but it is otherwise with the secondary affections, so much so that Dr. Rollet states that the mouth is the great laboratory of secondary syphilis. Of the secondary affections of the skin, the only one you are apt to see is syphilitic impetigo, which often affects the commissures of the lips, where it presents a very singular appearance not seen in any non-specific eruption. The pustules are flat and of various sizes, their base of a copper-red colour, sometimes elevated, sometimes sunk in a prominent border of the same hue, while the small spots on their surface are of a greyish or greenish yellow. On the lips the pustules are sunk in a deep border of ulcerated integument, while their summits are covered with the characteristic scabs; they arrange themselves in circles or semi-circles, surrounded by the well known copper coloured glory which even laymen know to be pathognomonic. On examining the mouth, it will be noted that the syphilitic impetigo is very generally connected with mucous patches.

Mucous patches are peculiar to syphilis. They consist of elevations of a rose colour, rounded in form, the surface closely resembling mucous membrane, and they are situated near the outlets of mucous canals, especially upon the mouth and its mucous membrane. Counsel has been darkened by the multiplicity of names given to it. It has been called 'moist pustular syphilide,' 'flat pustule,' 'flat tubercles,' and 'moist papule,' but, on the whole, 'mucous patch' is the best name. Bassereau states that in 130 men affected with mucous patches, 100 were on the tonsils, 55 times on the lips, 27 times on the velum palate, 18 times on the tongue, 17 times on the pillars of the soft palate, and 11 times on the internal surface of the cheeks. In 186 women affected with mucous patches, Davasse and Deville found them in the face only five times, so that it is one of the inscrutable facts of syphilis that in men mucous patches are most

frequent in the face, and in women least frequent in that region. So far as my experience extends, I should say that it is one of the most common manifestations of syphilis in the male sex. Their form is that of a flattened circular or oval papule of a rose or violet hue. Their borders are quite distinctly marked and they never have the copper-coloured glory. Their surface is sometimes dry, but more generally moist from the secretion of a dirty fetid fluid of an irritating nature. Their consistence is soft, closely resembling that of mucous membrane. Their development takes place spontaneously, though Davasse and Deville maintain that they may arise from the transformation of a chancrous ulcer. They first appear as a red spot, which is a true congestion of the skin or mucous membrane. The epidermis is gradually raised by a small quantity of serous fluid, soon the skin breaks and reveals a bright red surface covered with a moist whitish pellicle. In the mouth they are mostly of a deep violet colour; when the epithelium is destroyed, it is replaced by a yellowish false membrane, further on the patches are ulcerated and present an uneven surface dotted with fine and abundant granulations. The red colour, soft consistence, and moist surface covered with a whitish pellicle render the diagnosis of the mucous patch comparatively easy. As to prognosis, it is one of the most benignant manifestations of constitutional syphilis; indeed, according to Bassereau, its existence is almost a guarantee against the more severe ulterior syphilitic manifestations.

Syphilitic affections of the periosteum and bones are among the latest manifestations of syphilis, and may be regarded as types of the tertiary form. They are very common, and have been observed as far back as the sixteenth century. Many observations have been made, and yet these affections are too little known, so that a more profound inquiry is urgently wanted. The syphilitic affections of the osseous system assume three forms, 1. the inflammatory; 2. the gummy; 3. that of dry caries which appears to be a true atrophy of the bone. 1. The inflammatory form affects both bone and periosteum. A neoplasm is deposited in the substance of the bone or on a level with the periosteum which forms a protuberance more or less circumscribed. These protuberances are sometimes from the first as hard as callus, they are sometimes absorbed, and sometimes definitely organized. In the latter case, calcareous elements are deposited in the neoplasm, then a bony product which has received the name of exostosis or periostosis. The peculiar characteristics of osteo-nerios-

titis is an indistinct fulness, puffy at the circumference ; this is painful on pressure, and when superficial, there is redness and heat of the skin. 2. Gummy tumours of the bony tissues are not very rare, being found both in the periosteum and in the bone itself. They present themselves in the form of small rounded tumours, little painful, of a firm or somewhat soft consistence. This substance, which is analagous to a solution of gum, is of a whitish or yellowish colour, and generally ends in softening. Soon they inflame and ulcerate the neighbouring tissues, and sometimes end by eating their way to the exterior, forming fistulous canals. 3. The dry caries, or inflammatory atrophy is characterized at first by bone pains and a slight prominence beneath the periosteum, but later it presents a gradually enlarging depression. This thinning always commences by the dilatation of the vascular canals of the bones, and everything leads to the belief that this particular lesion succeeds to a gummy infiltration of which it is only the last stage.

The symptoms connected with lesions of the trifacial nerve vary with the branch affected. There are various sensations, pains more less violent, and sometimes anæsthesia. A female patient of Lallemands, after transient syphilitic hemiplegia, had fornication and numbness of the whole of the right side of the face, as if a cobweb had been applied to the skin. A similar sensation existed in the right half of the tongue. A case related by Herard makes mention of a numbness of the right side of the nose, and of the neighbouring parts of the cheek and upper lip. The pain, which is perhaps the most constant phenomenon, generally occupies one of the lateral halves of the head. It sometimes changes to the other side, or it shows itself on both sides of the head at the same time. Some authors, as Frank and Meckel speak of syphilitic odontalgia, and the affection is quite a common manifestation of the disease. All these affections present nocturnal paroxysms, and in all of them it is necessary to know the antecedents of the patient.

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#### DENTAL INSTRUMENTS.

BY X. Y. Z.

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Benjamin Franklin made a great many wise remarks in his day, but also some that were unwise ; and perhaps none of the latter were more illogical than his aphorism, that "a man should be able to do

with a saw, that which was intended should be done with an augur." Applying this remark to the celebrated philosopher's own life, and to every branch of science and art, we see its palpable error; and it may serve as a fit text, for us herein, to say a word or two on the subject of dental instruments.

Our manual dexterity, with our various appliances, is so much oftener called into service than our simple advice, that there is no profession which has made greater advances in the improvement of its instruments and appliances, than that of dentistry. In ordinary medical life, as it is on this continent, where surgery is not as much a specialty of certain practitioners as it is in Europe, ten out of twelve physicians have a greater proportion of strictly medicinal and therapeutical cases in their every day practice, than of surgical operations; and the improvement in surgical appliances bears no comparison to the ever increasing stock for the *dental* surgery and laboratory. Without instruments the occupation of the dentist is gone.

Doubtless the misery of poor instruments has often come home to many a conscientious dentist, who has endeavoured to make fine fillings with badly adapted pluggers; whose stock of excavators has been limited to the old orthodox straights, and rights and lefts; whose key of Garangeot—dread fracturer of alveoli and maxillary—was the most frequent appliance for extracting. The improvements in the various dental instruments within the memory of comparatively young practitioners, is perhaps the best testimony to the live spirit of progress in our profession, and the enterprise of the manufacturers. The rough paths over which our predecessors travelled have been smoothened for the present generation of dentists, and by means of better instruments, labor has been relieved of much of its severity, and the average class of operations have been much facilitated. A look over S. S. White's catalogue—and still better treat, a walk through his depot—will convince the most sceptical that dentistry is a real *live* profession; and that the ways and means of working are much improved by the co-operation of the manufacturer with the operator.

It stands to reason, that though some few men may use an augur where they should have a saw, the very large majority of us are too mediocre or too impatient to climb hills, when we can get all we want in the valley. Why use old and tedious methods, when new ones are much superior in every respect? Where is the sense in sticking to an old instrument and an old principle in the present advancing

state of our profession? We were much struck with the magnificent display in Dr. White's, and the other depots, and would urge our Canadian confreres to invest in the new pluggers, excavators, &c., now in the market. The investment will pay in pleasure to operator and patient, the satisfaction of using a good article, and better opportunity to do superior work. If we want to excel, we must have good instruments, Dr. Franklin to the contrary, notwithstanding.

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## PROCEEDINGS OF SOCIETIES.

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### THE AMERICAN DENTAL ASSOCIATION.

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BY W. C. HORNE, D. D. S., NEW YORK.

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The report of the Executive Committee was then presented and adopted.

The report of the Committee on Amendments to the Constitution was taken from the table, and the report was adopted without even a reading of it.

Dr. Truman's resolution on the right of female dentists to membership was indefinitely postponed, because the Association had no right to make recommendations to local societies.

Dr. Buckingham gave notice of an amendment to the Constitution, to be acted upon next year, providing that no person who holds a dental patent, or is pecuniarily interested therein, shall be a member of the Association.

Dr. W. H. Shadoan offered a resolution donating the amount of back dues, from 1865 to 1869, to thirty-three members, who were reported by him to be in arrears, each to the amount of \$23. The resolution passed after an animated debate.

The Committee on Ethics reported, through Dr. Shepard, that they had had brought before them charges against Dr. J. A. McClelland, of Louisville, for violating Article II., Section 3, of the Code of Ethics, by placarding large advertisements on the street cars of Louisville, and by unprofessional advertisements in the papers, which were read; they therefore offered the following resolution: "That J. A. McClelland, of Louisville, be expelled from this Association."

They also reported that they found upon the records of the Association charges against Dr. C. P. Fitch, of New York, for violation of the same clause of the Code of Ethics; but they did not feel

authorized to recommend action on his case, as no definite charges or proofs had been offered.

Dr. Atkinson called to mind the remark of Dr. McQuillen at the time of the adoption of the Code of Ethics, that it was unnecessary for gentlemen, and useless for those who were not such. He did not like the idea of singling out one or two as examples and leaving all the others to go free. It was well known that Dr. Watt, who had so persistently urged the adoption of this code, had gone home and signally violated its provisions, and yet no one had lifted up a voice against him. He thought the adoption of laws of this nature peculiarly unfortunate; because they would be brought to bear unequally; while one would be made to suffer the utmost penalty, others would be allowed to go free.

Dr. Fitch asked to be heard in explanation. He said that many loose and unfounded charges were floating about against him. The sum of his offence, he said, was this: that he had advertised the public of New York in good faith that he was ready to operate at reduced prices on certain days and hours; because there was a large class of most worthy people in that city who were desirous to preserve their teeth, and could not afford to pay the current rates of first-class operators. He had done nothing to lower the standard of professional skill, but only made use of the circumstances of the case to minister to his necessities. He yielded to no man in his love for the profession, and his desire for its advancement. He had meant to do no wrong in any course he had pursued, and, whatever the action of the Association, should endeavor to maintain the character of his professional operations, and devote his efforts to the relief of humanity within the range of his practice.

On a motion being made to refer Dr. McClelland's case to the Committee on Ethics for the ensuing year—

Dr. McQuillen opposed very strongly the postponement, and was in favor of proceeding at once with the trial of this case, which was a most flagrant one. As already stated, he had objected to the adoption of a code of ethics; but since it had become part of the organic law of the Association, he demanded its enforcement. While it was mortifying to know that the Code had been violated by one who had prepared it, and was most zealous in forcing it upon the organization, yet it was not an unusual thing in the history of morals for men to make laws and then to be the first to break them. It was much better to make few if any professions, and rather exceed than fall

short of such as are made. We could, however, only deal with cases in which specific and thoroughly substantiated charges had been brought before the Association; two such were under consideration. One of these, Dr. Fitch, had abandoned the objectionable practice, and offered an explanation with the desire of making some reparation; but in the other instance the accused was openly, and in the most objectionable manner possible, pursuing his unprofessional course. The rules of the Association had been so often suspended that there could be no possible objection to doing so then, and proceeding with the trial. The person charged with the offence was present, and no injustice would be done to him, as the members would listen patiently to what he might say in defence of his course before taking action upon it. If there was one class of men in particular for whom he entertained the most profound feeling of pity (he would not say contempt, for one should endeavor to unlearn that) it was those who were so lost to all sense of propriety and decency that they could stoop to the low tricks of charlatans, and thus engage in practices which cast a stigma upon themselves and the profession they dishonor. If such as these were to be present as meet companions, it would soon make not only the Association but the profession a by-word and a reproach. What they could want in the organization was difficult to conceive, for they were not with it in spirit, and should not be of it in person. Laws promptly and justly enforced in such a case would exercise a beneficial influence upon the *morale* of the profession.

Dr. Horne stated that the clause under which Dr. McClelland was indicted required that the charges should be investigated and reported upon at the next annual meeting after that at which they were made. The Association had adopted the report of a committee which proposed to substitute a new Constitution without a word of debate. If the old Constitution were in force, Dr. McClelland had the right to a copy of all the charges and specifications, and a year to answer in; if the new one were in force, there was no provision by which he could be brought to trial.

The portion of the report in regard to Dr. Fitch was then adopted; that relating to Dr. McClelland was referred to the Committee on Ethics for the ensuing year. Drs. W. H. Morgan, C. R. Butler, and L. D. Shepard were appointed as that committee.

A resolution of Dr. Bogue's, expressing regrets at the existence of misapprehensions as to certain members (unnamed), and for the injus-

tice of an *ex post facto* interpretation of laws, was laid on the table; and another, by the same, calling for a vote of censure on Dr. Atkinson, for disregarding the rules of order, was replied to by Dr. Atkinson in a characteristic manner. The resolution was ordered to be expunged.

The Publication Committee was instructed to print the Constitution with the Transactions.

Dr. Homer Judd was then inducted as President, and Dr. Taft read an address, after which the Association adjourned to the first Tuesday of August, 1870.

#### DR. TAFT'S ADDRESS

Dr. Taft said that his inclinations would lead him to retire in silence, but that custom seemed to require an address on the occasion of retiring from so honorable a position. He tendered his congratulations on the present condition of the profession, which was in advance of anything before attained, while the future promised continued progress. The labor and efficiency which had insured this advancement had also won for the profession public interest and esteem. The responsibility of enlarged privileges and advantages is measured by ability, whether inherent or attained by slow growth and effort. We are too apt to forget that each one has a work that no other can do. Each has his individual responsibility to himself, to society, to his profession, and to God. He who is faithless to himself will not be faithful to others, for no man loves others better than himself, as a rule. Every man should endeavor to fill the ideal of the Author of his being, cultivating his talents to the highest degree. There are various incentives to this. In every man there is a tribunal that holds him to a strict account. His own comfort and welfare require that he should neither be barren nor unfruitful. His duty to others demands such self-cultivation. We are so inseparably linked together by many and strong ties which we cannot break, that if we fail to be attuned according to the infinite design, discord is the result. No man can with justice to himself afford to base his professional character and reputation upon aught but an immutable foundation. Let it be fixed upon the rock of truth, and not upon the sands of error. We all require for our growth and nourishment the best food we can get. Why then rest satisfied with the husks, and too often with offal? Let us seek and eat the pure bread of life, that we may grow to the stature of perfect men. We

are under great obligations and responsibilities to our fellow-men, to society ; and it is impossible to dispose of those obligations otherwise than by a faithful fulfillment of them. The duties that devolve upon us to the profession that we have espoused—taken for better or worse—are, that we should carefully look to its interests, and labor industriously for their promotion. He has no sympathy or patience with the professional brother who, reposing in his quiet selfishness, or reclining upon his dignity, refuses to take part in the great labor of the day. The man who does not feel and yield to the great impulses of the age, who is not fired with their spirit, belongs to by-gone days ; by some mishap his coming has been delayed a few generations. Let us lay aside all antagonisms except against error and ignorance ; we have not time nor strength for fruitless contests, for precedence and self-aggrandizement ; we should make harmonious efforts to promote the good and advance the cause of profession. It would be pleasant to take a retrospect of the past ; but it is not expedient for him who runs a race to look back before the goal is won.

His earnest desire was, and should be, that our profession, which this Association so fully represents, may take its position as one of the battalions in the great army of progress, and keep abreast with the foremost in the march, who tramp, tramp, tramp to the music of the age in the glorious consummation of the redemption of humanity from the dominion of disease and death.

(To be continued.)

#### BOARD OF EXAMINERS OF THE DENTAL ASSOCIATION OF THE PROVINCE OF QUEBEC.

The adjourned meeting of the above corporation was held on the 21st of September, in accordance with the Act of Incorporation. The meeting took place at Dr. Bernard's office.

Present, A. Bernard, P. Baillargeon, C. F. F. Trestler, J. H. Webster, C. Brewster, J. A. Bazin, J. McKee, H. Ross, M. Pourtier, W. G. Beers.

The minutes of former meeting were read and confirmed.

The certificate or license, on parchment, and the seal were presented by the committee appointed at last meeting, and after examination were duly approved of. The Board also sanctioned the action

of the Secretary in obtaining various books &c., and ordered payment to be made for all indebtedness.

An application from T. A. Venner, of Quebec, for a license without examination was granted, he having practiced over two years in this Province. Various letters were read and placed on file.

The elective officers of the Board were authorized to make any verbal and other alterations in the Act of Incorporation, not prejudicing its fundamental principles, and apply for amendment.

The Treasurer's report was read.

Mr. Beers gave the following notice of motion to be brought up at next meeting :

"*Resolved*, That the license of this Board be not granted to any applicant exhibiting show-cases and other such unprofessional means of attracting attention, or making use of quack advertisements, and that any licentiate infringing this rule shall on proof have his license cancelled."

The applications of Messrs. Duclos and Valois for examination were submitted and received. Mr. Duclos was first brought before the Board, and passed a very creditable examination. Mr. Valois also received his parchment. The candidates were examined on the following subjects :—A. Bernard, Institutes of Dentistry ; P. Baillargeon, Dental Physiology ; C. F. F. Trestler, Dental Anatomy ; J. H. Webster, Mechanical Dentistry ; C. Brewster, Dental Chemistry ; J. A. Bazin, Filling Teeth.

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#### DENTAL ASSOCIATION OF THE PROVINCE OF QUEBEC.

The annual meeting of the above society was held on the 21st of September, at 8 o'clock p.m., at Dr. Bernard's office.

Dr. Bernard, President, in the chair.

The following members were present: Messrs. Bernard, Trestler, Baillargeon, McKee, Ross, Webster, Nichols, Brewster, Bazin, Pournier, Davis, Globensky, Valois, Duclos, Beers.

Mr. Hutchinson, of the *Daily News*, was also present by invitation.

The minutes of former meeting were read and confirmed.

The Treasurer's report was read and adopted.

Dr. Wm. Patton, of Quebec, was proposed for active membership, to be balloted for at the next meeting.

The election of officers then being in order, the following was the

result :—President, A. Bernard, Montreal ; 1st Vice-President, P. Baillargeon, Quebec ; 2nd Vice-President, J. McKee, Quebec ; Secretary, W. G. Beers ; Treasurer, J. A. Bazin ; Librarian, H. Ross, Quebec ; Executive Committee, C. F. F. Trestler, C. Brewster, E. Lefuivre, J. Dowlin, N. Fiske, J. H. Webster, L. J. Leblanc.

A motion to abolish the use of show cases after the 30th of March, 1870, was then passed unanimously, after a lively and somewhat amusing discussion.

Dr. Trestler said that he had several quacks in his vicinity who used show-cases, and he would like to have a law imposed to abolish them, by the Board of Trustees and Examiners.

Dr. Ross was opposed to show-cases inasmuch as they were no criterion of a man's ability as an operator, or a mechanical dentist.

Dr. Bazin said that a number used them, no doubt, in 'self defence,' and would gladly abolish them if their abolishment was made general. He would be rejoiced to see the last show-case taken in.

Dr. Patton referred to other disgraceful means of attracting attention, such as spread-eagles, golden teeth, quack advertisements, &c.

Dr. Beers thought that the profession should be divested of every semblance of quackery, particularly show-cases and loud advertisements ; and that if dentistry was ever to be elevated in Canada, the first steps must be taken by the members of the Dental Association.

Dr. McKee was opposed to all means of attracting the ignorant and unwary into our offices.

Dr. Bernard was glad to hear the discussion and trusted that the members would in their own practices, and with those not meeting with us, endeavour to establish a sentiment above such miserable efforts to get business. No dentist of real ability or integrity exhibits show-cases, and he thought that the profession should at once take a stand against them.

The next meeting of the Association will be held in Montreal, in November, due notice of which will be given to the members. It was decided to hold the January meeting in Quebec, and the following programme for that occasion was drawn up :

Essay on "Irregularities," by H. Ross.

Essay on "Hygiene," by M. Pourtier.

Discussions on filling teeth, extracting, and deciduous teeth.

W. G. Beers was appointed to deliver the annual address at the next annual meeting.

On motion of J. McKee, seconded by H. Ross, Dr. W. H. Atkinson, of New York, and Dr. W. H. Waitc, of Liverpool, England, were unanimously elected corresponding members.

W. GEO. BEERS, Secretary.

## SEVENTH AND EIGHTH DISTRICTS DENTAL ASSOCIATION.

REPORTED BY C. S. CHITTENDEN.

The Western New York Dental Association was at its last meeting adjourned *sine die*, and it was voted that the Seventh and Eighth District Societies being legal corporate bodies, and covering about the same territory, should hold their semi-annual meeting together, alternately in each district.

The first union meeting of the two societies was held in Medical Hall, Young Men's Association Building, Buffalo, N. Y., commencing Tuesday, October 5th, 1869.

The Association was called to order by the President of the Eighth District Society, Dr. Whitney.

Dr. Barrett read the minutes of the last meeting of the Western New York Dental Association, at Rochester.

Dr. Whitney read a short address, giving the reasons for the disbanding of the old Association, and for the union of the two District Societies.

Dr. Barrett moved the reference of the address to a committee of four—two from each district—and that the committee be instructed to draw up a plan of organization and association.

The Chairman appointed Drs. Gifford and Bristol from the Eighth, and Drs. Walter and Requa from the Seventh District.

Committee on Rose Pearl, were, on motion, given further time to prepare their report, as were the Committee on Mechanical Dentistry.

Dr. Barrett moved that Drs. Southwick, Freeman, Miller, and French be appointed a Committee on Clinics.

The Chairman appointed Drs. Barrett, Miller, and Lewis a Committee of Publication.

Dr. Hodge, of Binghampton, was introduced, and on motion was elected an honorary member. Adjourned till 2 p.m.

## AFTERNOON SESSION.

The Committee on Organization made their report, which was adopted after being slightly amended.

Dr. R. G. SNOW, from the Historical Society, asked the members to send him a sketch of their professional careers together with their photographs, to be placed in the book prepared for that purpose.

The first subject for discussion was "The proper preparation of Gold for Dental Purposes."

Dr. Barrett said that heat or caloric was the very opposite of cohesion, it destroys it. One reason for annealing gold is that it partially destroys cohesion and drives the particles of gold farther apart, permitting a more intimate interlacing of its particles. It also so alters the molecular arrangement or polarity of its particles as to permit a closer approximation of them to each other. But contrary to the general rule that annealing makes metals softer and more pliable, it sometimes makes gold harder, harsher, and more impracticable. This is owing to too much handling and overheating. We know that continued hammering will change the molecular arrangement of particles of iron in a mass, as for instance car wheels. It makes them hard and brittle. Gold in sheets is much more susceptible to this, so handling affects it. Then too, two or more thicknesses in the roll stick together making a lump. In practice, uses soft foil, and anneals it on an annealing tray, and uses it in the form of pellets. Heats it above the temperature of the breath, to avoid condensation of moisture on the surface.

Dr. R. G. SNOW said that the manner of filling teeth has entirely changed since he commenced the practice of dentistry. The old forms of gold—cylinders and tape—are done away with, and adhesive gold has taken their places. He thought the welding property of gold lies in its cohesive attraction. If a bullet is divided in the centre and the surfaces made perfectly smooth, they will, when placed in apposition, stick quite firmly together.

Dr. Barrett thought that the two pieces of the bullet would be held together, at least partially by atmospheric pressure.

Dr. Beattie said he was in the habit of heating his gold to a red heat, but could see no particular difference in its working, whether annealed to a white heat or only warmed sufficiently to drive off the moisture from its surface.

Dr. Oliver thought that in rolling gold into sheets the particles

arrange themselves on a line with the force applied. Gold plate is easily broken when force is applied with the grain, and with difficulty when applied against it.

Dr. Southwick uses Nos. 2 and 3 foil, and anneals not quite to a red heat, and uses from an anuealing pan. Uses the mallet in preference to hand pressure, as being more easy to himself, and a saving of the nervous exhaustion which is so destructive to the health of the dentist.

The next subject, "Continuous Gum," was taken up for discussion.

Dr. Bristol has had a good deal of experience in continuous gum work, and has done as much poor work as almost any one, and feels entirely sick of the discussion. There is no kind of work equal to it when it can be well done. Every piece, in his hands, has been porous, no matter how carefully he manipulated it, nearly every piece shrinks. Again they are too easily broken by being dropped. Poor as he is, he would give fifty dollars for a formula by which a piece can be made that will not shrink. He had hoped that with aluminum something good might be made. He had thought, and still thinks something valuable might be made of Rose Pearl. He has never been perfectly satisfied with a single set of teeth made of continuous gum since he first commenced its manufacture. It takes so long to make a perfect set of teeth with it that he has abandoned its use altogether. He has made many sets which seemed to be perfect when completed, and which gave good promise for a few months, but after a year or two they had fallen to pieces.

Dr. Giffard said he had had some experience in continuous gum work, but has not experimented much, he had used the formulas of others. As far as his experience has gone, it has proved as durable as any kind of work except, perhaps, gold work. Thinks it more durable than rubber, he has several sets which have been worn for eight or ten years. He doubts whether dentists living in the country can succeed well with it. It requires to be very carefully baked, and unless a person is constantly engaged in its manufacture he will be liable to failure, it requires a skilful and practiced eye to tell when the baking has reached the proper stages. Thinks that continuous gum work can be made to be as strong as any other, and is, when perfect the most beautiful of all. In removing the pieces from the muffle, great care must be taken to prevent the gum from checking from too sudden cooling. There is some difficulty about repairing it, and he thinks it is advisable to send broken sets to some one who

is constantly engaged in that style of work to be done. He would now send all manufacturing and repairing to a regular laboratory to be done.

Dr. Whitney said that between 1851 and 1856 he had done a large amount of continuous gum work, but could not now tell how much of it is in use. At first he had used Hunter's gum, but found it almost invariably porous and easily broken. Afterwards he used Allen's formula with much better success. Teeth made after Hunter's formula shrank badly, much more than those made after Allen's.

Dr. Bristol said that in 1839 we had a gum which shrank but little. He had used many formulas, but they all shrank more or less leaving the gum full of checks, and these checks would be found, when examined under a microscope, to extend clear through the gum. Teeth can be made to look beautifully out of the mouth, but they are not fit to be used. Continuous gum work must be made by artificial light as the eye cannot distinguish the colors properly by daylight.

Dr. Oliver has used the continuous gum for a considerable length of time, but thinks that for a useful artificial denture it is now obsolete. There are so many contingencies that cannot be fully under the control of the dentist, that he does not consider it worth a rush for popular dentistry.

Dr. Daboll said that he had had about a year's experience in continuous gum work while with Dr. Bristol, of Dansville, when he found that many cases seemed to be as near perfection as possible, and answered the purposes of mastication and enunciation thoroughly, while others, which at first appeared to be as well made as the others, only lasted for a short time.

Dr. Bristol said that he could never get two pieces of gum materials alike, there would be a very great difference in the quality, and he would advise every dentist using continuous gum, that if he ever succeeded in getting materials that answered the purpose well, to purchase all that he could obtain. He contended that the secretions of the mouth acted upon the materials of which sets of teeth are made.

Dr. Danforth thinks that one great cause of the breaking of sets of teeth made of continuous gum work arises from its inelasticity, as when there are changes in the alveolus from absorption the plate will bear most heavily in mastication on the roof of the mouth, and some persons seemed to try to see if they cannot break their plates by biting from side to side. Adjourned.

Wednesday morning, According to announcement made yesterday, most instructive clinical lectures were given by Drs. Southwick and Daboll, in their respective offices, at eight o'clock, at which most of the members were present. These clinical lectures have become one of *the* features of the meetings of the Western N. Y. dentists, and cannot fail to elevate the character of the operations of all who attend them.

At ten o'clock the Association was called to order by the President, and after reading of the minutes the discussions were resumed.

"Anæsthesia, its effects upon the blood," Dr. Whitney, essayist. Dr. Whitney being unable from a severe cold to speak for any length of time, his essay was read by Dr. George B. Snow, after which the discussions proceeded as follows, viz :

Dr. Barrett said he would like to say a few words on the subject of the administration of anæsthetics. We find that ladies are more subject to odontalgia during the catamenial flow than at any other period, and he would object to administer any anæsthetic at such time. He would never willingly give it to a lady when there is any obstruction to the regular flow of the blood, if he were aware of it.

Dr. Squires wished to know whether any one had ever seen any serious results follow the administration of an anæsthetic during catamenia ?

Dr. Danforth has given ether for twenty years, and seldom gives any other anæsthetic, has a way of giving it peculiar to himself. He takes a common glass tumbler and heats quite hot, and then places it into a sort of funnel made of paper, so prepared that it can be placed over the mouth of the patient, he then puts a piece of sponge into the tumbler and pours enough ether on to it to thoroughly saturate it, and then places the funnel over the mouth and directs the patient to inhale through his mouth and exhale through his nose. At one time he was careful to make inquiries with regard to the catamenia, but latterly, pays no attention to it.

Dr. Walter always refuses to give any anæsthetic during the menses.

Dr. Leach has employed nearly all the anæsthetic agents now in use, but prefers chloroform, particularly on himself. Has taken it himself till the sense of feeling was entirely gone, and still remained sufficiently conscious to extract one of his own teeth. Thinks that it should be given slowly to ensure safety.

Dr. Regua is of the opinion that the best effects are produced by

giving the anæsthetic rapidly, particularly is this the case with the nitrous oxide.

Dr. Barrett agrees with Dr. Requa in regard to giving the nitrous oxide. Has had some trouble with chloroform. In one case the patient, after coming out from the influence of the chloroform, was taken with what appeared to be fainting fits, and he was obliged to keep him moving about for more than half an hour before he entirely recovered himself.

Dr. Daboll said he had noticed that with persons who had been or were suffering from chronic disease of any kind, the symptoms appeared to be aggravated by the administration of nitrous oxide, and thinks that some of the fatal cases have arisen from a fainting of the person from the excitement consequent of the extraction of the teeth.

Dr. Requa asked if the sinking sensation might not arise from the loss of animal heat.

Dr. Rathbun said he was of the opinion that the giving of an anæsthetic on a full stomach was frequently the cause of the sinking sensation of which mention has been made. He is particularly careful not to give any anæsthetic during the catamenia.

Dr. Giffard thinks the mind has a great deal to do with the effect of anæsthetics, particularly with delicate persons who are the subjects who most require these agents.

Dr. R. G. Snow said it is absolutely impossible to predict what results will follow the giving of anæsthetics, and thinks that the greatest care should be exercised in employing them. It should be given slowly, and the person should be allowed to have plenty of air with the anæsthetic. Does not deem it prudent to give it to a lady, unless she has one or more of her friends with her. He then read the following account of a new agent from one of the public papers, viz: "The *Berlin Correspondent* says that a new anæsthetic has been lately discovered by Dr. Liebreich, to which he has given the name *Chloralhydrat*. It is highly spoken of by the faculty, and is said to be superior to chloroform, producing a more complete state of unconsciousness, while it neither induces feebleness nor leaves any bad effects behind. A medical gentleman has informed us that he has held rabbits from 12 to 14 hours under the influence of *Chloralhydrat*, during a part of which time he kept them suspended over the back of a chair, and as soon as they wakened up they displayed their usual activity and fed with unimpaired appetite. We have also learned that the newly discovered body has been most successfully

applied as a sedative in the treatment of the insane. *Chloralhydrat* resembles chloroform in appearance, but is not so heavy, and, being much less volatile than that body, it has, of course, a feebler smell. On the tongue it has a sharp, but not an acid taste, and, though it reminds one of chloroform, it gives the sensation neither of the warmth nor sweetness of the latter substance. *Chloralhydrat* is absorbed and not inspired, and in this respect it differs from all other anæsthetics. When liquid ammonia is added to a solution of this body chloroform is precipitated."

Dr. French always wishes to get the patient into an entirely unconscious state before proceeding to extract. Thinks one of the causes of unpleasant results is impurity of material. The best commercial ether is unfit for anæsthetic purposes. He has had excellent results from a mixture of three parts of chloroform, to two of ether and one of alcohol.

Dr. Whitney, in reply to Dr. Requa's inquiry, said that there is always a great loss of animal heat during the administration of anæsthetics, but does not think that the sinking sensation arises from that cause, but from the lack of a sufficient amount of stimulation from the blood to the brain. He thought that hysterical symptoms are likely to follow when given to females during catamenia. Statistics show that the large majority of fatal results have been with robust persons, and that a fatty condition of the heart has been found very frequently in post mortem examinations.

Adjourned.

#### AFTERNOON SESSION.

"Filling over exposed pulps, and how to do it successfully." Dr. Daboll, essayist.

Dr. Barrett asked what course Dr. Daboll would pursue in a case where the tooth had been aching, and the decay in a position difficult of access.

Dr. Daboll said he did not think it was possible to save the nerve after congestion has supervened.

Dr. Stainton asked if a portion of the nerve could not be amputated and the remainder preserved?

Dr. Daboll thinks it cannot be done with any degree of certainty.

Dr. Barrett wished to know what is meant by congestion?

Mr. Chittenden said he understood congestion of the nerve to be that condition when from any cause a larger amount of blood has

been carried into the nerve than has flown out of it, thus causing the whole nerve to become swollen and painful, a condition which, unless speedily relieved, must prove destructive to the nerve. He does not believe that a nerve that has been in such a condition for twenty-four hours can be preserved.

Dr. Leach has confined his practice to a great extent to "doctoring up old teeth," that have been giving more or less pain. In such cases he removes the decay as much as possible from the walls of the cavity, but, leaves the softened dentine immediately over the nerve undisturbed, and fills with os-artificial. He endeavors to save every nerve alive if possible.

Dr. Bristol asked if a nerve might not, in some instances, change its nature and become a fungus?

Dr. Daboll has never seen a fungus inside the nerve cavity.

Dr. Hodge had a case recently, in which there was a fungus growth as large as a pea.

Dr. Bristol is positive that a nerve cannot be restored to health after congestion has supervened. In such cases there will be a fungus growth found on careful examination.

Drs. Barrett and Daboll are of the opinion that there can be no fungus growth unless the nerve has been destroyed.

Dr. Requa would not attempt to preserve the nerve in an incisor after it has been wounded; would destroy it and fill the nerve canal.

Dr. Beattie frequently wounds exposed nerves in childrens teeth to relieve congestion, and fills at once. Has been very successful with this method of treating such teeth.

Dr. Southwick asked whether Dr. Requa uses arsenic in the incisors?

Dr. Requa. Yes.

Dr. Southwick thought dentistry was too old now, to admit of employing arsenic in these teeth. He would remove the nerve with a broach. In most cases it can be done with very little pain. He would then fill the root at once, and thus preserve the color of the tooth. Does not destroy as many exposed nerves now as he was formerly accustomed to do. Now, when a tooth is presented to him in the above condition, he first fills the tooth with os-artificial, and when that has become hard he removes enough of it to admit the forming of a properly formed cavity, and fills it with gold. He said

he was glad that the discussion had taken the form that it had, as he feels that it is a matter of great importance that as many teeth should be preserved alive as possible.

Dr. Squires asked Dr. Southwick whether he used the os-artificiel immediately after applying the creosote, and whether the nerve would be found in a healthy state if examined at a future time.

Dr. Southwick said that every tooth treated as he had indicated could not be saved, but a large majority could. He related a case in which a tooth had been treated in this way, in which the nerve was perfectly healthy at the expiration of two years.

At the close of the discussion, there being a half hour before the time fixed for adjourning, Dr. Geo. B. Snow, from the Buffalo Dental Manufacturing Co., exhibited several old vulcanizers which had exploded while being used. In one a small piece had been blown out about two and a-half inches from the top. A longitudinal section had been cut out of it, which showed that the copper had been dissolved away till it was not much thicker than a sheet of paper. This thin part of the section was about an inch and a-half long, and when placed back into its original position, showed that the dissolving had taken place at the water-line.

Dr. Whitney said that he believed more or less sulphuric acid was generated in the vulcanizer, which in process of time would destroy the copper at the water-line so much that all would be liable to explosion. He urged every one present to use the greatest caution, as when vulcanizers are old, allowing the thermometer to rise too high would be attended with great danger.

Dr. Hayes expressed himself with great earnestness, with regard to the care necessary to be exercised while using vulcanizers. A man might as well place a loaded bomb-shell with the fuse lighted, in his laboratory, and go away and leave it, and not expect it to explode, as to leave his vulcanizer without care while the steam was up. Adjourned.

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## SELECTED ARTICLES.

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### CAPPING EXPOSED PULPS.

BY A. O. RAWLS.

[Read before the Indiana State Dental Association.]

The delicacy of this operation must be apparent if we but note the

fact that the Dental pulp is one among the most highly organized structures of our body, and responds to morbid influence through the medium of the most sensitive nerve of the entire nervous system. Besides the difficulties arising out of those conditions, it is enclosed within a wall of solid, unyielding bone, the resistance of which would prove quite an impediment to success, should the operation be performed in a rude, bungling manner, or at a time when inflammation was too great to admit of the probability of its being overcome in the natural way of vital resistance and recuperation. Viewing the subject in the light of other days, when the practice of capping an exposed nerve was in its incipiency, can we be surprised at the limited success met with and the meagre support it received at the hands of our profession then, when to-day, with a theoretical and practical experience of twenty or thirty years in advance, and many valuable improvements to render us assistance, we fail in not a few of such cases intrusted to our care. Indeed, quite a number of the profession have abandoned the operation to considerable extent, resorting to it only when the pulp presents unmistakable signs of freedom from morbid conditions, while upon the other hand a few have turned their attention to therapeutical treatment when necessary, and, judging from the amount of success obtained in a comparatively short time, we would at least consider the practice commendable and well worthy a thorough trial.

When the practice of capping, for the purpose of protecting an exposed pulp first began to attract attention, its enemies were numerous and for several years the reign of arsenic or its kindred preparations continued unabated, but now we may rejoice in the thought that this fell destroyer has seen its palmyest days, and the possibility of saving an exposed pulp, when there exists but little inflammation, is no longer a question at issue, the only question being one as regards the relative value of the materials in use and the most satisfactory mode of manipulating the same to secure the best possible results.

If I mistake not, capping an exposed nerve or pulp dates prior to the operation of destroying it, and the first material used was the charred surface of the pulp itself, the actual cautery being used to produce the char, and this broken down tissue left remaining as a shield or barrier between the living pulp beneath and external filling, as might be inferred from the rudeness of the means resorted to and the nature of the parts involved, its use was not long continued; but the ill-success of this first attempt to fill over an exposed pulp, in all

probability gave rise to the employment of means for its entire destruction. Shortly after this, metallic capping merged into use, sheet gold taking precedent, though on account of its conducting properties, soon yielded its laurels to lead and other materials of less heat-conducting powers, all of which have gradually fallen into disrepute; lead from its ease of adaptation to the wall of the cavity, and from the supposition entertained at one time that the oxyd deposited beneath the capping proved beneficial in allaying inflammatory action, has enjoyed quite an extensive reputation. In the mean time, chemical science has not failed to appreciate the difficulties of our position, or been derelict of her duty, but has advanced nobly to our assistance, and presents a material for our consideration which bids fair to eclipse all of its predecessors, and already opens a new era in the capping of exposed pulps. Its composition is chloride of zinc, in solution and calcined oxyd of zinc; and, I believe, the credit of first using this article as a filling for decayed teeth is due to Drs. Keep, of Boston, and Metcalf, of New Haven. Since then, not unlike other articles of merit, it has come very gradually into general use, improving in quality as its deficiencies were ascertained and the demand more extensive, until to-day it occupies a position enviable indeed, standing upon its own merits an auxiliary in operative Dentistry worthy of our esteem and recommendation. As a protective shield for an exposed pulp it has not been in general use many years, though for complete fillings and other purposes in which it has rendered valuable services, it has withstood a fair test for a considerable time.

All materials employed, or that have been in general use, and every theory linked with practical application in the Dental catalogue, has been burdened more or less with imperfections and objections, and as a matter of course, oxy-chloride of zinc has its complete share, and if we were to judge and be governed by the opinions of a few, it certainly has an overdose.

Prominent among the objections urged against the use of this article as a shield over an exposed pulp is, first, that it is entirely too porous, consequently, when in close proximity to the pulp, would have a tendency toward absorbing all poisonous or effete matter existing at the point of contact, thereby rendering it unfit to be placed in such near relation with living tissues, laden as it would be with such impurities; second, that the escharotic properties possessed by the chloride is dangerous to the life of the pulp, and many cases are

cited in which its use (rather abuse) has destroyed the life of this valuable structure. There are other objections, but these which I have noted seem to be the principle ones against its employment in this direction. As to the first mentioned, it is only necessary to state that our endeavor should be in the preparation of such cases to rid, if possible, the pulp and entire decayed cavity of the least indication of disorganized tissue or any like impurities. Should there none form after the operation, the difficulty is overcome. To the second objection we would reply that a judicious use of the os-artificiel, when well prepared, would obviate all such results, as the chloride is not taken into the circulation, and it is hardly probable that its use would destroy the pulp, unless employed in such quantities as to produce a great amount of inflammation.

The manner of introducing this material, and its consistency at the time it is introduced, tends as much, probably, to govern the results of the operation as any thing else concerned, and is, no doubt, too often overlooked or entirely disregarded, and failures from such neglect are credited to the material.

Should it be mixed too thick or allowed to dry out too much before introducing, the force required to adapt it closely to the walls of the cavity would give rise to congestion and consequent inflammation, or if placed in gently while thick as before, then there would exist a lack of cohesion in the particles of the filling; also, imperfect adaptation to the exposed surface of the pulp, the result of which would be crumbling of the cap upon introduction of the filling over it, or a place left between the shield and pulp, which condition would surely induce strangulation and death of the part involved, while a reverse of this mixing and introducing it of too thin a consistency would prove equally disastrous. We are all aware that a solution of chloride of zinc enters into the composition of os-artificiel, and that it is endowed with powerful escharotic properties, and in case we should incorporate this substance too freely with the calcined oxyd, its effects would not only be very powerful, but would tend toward the production of no small amount of irritation, and probably to such an extent that the vital forces would not suffice to re-establish healthy action. We will grant, however, the possibility of there being sufficient reaction of the recuperative powers to counteract the irritation existing, in which event we have left for our consideration a thoroughly charred surface of the pulp at the point of exposure. The question now arises as to the probability of the char remaining

*in situ*. If such were the case we would apprehend no danger whatever, though I am inclined to the opposite opinion that such is not the condition of affairs, but that the char is removed by absorption, not taken up by the capping material, though through the medium of the absorbent vessels of the pulp stimulated to increased action as a consequence of great irritation, thus ridding itself of the cause and leaving an intervening space between the filling and pulp, corresponding in size to the extent of broken down tissue, thereby rendering the possibility of success doubtful, as the space could not certainly exist without more or less trouble. However, this neglect should not argue against the usefulness of the material in such operations, but only guard us against its abuse. As regards my manner of introducing the oxy-chloride of zinc over an exposed pulp, I have nothing new to offer in that direction, and in conclusion would say that this material, when properly prepared and manipulated with the care that the delicacy of the operation requires is, in the vast majority of cases, far superior to any other article extant as a protection for exposed pulps or sensitive dentine, and especially is it invaluable as an additional shield between the filling and nerve, when there exists but a thin lamina of dentine over the latter.—*Dental Register*.

SULP. ETHER AS AN ANÆSTHETIC.—So much has been said in reference to nitrous oxide gas, that we fear that the profession will lose sight of the valuable agent, *Sulp Ether*. Some of the advantages resulting from the use of ether may be mentioned. It is always at hand. It causes no discoloration of the lips like that purplish hue imparted by the "gas," and throbbing of the pulse may be as plainly counted as when the patient is asleep. There is danger in using ether, as there is danger in using everything else, but when *used with judgment*, there is far less danger than when we use the murderous chloroform. Dr. Morton will receive the thanks of posterity for his great discovery, as long as pain endures.

Ether must be of the best quality, with the *spec. grav.* of  $-750$ . A fair test of the purity of ether is made by dropping it upon bibulous paper, when, if it is good, it will be found that it has entirely evaporated, leaving no smell.

It is well, when using ether, to get the patient's mind free from all care; get them to sit easily in the chair, dress loose, and after placing the cork (with a long string attached) in the mouth, place a sponge in the folds of a rolled towel, you will then have a tube which

you can place over the patient's mouth and nose. Then put about 1 oz. of ether on the sponge and *slowly* place it *near* the mouth. When he has breathed two or three times, you may place it *upon* the mouth and nose. You must not close the distal end of the napkin, it must be an open tube. It will be seen, then, that the air, in small quantities, enters through the pores in the sponge. Put on a spoonful or two more ether, when it is needed; it requiring from 1 to 4 ozs. Some commend the use of chloroform with the ether. We never approved of the plan. Heavy breathing, lifting the hand and finding it to fall *dead*, and pinching the skin of the hand, are the tests of when etherization is complete. Never give ether till two hours after the patient has eaten his meals; it causes vomiting.

When you have finished the operation, bathe forehead with cold water, or let the patient smell of ammonia. Never give brandy. In some cases the patient will seem to strangle. This is caused by the tongue falling into the glottis. Then you must pull the patient's tongue forward with your forceps.

These crude hints may save you the necessity of buying a costly gas apparatus.—*Dental Office and Laboratory.*

## EDITORIAL.

### OPENING OF THE DENTAL COLLEGE.

From the following, forwarded by the Secretary, it will be seen that the long talked of school for the education of the future dentists of the Province, was opened for the reception of pupils on the 1st instant:

#### "ROYAL COLLEGE OF DENTAL SURGEONS OF ONTARIO.

A meeting of a portion of the faculty of this institution was held at the Queen's Hotel in this city on Friday, for the purpose of opening the College. In the absence of the President, Mr. Chittenden was called to the chair.

It was then moved by Mr. O'Donnell, seconded by Mr. Callender and carried, That the following gentlemen be appointed Clinical lecturers to this College, viz.:—W. C. Adams, Toronto; J. Leggo, Ottawa; G. V. N. Relyea, Belleville; H. T. Wood, Picton; A. Bernard, and W. George Beers, Montreal; H. H. Nelles, D.D.S.; A. C. Stone, M.D., London; R. Rowe, M.D., Cobourg.

Moved, seconded and resolved, That the regular lectures in the

Dental Course commence on the 15th November, and that students be informed that arrangements have been completed so that they have the opportunity of obtaining preparatory instruction in the offices of Messrs. Trotter and Meyers, Toronto, whose offices will be open to them during office hours up to that time.

Moved by Mr. Callender, seconded by Mr. Meyers, and carried, That this faculty attend the opening lecture to be delivered by Prof. Caniff, M. D., M. R. C. S., England, of the Medical Department of Victoria University, this evening at eight o'clock. The meeting then adjourned.

In the evening the faculty attended an interesting and instructive lecture by Prof. Caniff, in the Victoria College, Yorkville. The Venerable Dean, Dr. Rolph, at the conclusion, announced that the regular Medical lectures would not commence till Wednesday next, the 6th inst., they having been postponed in honor of Prince Arthur's visit to Toronto."

We had the pleasure of an interview on that occasion with Dr. Rolph, the Venerable Dean, Dr. Caniff and several others of the members of the faculty of Victoria University, and were particularly pleased with the interest which they manifested for the advancement and elevation of our specialty, and we feel certain that those Dental students who place themselves under the tuition of these gentlemen, will derive the greatest possible benefit from so doing.

As an attendance on the lectures to be delivered at the Medical school, is of the greatest importance to those who wish to excel in dentistry, we hope that all who intend to present themselves for examination before the Board at its next session, will attend them.

There are a large number of dentists in the Province, who have been practicing a less time than five years, who will be up for examination at some future time, and we would most strongly urge them to avail themselves of the opportunity now afforded to attend those lectures which they feel they most require. In the Dental Department proper, which will be opened on the 15th prox., the principal part of the instruction will be given by Messrs. Callender and O'Donnell, who are well qualified for the positions which they hold. They will be assisted by Messrs. Trotter and Meyers, in whose offices the students are allowed to remain until the regular session commences.

It was thought advisable to ask the assistance of the gentlemen named in the Secretary's report, to assist the Professors at different

times during the term, by giving the class a short course of Clinical lectures on such subjects, connected with dentistry, as they may choose. Several of them have written to us that they will most cheerfully undertake the duty which has devolved upon them, and from the high standing which all these gentlemen occupy, we feel that we can congratulate the students on many very profitable treats in store for them this winter.

C. S. C.

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### VALEDICTORY.

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A position in the great metropolis of the west, Chicago, having been offered the subscriber, which promised a better remuneration for labor than the practice of dentistry, he has deemed it desirable to accept it, but with many regrets for having to sever himself from the country he loves, and the many dear friends acquired during a residence of over a quarter of a century in the Dominion of Canada. Among the most valued of his friends were many of the Dental profession, whom he leaves with feelings of kind and grateful remembrance, which will be cherished as long as he lives. Having honestly (as he thinks), devoted himself to the profession of dentistry in Canada, for a period of over fifteen years, during which time he has done his best to benefit the profession and his patrons, and having had the honor of assisting to place the profession on a respectable footing, and to complete the first volume of the *Canada Journal of Dental Science*, he retires from the field with the best wishes for the profession in Canada and the success of this Journal, and with the hope that every man will rally round the two worthy editors and proprietors, Messrs. Chittenden and Beers, whom he has left behind, he begs to retire.

R. TROTTER.

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PRESCRIPTIONS IN ENGLISH.—*The Philadelphia Medical and Surgical Reporter*, one of the best of our medical exchanges, urges upon the profession the propriety of writing prescriptions in the English language only, instead of the abominably bad Latin generally used. A most sensible suggestion say we.