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Original Communications.

INSTRUMENT NOMENCLATURE WITH REFERENCE TO INSTRUMENTATION.*

By G. V. BLACK, M.D., D.D.S., Sc.D., Chicago, Ill.

Read before the National School of Dental Technics, Annual Meeting of 1897.

INTRODUCTION.

[We have much pleasure in complying with the request of the National School of Dental Technics, for the publication of the following paper by Dr. Black.—ED.]

The want of some recognized scheme of Nomenclature and Classification of Dental Operating Instruments that will individualize the instruments of the several orders and classes is a great bar to progress in teaching instrumentation. This is apparently severely felt by all who labor for exactness in their operations, or endeavor to express the manner of their performance and to speak of the instruments used. The teacher has no means of telling his pupils just what particular instrument he would use in performing a specific act in excavating a given cavity or preparing a margin. The only means of individualizing excavators and pluggers, the instruments which present the most important variations, has been the manufacturer's number. These numbers have not been used by the profession, except occasionally for ordering instruments from catalogues. An extended study of these numbers develops the following facts: When an instrument is designed that is thought to be a good pattern the manufacturer assigns it a number.

*This paper as printed for reading before the National School of Dental Technics was copyrighted, because it was seen that a revision would be necessary, and it was not desirable that it should be generally published before such revision.

In this way hundreds of instruments are numbered without system. Finally, to rid himself of the multitude of instruments and numbers, the manufacturer collates those forms that sell best and throws out the rest. He then renumbers those retained, and enters them in the new catalogue. In this way instruments of similar pattern are for a time brought nearer together in the numbering. But the process of adding new numbers begins again and soon it becomes another confused mass. There has never been any system of numbering that indicated either the form or use of the individual instrument. It has been purely arbitrary. For this reason, the numbers have not been used by teachers, except for the one purpose of making lists from which the students should do their buying.

A dentist needs some means of indicating precisely the forms of the instruments used in the operations he endeavors to describe, and especially is this badly needed in school work. So long as the teacher has no means of accurately designating the particular instrument he employs, so long will his manipulative teaching be vague and uncertain. The pupil will be unable to know just what is meant, and any description of the manner of using individual instruments will be confusing and without force.

Not only this, but the confusion gives rise to an unnecessarily great multiplicity of instrument forms. We being unable to teach manipulation, the student fails to learn the range of valuable instrument forms, and the powers and capabilities of instruments, and is therefore continually seeking new forms, hoping to find that which will serve him better. This being done without accurate appreciation of mechanical laws, the vast majority of efforts are failures, which tend only to further confuse the manufacturer's numbers.

It should be regarded as a truism that the really capable instruments are strictly limited in present modes of operating by definite laws of usefulness that no man can put aside, and that the valuable forms continue in our cases year after year.

Special instruments for special purposes there are, and many of them fitted only for individual idiosyncrasies in operating. Radically new instruments of value in the line of excavators and pluggers come forward now-a-days only as modes of operating are so changed as to require new forms. This kind of growth will continue. That which is needed now in the line of excavators and pluggers is a strict classification of the useful forms and the development of a scheme of nomenclature for the individual designation of each form. The presentation of such a scheme to the pupil will place before his mind the range of possible forms from the mechanical standpoint, and will enable him to know quickly what has been produced and in a much fuller sense than heretofore to know what can be produced.

This failure to appreciate instrument forms and the special usefulness of each form gives rise to great confusion in operative procedures. The disagreement as to method among dentists is unnecessarily great, and when such a degree of confusion exists only a very few of the methods can be the best. We should be able to teach methods in our schools. Can we do so without the ability to designate accurately the means of carrying out the method? The carpenter would not buy an auger that had not been made to a definite formula. The carpenter's boy would be laughed at, if, when sent for a quarter-inch auger, he should bring a seven-eighths. Can we not appreciate the forms and sizes of our instruments as definitely?

What our students need in the beginning of school work is a close drill in the appreciation of the forms of cutting instruments and pluggers, such as will enable them to discover the peculiarities of each with exactness, as to width, length, and inclination of blades, and the proportions of the several parts. Also they should be instructed as to the possible variation of useful forms. Directly coupled with this, the student should be taught to record the forms for future reference; and, it would be well for him to acquire the skill to reproduce them from the record. If this be coupled with a careful drill in the uses and capabilities of instruments, an impression will be made on the mind, and a skill acquired by the hand that will be a great aid in the development of manipulative ability.

It is my object to develop the details of a scheme of instrument nomenclature and classification applicable to cutting instruments and plugger, by the use of which the teacher can reach exactness in teaching instrumentation. This will be attained by first defining and arranging in an orderly way the words of instrument nomenclature that have been developed in the ordinary speech of the profession, by use of which groups of instruments may be definitely known; and then arranging a simple system of formulæ by which individual instruments of each group may be accurately designated.

It cannot be expected that this proposed scheme for the classification and study of instruments will be of special benefit to dentists now in practice. That is not its object. It is intended for school work only; but may in time spread to the general profession through the students who go out from our schools.

Another object of the scheme is to limit the number of forms of instruments employed, and to adopt a classified list for school work that shall be sufficient for all schools and not be cumbersome to any. This can be done by selecting a sufficient classified list to be used in teaching, and from which each school may select the particular instruments the students will be required to have. This particular feature of the scheme will be more fully developed later.

Or, instead of selecting a sufficient classified list for all schools to select from, each school may select its own classified list in accordance with a specified set of rules for the arrangement of instrument sets. A plan for doing this will be developed later, by which any classified set of instruments will be perfectly comprehended in the minutest detail from the written statement by any one familiar with the scheme of classification, and who has attained a working knowledge of any single set of instruments so classified. Also, such instrument sets may be accurately made by any skilful instrument maker without other guide than the written formulæ and the rules that will be developed in this paper.

This paper will be in two parts. The first part will consider and arrange the nomenclature heretofore developed, and the second part will be devoted to the consideration of formula names and the formation of instrument sets.

PART FIRST.*

INSTRUMENT NOMENCLATURE.

[Furnishing the Basis for School Instruction.]

In the development of any system of nomenclature, the basis should be the names that have arisen in the common speech of the profession. These names have a meaning, and, if we gain an understanding of this meaning, we will be able to classify the names in accordance with it, and in so doing present an orderly nomenclature. In doing this it is often necessary to choose between two or more names that have been applied to the same thing and occasionally to separate two items that have been called by the same name. In this way the uncertain nomenclature in vogue, developed at random in the first instance, is rendered orderly and definite. This is really done in instrument nomenclature, and without the introduction of any considerable number of new terms

NAMES OF PARTS OF INSTRUMENTS.

Cutting Instruments, or Excavators.—Each excavator is composed of a shaft which is used as a handle, a shank and a blade. Usually in excavators the shaft is perfectly straight and without variation in size. The *shank* begins with the first turned part and connects the shaft with the *blade* or working point. It usually tapers from its connection with the shaft to where the blade begins.

The *blade* is the part bearing a cutting edge. It may be said to begin at the angle which terminates the shank—the last one, if there be more than one angle—and ends in a cutting edge.

*Some portions of this was given the National School of Dental Technics at Ashbury Park in 1895 by Dr. D. M. Cattell, but it is thought best to give it here complete.

Pluggers have no cutting edges and therefore no blades, as "A blade is the leaf-like portion of an instrument bearing the cutting edge." The shank of pluggers, therefore, extends to the working point, though they may have similar angles to the excavators. (We should have a specific name for that portion of the plugger corresponding with the blade of the excavator.)

CLASSIFICATION OF NAMES OF OPERATING INSTRUMENTS.

Existing names of operating instruments may be divided into order names, sub-order names, class names and sub-class names (4).

An *Order name* is one designating such instruments as are used for a purpose so similar that groups have received a name indicating the purpose of their use, or answers to the question, "What for?"

The well defined order names are *excavators*, *pluggers*, *separators*, *scalers*, *finishing instruments* and *accessories*.

A *Sub-order name* is one designating the locality, position or manner of use, in such a way as to distinguish certain instruments from other members of the order, or answers the question, "Where, or how used."

A *Sub-order name* is often attached as a prefix to the order name, as *hand plugger*, *mallet plugger*, *push scaler*, *pull scaler*, etc. *Enamel Trimmer* is a sub-order of excavators. *Burs* belong both to Excavators and Finishing Instruments as sub-orders, as *cavity bur*, *finishing bur*. The word *Bur* is properly a class name—they have no order name.

A *Class name* is applied to a group of the members of an order and describes the point or immediate working part, as *hatchet* or *hoe*, descriptive of the blades of excavators, or the working point of pluggers, as *convex plugger*, *serrated plugger*, *smooth plugger*, etc.

A *Sub-class name* describes the angles and curves of the shank leading to the working point or blade, as *bayonet plugger*, *spiral plugger*, *contra angle hatchet excavator*.

In the common speech of the profession, these names have been habitually compounded. Sub-order names are prefixed to order names—as in *mallet-plugger*, *hand-plugger*, etc. Class names are prefixed to order names, as in *hatchet excavator*, *spoon excavator*, *hoe excavator*, etc. Also sub-class names may be prefixed to either order or class names, or all these joined, as in *contra angle hatchet excavator*, or in *bayonet plugger*.

In all these compoundings, the order name is last, indicating the use or purpose—the sub-order name prefixed, indicating how or where, while the class name is descriptive of the forms of the working point, and the sub-class name the form of the angles and curves of the shank leading to the point. It should be noted particularly that these terms are applied to groups of operating instruments. They specify the kind of instrument but do not individualize the

instruments of the group. These may vary indefinitely in the widths, lengths and angles of blades. For these differences we will propose other terms.

RIGHTS AND LEFTS.

There is a distinct division in operating instruments, known as *Rights and Lefts*. Among excavators we have two forms of rights and lefts. The *beveled* rights and lefts and the *lateral cutting* rights and lefts, or, true double plane instruments. The beveled rights and lefts are hatchet forms made rights and lefts simply by the form of the bevel of the cutting edge. Most of the hatchet forms have bi-beveled edges, *i.e.*, the edge is formed by grinding equally from the two flat sides of the blade. The beveled rights and lefts are formed by making two hatchet forms alike, and then grinding the bevel all from one side on the one, and all from the other side of the blade on the other. The result is a pair of instruments, the one suitable for shaving down the buccal wall of a cavity, and the other suitable for shaving down the lingual wall. The cutting edges are upon opposite sides of the blades, making them rights and lefts. These are used mostly for cutting enamel in opening cavities, but may also be used very effectively in cutting dentin. Any of the hatchet excavators may be made in pairs and converted into beveled rights and lefts, but the general adoption of this, while producing excellent instruments, multiplies the number of instruments in the operating case to such a degree as to cause confusion. For this reason the formation of beveled rights and lefts should be very strictly limited to enamel instruments, or to special instruments for heavy cutting.

LATERAL CUTTING RIGHTS AND LEFTS.

True Double Plane Instruments.—The double plane, or intersecting plane rights and lefts are a totally different class of instruments, and are designed for lateral cutting, while the other forms, single plane instruments, are for direct cutting. If any of the single plane instruments be laid upon a table or any plane surface, in a certain position, it will readily be seen that all of the angles and curves, no matter how many, are in a single plane. If it is held before the eye, in a certain position, the instrument appears straight—such instruments are suited for direct cutting.

If we carefully examine the rights and lefts known as spoons or rapid excavators, it will be noted that each has an angle or curve that is not in the same plane with the principal angle or curve, but in a plane that intersects the plane of this principal angle at right angles. These we will call *double plane* instruments—they differ essentially from the single plane instruments in that they are specially suited for lateral cutting. They are always made in pairs.

They are first formed similarly to the hatchet excavators, but after the blade is formed the blade of one is curved to the right and the blade of the other is curved to the left. This important division of cutting instruments is confined mostly to what has become known as spoons. They are suited to scooping out masses of carious material. They are not of much value for cutting hard material. This form of rights and lefts is also used occasionally in pluggers.

DEFINITIONS OF CLASS NAMES.

A *Class name* is one that describes the immediate working point of the instrument.

CLASS NAMES OF EXCAVATORS.

Hatchet.—The shank has one or more angles or curves, the last length forming the blade, the edge of which is in the plane of the angle or angles.

Hoc.—The shank has one or more angles, the last length forming the blade, the edge of which is in a plane intersecting at right angles the plane of the angle or angles.

Spoon.—These are always made in pairs. They are first made in the form of hatchets and then the blade of the one is curved to the right and the blade of the other is curved to the left, then the cutting edge is ground to a semi-circle. This curve of the blade is in a plane that intersects the plane of the principal angle or angles at right angles, making the instruments true rights and lefts.

Discoids.—(Disc-like, circular.) The blade is circular in form, having a cutting edge extending around the whole periphery, except that portion by which it is joined to the shank. This circular blade is placed at more or less of an angle with the shaft.

Formerly this form was called a spoon, several forms being grouped under that name. Discoid blades are sometimes seen on double plane instruments of various forms.

Cleoids.—(Claw-like—in the form of a claw.) Sharp pointed blades in the form of a claw, with cutting edges on two sides of the blade.

Chisels.—Straight blades with cutting edge formed by beveling from one side. The blade is usually straight with the shaft, but may be slightly curved.

Binangle Chisel.—A chisel blade placed at a slight angle with the shaft in the hoc form. They are contra-angled.

Rotary cutting instruments will not be included in this list.

SUB-CLASS NAMES.

A *Sub-class name* is one applied to and descriptive of the angles and curves of the shank of an instrument which leads to the blade or working point.

Mon-Angle.—An instrument having one angle only leading to the working point as in pluggers, or forming the blades as in excavators. Mon-angles form a large majority of excavators. In the greater angles only the shorter blades can be successfully used as mon-angles, for the reason that when the blade is long its inclination carries its working point laterally so far from the central line of the shaft as to render the instrument liable to turn in the hand when the edge is forcibly applied. This renders the instrument unsteady and ineffective. To remedy this defect, all cutting instruments, in which the angle and length of blades will carry the cutting edge more than three millimeters from the line of the central axis of the shaft, should be contra-angled.

Contra Angle.—The shank of the instrument is first bent backward (from the direction of the cutting edge), and nearer the cutting edge another bend is made forward—this length forming the blade, the object being to form a long blade, the edge of which will be near the central line of the shaft.

Binangle Contra Angle.—A contra angle formed by two angles as described under contra angle.

Triple Angle Contra Angle.—In an instrument of the angle of 12 centigrades or less (about 45 degrees)—the binangle contra angle will bring the cutting edge sufficiently near the central line of the shaft, and at the same time carry the shank sufficiently out of the way to permit the use of the full length of the blade; but instruments of a greater angle, a binangle would not do this, therefore a triple angle contra angle must be made; this is done by first bending the shank backward as in the binangle contra angle and then forming another angle which will bring the remainder of the shank parallel with the shaft; then passing forward a space of more or less length as may be required, another bend is made forward by which the blade is formed. In this way the cutting edge of a long blade is brought sufficiently near the central line of the shaft for effective work, and the shank carried sufficiently out of the way to permit the full use of the length of the blade.

Long blades that require contra-angling are mostly for use in places where a long reach of blade is necessary.

There are a number of other sub-class names that have been applied to excavators, but as none of them will be used they will be passed by for the present. Also, there are a number of sub-class names applied to pluggers, as cork screw, cow's horns, bayonet, etc., but as we shall not fully consider pluggers in this paper, they will also be passed.

Curves occur among the rights and lefts or double plane instruments for which no distinctive names have been developed. Those forms which I designate as spoons have a curve beginning at about one third the length of the blade and gradually increasing to the

cutting edge. Another form often seen, but which now seems to be in less favor, is what I should term the hoe spoon. This blade is straight like that of a hatchet until near the cutting edge, when it is bent laterally at an angle, and the cutting edge rounded as in the spoons. These are in pairs, as the spoons, and are true double plane instruments.

Other forms that have been used are almost endless, many of them without names, and very generally have disappeared under the law of unfitness for the purposes intended.

RULES FOR CONTRA ANGLING.—RECAPITULATION.

1st. All blades, the angle and length of which will bring the cutting edge more than three millimeters from the central line of the shaft, should be contra-angled.

2nd. All instruments with angles of 12 centigrades or less, when requiring contra angles should be binangle-contra-angles.

3rd. All instruments with angles of more than 12 centigrades, when requiring contra-angles should be triple-angle-contra-angles.

4th. When the contra-angle is used the cutting edge of the instrument should be brought within two millimeters of the central line of the shaft, or better—when the contra angle is used the working edge should be brought just so near the central line of shaft that when the instrument is laid edge downward upon a plane surface the edge should just touch, but not actually rest upon the surface.

(To be continued.)

A LITTLE HINT.

By G. H. REYNOLDS, B.A., D.D.S., Strathroy, Ont.

Dentists could save themselves much from the unpleasantness and unhealthfulness of inhaling their patients' breath, while performing long operations in gold filling, when the rubber dam is applied, by placing a sheet of paper from a gold-foil book before the patient's nose, securing it under the dam and elastic fasteners. It also prevents the moisture from the breath coming in direct contact with the gold while packing. This makes it equally agreeable to the patient. This suggestion may not be new to many of our professional brethren, but it would be well if it were more practised.

HINTS.

BY A LAZY MAN.

AMALGAM. If you have vol. 3, *Canada Journal of Dental Science*, 1870, read what was written on this subject, pages 169, 321, 360, 370.

If you can get any of the old laboratory tools of Chevalier —, shears, plate punches, pivot punches, etc., they will put to shame the rubbish of modern steel.

MOULDING sand. Take ordinary bath-brick finely powdered. Add about 40 per cent. to your moulding sand. It makes a cohesive, compact and sharp impression.

OLD Journals. Look back over them from time to time, and you'll discover that you either never read them before, or that you've forgotten many valuable hints they contain.

MOST of women do not mind so much being hurt, as they mind having a nice dress spoiled. Use a rubber apron for the dear creatures when taking impressions; you'd make a much better one, too.

SAW large spools in two. Handy to lay instruments on, for bench blocks. Drive nail through a spool on your work bench. Fasten spools anywhere convenient in or near your operating stand so that they will hold your floss silk and gilling twine.

ANOTHER very nearly serious explosion of pyrozone tube is reported. When you are plainly directed to keep it in a cool place; to cool it in icy water and wrap the tube in a towel before opening it, you should obey instructions. A man who lights his pipe on a can of gunpowder deserves to be blown up.

If you have a silver-plated fountain spittoon, do not let your patients eject into it loose particles of amalgam. They may adhere to the edges of the basin, and irreparably corrode the plating. One of the handiest things about a chair is the small hand spittoons. I use a china bowl if I use iodine in the mouth.

KEEP an assortment of small rubber rings on upright pieces of wood or steel, the size of a match. I often use them for ligaturing rubber dam. Slip on and off easily; do not hurt gum like silk. Handy too in keeping in cotton, etc., over temporary preparations in large and shallow approximal cavities. Can cement them over cavity.

COMMON cut tacks. Drive them in any form you like into plaster models to make air-chambers. Use them for some lower sets. Do not leave them on your laboratory stool.

FASTEN two pieces of thin wood, double the size of a match, placing a small rubber ring between them before you fasten them. Then slip over each piece small rubber ring, to meet each other. Make handy tweezes for cotton pelletes dipped in iodine, or for any purpose which would injure steel. I think I must have stolen this idea.

CORKS, champagne corks especially. Better than buff cones or wheels. Cut them into anyshape to get into anyhole or corner. Thin slices make best non-conductor for exposed pulps. Stick laboratory files into them for handles. A big piece square makes fine laboratory block. Cut a lot of them into shape for mouth gags, and tie string to them. Cork soles best soles for the dentist's feet.

MUST stop ; very lazy again.

OBSTINATE HÆMORRHAGE.

By W. G. B.

A case of unusually obstinate hæmorrhage came under my notice, following the rough extraction of a superior molar. The outer and inner plates of the alveolus were severely smashed ; one gash, made by the forcep, extending a quarter of an inch into the hard palate. Various preparations had been used in the abbatoir where the patient had the operation performed. Tannic acid was on hand, so that was tried, and failing, perchloride of iron was used on top of it. This of course was an incompatible mixture, forming tannate of iron, and rendered both inert. An hour after the operation, the dentist telephoned me, and the patient arrived. After cleansing the socket with hot water and lysol, I packed lycoperdon giganteum into the wound and socket, and retained it covering the entire extent by a compress of spunk, under a steel band fitted to grip the outer alveolus and the wounded palate. The effect was instantaneous. When I was a student of Dr. Chas. Brewster he was using lycoperdon (puff-ball) for hæmorrhage, which was much more common than now. Sir B. Ward Richardson thought the change due to the more general use of fruit, and the improvement in the ordinary diet which produced better blood. Sir Benjamin devoted much attention to the fungus in a work he wrote on the medical treatment of the disease of the teeth. Dr. Brewster was never without a good supply of puff-ball, and in common with him

I never failed with it, and never depended upon anything else, so so far as alveolar hæmorrhage was concerned. Several cases of spontaneous bleeding from the gums were arrested by packing it into the interdental spaces. A few years ago Dr. Klotz in one of his "Translations" gave us an account of its use by a surgeon of Edinburgh. Some years ago a fatal case of spontaneous bleeding of the gums occurred in Montreal. A dentist was called in who could think of nothing more ingenious than extracting several teeth and trying to plug the sockets with plaster of paris! After a final surgical resort of ligaturing the carotid the patient died. I have had several cases of vicarious bleeding from the gums, which the lycoperdon arrested. It is found in the fields, especially on sandy soil, in the fall of the year.

Dr. Brewster found the greatest virtue to lie in the genus lycoperdon bovista, which is smaller and scarcer than the genus giganteum. The doctor conceived the idea of medicating it with camphor and carbolic acid to remove certain objections. The theory of the effects of the fungus is explained by the excess of phosphate of soda, the styptic properties of which were once in repute.

Correspondence.

To the Editor of DOMINION DENTAL JOURNAL:

SIR,—A remark in the *Review* impressed us as worthy of attention. It was concerning the spirit of the members of the Odontographic Society of Chicago. "Its entire elimination of politics, and recognizing no faction, etc." Good fraternal feeling is something of emulation in all bodies. We congratulate Chicago and the West that such is the fact. We are not emphasizing anything but another fact when we say such is not the spirit of New York City proper. The division of the Odontological Society is much regretted by many of the *best* members of the profession of the city and its surroundings. It is more and more felt that it was *never* a necessary step that was taken, while it will be admitted that not a little did there arise that nettles human nature; but, over against all that, there were very many reasons why a higher element should have prevailed and saved the repute of the associated portion of the profession of such a city as New York certainly is, from a stigma that more and more deepens a shadow over the future possibilities, of creating an atmosphere for progressive efforts among the coming portion of those that are to take the place of the present generation. If it is to become a more noble and self-sacrificing,

it certainly must, a larger example. While we have not—from the initial step of forming the Odontological Society—been in sympathy with the formation of the Society at the time—with the real purpose it had in view—yet we have come to see that this Society has had put into its hands possibilities that augured for much good, not only for the general membership, but such that could and would have reflected a higher standard for aspiring dentists, that were sure to be among the coming generation of practitioners. To any one coming among the associations of this body and its quarters, they could not but be favorably impressed with the beginnings that so markedly indicate an enterprise that was well worthy of emphatic energy looking to the increase. To what do we refer, it will be asked? It is to the cabinets filled with a quality of material that would richly grace any of the museums of our country. No scientific body can boast of anything finer. It is up to date as a scientific standard. We have definitely noticed the animated attention that these cabinets have secured from strangers; to many it has been a decided surprise and it has given an *eclat* to the Society quite little thought of by the mass of practitioners. While, as we have said, we have not been personally engaged in the participation of this creditable work, yet we have always, when visiting the Society meetings, felt a professional pride that this Society was marked by such *good* beginnings. Now, in the midst of all this good prospect, that there should come such a destructive blow to the Society's prosperity; it is lamentable that those who have taken so good a share in the helpfulness in providing this attraction, embodying so much of educational advantage, should have so ruthlessly broken ranks and torn themselves from the enjoyments and emoluments that they so much aided in securing, and more, they have lessened the high standard that is naturally looked for in bodies that assume *high* aspirations. We say that it is a *destructive blow*, not only to the Society, *but* we predict that it will prove to be far more reaching in its dire effects to those that have forsaken the *larger* prospect for what must be the *lesser*. From all we know, we assert that we are acquainted with the prime facts that led to the resignation of nineteen members of the Society. We chanced to be present when it was plainly manifested that the major grievance was emphasized. It was this: the Society had divided for good reasons that had become apparent, *viz.*, that it was for the interests of the Society that their proceedings should go back to the larger channel of circulation which it had formerly used, which was the *Cosmos*. Previous to this effort for satisfaction, etc., there was a hope that these better counsels would prevail, and that there would be a *partial* return at least to the parent society. But the agent that was sent to demand satisfaction was, unfortunately, of a temperament not in the least qualified for concili-

ation, and his efforts were an *absolute* failure, as we saw from the start it must be. Without adding more, we confess that we do not see a pleasant future for society advancement in New York City proper. The break must, and does, have a disintegrating effect. As things stand, all society advantage must be retarded, and what was beginning to be a nucleus of august proportions and attraction to a society that had had quite an unusual and popular record, and might have become an object of professional pride, must be shorn of its strength. We are sure no one can say that, united, both factions could have secured a future for usefulness. One thing we do not hesitate to predict, that time will prove an *irredeemable misfortune* if the disunion is selfishly persisted in, and bring a stumbling block in the pathway of true elevation of professional character in New York.

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TUBERCULOSIS OF THE SALIVARY GLANDS.—Though it is easy to induce tuberculosis of the salivary glands experimentally, we meet the disease clinically but very seldom. O'Zoux describes two cases in the submaxillary gland (*Arch. clin. de Bordeaux*, No. 1, 1897). The swelling is considerably larger than in simple adenitis and is exceedingly painful; the pus is thin and moderate in amount. The author explains the rarity of the disease in this location by the fact that the blood remains in contact with the oral mucous membrane for too short a time to give rise to infection.—*Amer. Med.-Surg. Bulletin*.

MECHANICAL IMPEDIMENT TO RESPIRATION DURING ANÆSTHESIA.—Dr. C. Hamilton Whiteford (Plymouth) writes: Like Dr. Potter, I have frequently observed the mechanical obstruction offered by the lips in anæsthesia. In people with deep flabby lips, especially in those who have lost their front teeth, the lips—the upper as well as the lower—frequently act as valves, allowing expiration but preventing inspiration by their edges being drawn in and completely closing the oral orifice. This valve action is quite independent of any obstructions caused by the base of the tongue falling over the larynx, occurring equally with the chin elevated or depressed. Pulling forward the tongue with forceps, the chin being already elevated, relieves the dyspnoea and cyanosis by separating the lips and allowing the free entry of air.—*Brit. Med. Journal*.

AN ANÆSTHETIST'S MOUTH OPENER AND GAG.—Messrs. Weiss & Son, of 287 Oxford Street, have a little appliance designed by Dr. Frederick Hewitt with the object of affording a

ready and rapid means of opening the mouth of the semi-anæsthetized or anæsthetized patient. Owing to the frequency with which the upper teeth overlap the lower, it is often impossible to relieve obstructive breathing by the customary plan of pushing the lower jaw forwards, and it therefore becomes necessary to open the mouth. If the teeth are tightly clenched, and more especially if there are no vacant spaces between them, Dr. Hewitt points out that it is by no means an easy matter to do this. The difficulty reaches its acme in the case of powerfully built men whose upper teeth considerably overlap the lower. The little appliance is made of brass and is, in reality, a curved finger shield more or less wedge shaped, which can be introduced beneath the overlapping upper teeth. When the thin end of the wedge has gained admission the mouth opener is pushed onwards till the teeth are separated by the large end, at which two slots are cut, one through the upper and the other through the lower wall. When once the teeth have fixed themselves in these slots the finger may be taken out of the instrument and the mouth will remain open without any further assistance.—*Brit. Med. Journal.*

REMARKS ON THE EXPLORATORY PUNCTURE OF THE MAXIL-LARY SINUS AND THE "SEROUS AFFECTION" OF THIS CAVITY. —G. Krebs, in *Archiv. fur Laryng. und Rhinol.*, Band 4, Heft 3, inquires whether the exploratory puncture of the antrum of Highmore is quite harmless. The procedure is employed chiefly in cases of nasal suppuration, in order to discover the source. Asepsis in the nose being impossible, a healthy antrum may become affected. A number of cases in which operative measures in the nose have led to suppuration in the antrum have been described, although there is no instance on record, to the author's knowledge, in which exploratory puncture of the antrum led to its infection. He regards as suspicious, however, the reference of Noltenius to "an almost clear serous fluid which subsequently became cloudy and then purulent;" also Grünwald's statement that in some cases he explored the antrum four times before he found pus. Grünwald holds that exploratory puncture with a negative result proves nothing. The author, on the other hand, points out that in antral empyema pus is always present in the cavity, so that when exploratory puncture yields a negative result we have conclusive proof that the antrum is unaffected. While surgical principles point to the inferior meatus as the proper place for perforating when we have the treatment of the antrum in view, the author reminds us that for exploratory purposes the middle meatus is better suited, owing to the thinness of the wall. In consequence of frequent trial puncture, a new form of disease has appeared—the "serous affection" of the antrum, as described by Noltenius.

Since the publication of this writer's paper, the author has found serous contents in the antrum in two cases. In both there was empyema of the frontal sinus of the same side. As none of the subjective or objective symptoms could be attributed to this "serous affection," it was not treated. In both cases, after a week, the antrum was again punctured, and found empty. In one of the patients this procedure was repeated a year later, with a similar negative result.—*American Medico-Surgical Bulletin*.

IMPRISONED TOOTH: AN OBSCURE CAUSE OF CERVICAL ABSCESS.—Mr. T. R. Jessop read a paper on the above subject, giving particulars of two cases. In the first, a female of 25 had suffered from pain in the lower jaw for some years. After extraction of a molar tooth an abscess formed, which discharged through the cheek, closing, refilling, and bursting from time to time. Later all the teeth on this side were removed, but without any benefit. When Mr. Jessop saw the case bare bone could be felt at the bottom of the sinus, and on exposing the jaw under ether a minute hole was observed leading to a large cavity containing a carious bicuspid tooth. This was removed, and in a short time healing was complete. In the second case, a man of 45, similar symptoms were present, but there were in addition several sinuses in the neck leading towards the ascending ramus of the jaw. Examination with a probe revealed no bare bone. All the molar teeth had been removed in the upper and lower jaw on that side some six years previously. The upper jaw was wider and thicker and more substantial than natural, whilst the lower was sharp, firm, and compact. This observation led Mr. Jessop at the operation to attack the upper jaw first, but he was unable to find any disease. On gouging the lower jaw the marble-like surface of a tooth was struck, and a full-sized wisdom tooth undergoing caries was extracted. The sinuses ceased discharging, and in a few days had entirely healed.—*Brit. Med. Journal*.

CONGENITAL TEETH.—Details of three cases and references to seventy more are given in the *Edinburgh Med. Journal* by J. W. Ballantyne. From a study of these cases he arrives at the following conclusions: (1) Congenital teeth form a rare anomaly, but one which has long been known both to the profession and to the public. (2) Their presence has often an ill-effect upon lactation, partly on account of the imperfect closure of the infant's mouth, and partly by the wounding of the mother's nipple; sublingual ulceration may also be a result, and infantile diarrhoea and atrophy are more distant consequences. Sometimes, however, symptoms are altogether absent. (3) Congenital teeth have probably little or no prognostic significance as regards the bodily or mental vigor of the infant carrying them. (4) The teeth usually met with are

lower incisors, but sometimes upper incisors may be seen, and very rarely molars of either the upper or lower jaw. Other facial or buccal malformations may occasionally be met with. (5) They are caused by the premature occurrence of the processes which normally lead to the cutting of the milk teeth; in a few cases it would seem that the anomaly is due to a true ectopia of the dental follicle and its contained tooth. (6) In a few instances a hereditary history has been established. (7) As the congenital teeth are usually incomplete and ill developed, and more likely to be more an inconvenience than an advantage to the infant, they are best removed soon after birth, an operation which can be easily and, except in very rare instances, safely performed. (8) The occurrence of premature teeth in certain historical personages is an interesting fact, the importance of which has been much exaggerated.—*Canadian Practitioner, Nov., 1897.*

A SALIVARY FISTULA OF THIRTY YEARS' STANDING : OPERATION : CURE.—Mr. G., aged 61, native of St. Helena, consulted me in June, 1896, for what he termed "a leak in his neck." Examination revealed an opening about the size of a small pinhead situated in the inferior portion of the superior carotid triangle of the left side of the neck, and from which there was oozing a thin watery fluid. On giving him a small crystal of citric acid to suck, the flow of this fluid would markedly increase. It was evidently salivary secretion. I passed a small probe into the fistula in the direction of the parotid gland about two inches. Over thirty years ago the patient underwent an operation for an enlargement in the neck, which he says the doctor called "a tumor"—what variety of tumor I could not elicit from the patient. After the healing of the wound, which was several months after the operation, he noticed that his neck was always wet, and that from the lower portion of the cicatrix there seemed to be an oozing of water. He had undergone treatment on several occasions without success. I injected, hypodermically, cocaine, placing the patient in the recumbent posture (which I believe to be the only safe manner for the administration of that anæsthetic), and passed a probe well into the fistula. I then passed a curved needle, threaded with heavy silkworm gut, well under the probe and fistula, bringing it out on the other side. Removing the probe I ligated the fistula. This would be at a point about 4 c.cm. from the opening of the sinus. Reinserting the probe to the point of ligation, I cut down upon the probe, laying the fistula open, and curetting thoroughly, sutured the incision with three or four sutures. I asked the patient to return in four days. Examination then showed no signs of suppuration, and the wound seemed well healed. On the fifth day I removed the ligature. On the eleventh day the sutures were taken out. It is now fully three

months since the operation, and there are no signs of the recurrence of the fluid, and the surface is thoroughly healed. The only points to be noted in this operation are these: The ligating of the fistula at the proximal end of the fistula, thus shutting off the flow of saliva, to allow the curetted portion of the canal to heal; and the early removal of the ligature before its cutting its way to the fistula, or causing the parts to slough. I might here add that I found the opening of Stenson's duct, and I had no difficulty in passing a probe its full length.—*Brit. Med. Journal.*

THE MEDICAL TREATMENT OF TOOTHACHE.—(Frederick C. Coley, M.D., Physician to the Children's Hospital, Newcastle-on-Tyne, and to the Northern Counties Hospital for Diseases of the Chest.)—Beyond all question the treatment of toothache is mainly surgical. An aching tooth is usually carious and should be "stopped," if that can be done with a fair prospect of success. Carious teeth which cannot be "stopped" had better be extracted as a general rule. But I need not waste time in enumerating the circumstances which often arise to make these simple rules inapplicable; and no one who has recently suffered from a "jumping" toothache will be inclined to think that I need not apologize for asking a little space in which to enumerate the remedies which I have found successful in such a common and painful ailment. I may say at once that I believe very few toothaches are incapable of permanent relief without extraction of the tooth. That operation is very often the most desirable way of procuring relief, but it is very rarely the only way. Thousands of people have carious teeth without toothache, which proves that caries is only one factor in the production of pain. The other factor may (and commonly does) prove to be removable, and then the pain ceases, though the carious tooth remains. And, on the other hand, it is only too common to find that neuralgic pain persists after the extraction of tooth after tooth, which might perhaps have done good service *in situ*. A toothache which is "scotched" by appropriate means often ceases permanently; or it may return once or twice (being again relieved by the same, or some other, remedy) and then finally disappear. To attack a pain of this kind by a mere narcotic, such as opium or morphia, seems to me rather clumsy therapeutics, and we can usually find much more suitable methods. Alcohol in any form is still more objectionable. One of the most melancholy cases of alcoholism that ever came under my own observation had its origin in the inconsiderate recommendation of stout as a remedy for dental neuralgia. It is partly because I desire to replace these dangerous narcotics by more effectual and safer remedies that I have determined to write the present paper. The pain of a hollow tooth may generally be entirely removed by

inserting in it a pledget of cotton wool soaked in carbolic acid liquefied by the addition of an equal quantity of water. A pledget of dry wool should be placed over the carbolized wool, to retain the acid. The aching usually ceases in a few minutes, but may recur after a few hours, to be again relieved on a reapplication of the carbolic acid. A very few repetitions commonly suffice to make the cure permanent. But of course the hollow tooth should be stopped, if possible, afterward. A gentleman came to me one day in terrible agony from a raging neuralgia located in the part of his lower jaw from which he had lately had several teeth removed. I applied to the gum rather less than half a grain of cocaine in powder. In a minute or so he exclaimed, "It is gone!" and the changed expression of his countenance showed how complete was his relief. Better still, the neuralgia never returned, though he had previously suffered from it at intervals for a considerable time. Probably the permanence of the cure was attributable to a quinine mixture which I also prescribed. It would, however, be unwise to give the patient a prescription for cocaine or a quantity of the drug to be reapplied p.r.n. Such a course would involve no little danger of setting up a habit leading to cocanism. Persons who have been for some time deprived of a proper allowance of sleep, from any cause, are very liable to be painfully reminded of the existence of any bad teeth which they may happen to possess by an attack of dental neuralgia. If this is not soon relieved by appropriate means it tends to aggravate and perpetuate itself by still further depriving the patient of sleep. I have found the following prescription very useful in such cases :

R Quin. sulph.....	gr. ii
Acid. hydrobrom	m. xv.
Tr. gelsem	m. xv.
Syrup	℥ iss.
Aq. ad.....	℥ j. t.d.

I have seen a raging toothache completely relieved in a few minutes by a single dose of two grains of exalgin. It is best given in solution. Half a drachm of rectified spirit will dissolve as much as gr. xx of exalgin, and this does precipitate on dilution with water. Exalgin is, however, a somewhat uncertain remedy. Sometimes it is a brilliant success, and sometimes it is an utter failure. There is a kind of toothache which comes on after taking food, when the contents of the stomach are naturally acid. This is often relieved with quite astonishing rapidity by the administration of an alkali. The best way is to give a seidlitz powder, minus a quarter of the acid, so leaving an excess of alkali. In a typical case of this kind the pain ceases instantaneously—almost as soon as the effervescing draught is swallowed. But of all medical remedies for toothache I

know of none which is so successful as salicylate of sodium. I believe it is especially useful in those cases where the pain is started "by taking cold." Even in the condition which is called by dentists "periostitis," where the carious tooth becomes slightly loosened and projects beyond its neighbors, and is exquisitely tender when eating is attempted, I have often known sodium salicylate to be completely and permanently successful. A dose of gr. xv. will usually relieve the pain very promptly, and if this is repeated every four hours the inflammation may entirely subside, leaving, of course, a carious tooth to be disposed of according to circumstances. The addition of belladonna is often advantageous. Fifteen grains of sodium salicylate, with fifteen minims of tincture of belladonna, will often procure refreshing sleep instead of a night of agony. I believe that this use of salicylate of sodium is not generally known. I first became aware of it by experience in my own person; and since then I have used it with many brilliant successes and few failures in a very large number of patients. I have once, however, known phenacetin to succeed where the salicylate failed. But the salicylate is much more worthy of confidence as a rule. It is especially valuable in children, where extraction of teeth is to be avoided, if possible, lest the development of the maxilla should be injured.—*Canadian Practitioner, Nov. 1897.*

Selections.

BRITISH TEETH ON THE DOWN GRADE.

By CHARLES FOX, L.D.S.

ABUSE OF DRUGS.—Probing once more into the conditions that operate in this year of grace 1897, and placing them alongside earlier periods in the century, we find an important though perhaps secondary cause for dental deterioration, in the enormous increase of medicine-taking, by all sorts and conditions of citizens. True it is that the physicians with deepest insight into the laws of health rely less and less on drugs and more and more on a sanitary environment for their patients, with strict rules as to diet, clothing, bathing and exercise. But the deeply rooted prejudice in favor of a "bottle of medicine" obliges many a doctor to supplement his really important advice by a needless prescription. And while the drugs are poured down the long-suffering alimentary canal with regularity and touching faith, the more weighty matters of fresh air or exercise will be treated as mere fads of the doctor. One of George

Eliot's most humorous character sketches is that of the old lady in "The Mill on the Floss," who used to show her friends many shelves of empty medicine bottles. There they stood in long array, fragrant witness to her much-to-be pitied state, and yet all the time a cherished monument of pride to the invalid. But this abundant dosing was a luxury of the well-to-do in those days, whereas from a thousand dispensaries and ten thousand chemists' shops in these prosperous days, flow out an ever-widening stream of physic to combat the stress of civilized life. Only the other day a parish doctor found one hardened pauper in his care could boast of having consumed one thousand gallons of medicine all paid for by a tender-hearted nation.

I can remember noticing the dispenser in a busy provincial hospital very frequently filling bottles straight from a large jar. I asked to be enlightened as to the special virtues of this popular mixture. "Oh! that's the faith, hope and charity blend," responded the chemist with a knowing wink, "plenty to taste and smell, nothing to harm a child; and yet, believe me, effects half the cures in the out-patient department." Empty handed, they go away sullen and disappointed, but with a bottle of brown sugar, peppermint and aqua pura they march home light of heart, for "hope springs eternal in the human breast."

Were the prescriptions all of this innocuous order, we as dentists need make no moan. But when diluted sulphuric acid and iron, for instance, as direct destructors, and mercury, arsenic, iodide of potassium, and bromide of potassium as indirect agents for dental mischief, enter so constantly into medical prescriptions we may rightly call for pause. Of course the lesser must give place to the greater, and in cases of virulent or serious disease, the teeth be of secondary importance. All we wish to urge is that they should more often be placed in their rightful perspective, and the servants of a lifetime not be injured while dealing with the temporary symptoms of a passing ailment. This criticism, be it understood, is made "with bated breath and whispering humbleness," but an experience like the following is of too frequent an occurrence in every dental office to prevent our duty being to speak a word in season to our medical brethren. A young woman in service had been a terrible sufferer from neuralgia for more than six months. She attended a dispensary and religiously swallowed twenty-five bottles of physic, containing among other things iron and strychnia. Not once was her mouth examined, or any instructions given to visit a dentist. Finally when the toothache became sufficiently localized she came to have her teeth seen to. A wrench with a pair of forceps cured the neuralgia at once, but the effects of iron and strychnia on the other teeth and general nerve power will never be set right.

But beyond the field of professional prescription lies the vast territory of quack medicine, as boomed in a thousand journals and magazines. The British people polish off 200 millions of pills per annum, as our patent medicine stamp duties bear record, and what boundless oceans of safe-cures, balms, oils, elixirs of life, and soothing syrups are greedily imbibed by the credulous population of these islands? No more terrible instance of our national power, no, not the Jubilee Naval Review itself, can be named than the fact that we sell to foreigners £800,000 worth of patent medicines every year.

Harping back on the one item of iron, it is this in its numerous forms that is the sheet anchor in cases of anæmia. Now anæmia is frequently caused by an indoor life with white bread and tea diet; and the kind-hearted mistress who sends her maid to the dispensary, would be acting a wiser part if she insisted on the pale-faced housemaid spending an hour or two in the sunshine every day. The way in which delicate children, for they are often nothing more, are kept in underground kitchens, or closely confined to the house, day after day, with a glimpse of twilight liberty once or twice a week, is a scandal to our civilization. No class needs the dentist's help more than the domestic servant, and in these poor white slaves, with their wrecked mouths, we see the evils of an unwise diet, bad air and strong medicines in their most pronounced form. If iron must be taken, let the patient use it in the form of a bicycle, for that prescription has cured thousands of stubborn cases of anæmia, since fashion blessed the merry wheel. In the big house of my acquaintance, where servants succeeded one another at frequent intervals, they all rapidly developed dental trouble. From healthy country lasses they degenerate into pallid, languid creatures, with fetid breath and lack-lustre eyes. The young ladies a story or two above, revel in sunshine and healthful exercise, and are financially valueless to the dentist. The good lady imagines she is doing her duty by her dependants, for they are not overworked, and the medical and dental bills cost her a pretty penny, but let her try for herself and children one month in the kitchen, with one evening and Sunday afternoon out for weeks and doubtless they would also peak and pine.

There is a medicine habit as well as opium or alcohol habit, and as the wisdom of our people grows, and the firmness of our physicians, there will be less recourse made on every trivial pretext to drugs. A young doctor remarked to me when discussing this question, and he was an honored man in his day, "I firmly believe that England without a chemist's shop or dispensary or any medicine stronger than dandelion and stewed figs would be a healthier nation than it is to-day, Whenever I find my patients educated to the comparative importance of obeying common-sense

hygienic orders, I bar internal medicines altogether. With the rest I am depending more and more on mild vegetable drugs, linked with repeated advice as to the things to do and the things to be left undone. Strong mineral drugs or powerful nerve tonics effect their cures at too great a permanent cost."

If a person eats half a hundredweight too much sugar every year, Aunt Hannah's Syrup will not re-establish their dental integrity. The child who is robbed of milk and stuffed with cornflour cannot be coaxed into stalwart youth by the aid of Mr. Gainfast's Soothing Syrup. Pale-faced girls in factory or suburban kitchen on meagre allowance of sun and breeze will not permanently blossom into blushing beauty on Dr. Blaud's Pills for Blue People, nor will old men with kidneys ruined by years of excessive drinking renew their youth on a course of Safe Cure.—*British Journal of Dental Science.*

THE NEXT GENERATION.

Those who have been dentists for twenty-five or more years, and who are conversant with what is now taught and practiced by the advanced men, can but be astounded by the developments of the past quarter century. In those early days dentistry was merely a vocation. It was almost exclusively mechanical. To be sure, we were accustomed to speak of it as a Profession, with a big P., but there was very little that was really professional about it. It was merely manual labor of one kind or another—labor of a superior order, of course. Men eminent in dentistry openly proclaimed that if all knowledge of medicine could be at once and forever blotted out, it would not in the remotest degree affect the "profession" of dentistry.

Now, in the closing days of the century, we see medicine clearly and definitely divided into a number of well-defined specialties, and dentistry advancing to occupy one of these fields. This partition of medicine has become an absolute necessity, and it must year by year grow yet more marked, because, as research and study enlarge the field, it becomes more and more too great for one life thoroughly to master. The diseases of the eye and ear naturally fall to the oculist and the otologist. Affections of the skin are referred to the dermatologist, etc., etc. Disorders of the oral cavity must necessarily come within the province of the educated dentist, and these naturally carry with them lesions of the subsidiary or associated cavities, so that not only such affections as stomatitis, gingivitis, ulitis, glossitis, all degenerations of the oral mucus-membrane, the ordinary tumors of the mouth, with disorders of the maxillary and frontal sinuses, will fall within his

province, but affections of the pharynx as well. Indeed, there is no one who has such excellent opportunities for the examination of the pharyngeal cavity as the dentist, and the treatment of the different forms of pharyngitis should be taught in our schools. Already this is the case in some that we know of.

One does not need to look far into the future to forecast the day when dentistry itself must be divided into specialties. If the present rate of development should continue for another quarter century, the practitioner of 1925 may be either a Prosthetic Dentist, an Operative Dentist, an Orthodontal Dentist, or a Medico Dentist. The general practitioner in dentistry will at that time be as infrequently met with as the general medical practitioner is at the present time. The field will be far too broad for one man to cover. He will not in his lifetime be able to master the whole science of dentistry, any more than now he can become learned and skilful in all the branches of medicine.

Does anyone entertain the idea that such visions of the future are fanciful, visionary, utopian? Let him look back a quarter of a century, note the progress made, and then calculate where that rate will land us in 1925. Surely, it will not be contended that the advance of the future is to be less than that of the past. As man develops in intelligence and in the comprehension of scientific laws, these but become instruments for future use, to enable him to accelerate his rate of progress. Look back twice twenty-five years, and see how many secrets of nature have been wrested from their hiding places. The steamboat, the railroad, the telegraph, the telephone, the phonograph, the microscope, the spectroscope and a hundred other triumphs of science have been added to the armamentarium of man, only to be used in making further discoveries. We do not mean that all these were utterly unknown fifty years ago, but their modern uses were yet a secret. Fifty years hence the world will be employing all these instruments in a hundred ways now unknown.

Surely, dentistry must progress with the rest of the world, even if it does not keep up its present rapid pace. Already Prosthetic Dentistry is divided by those who give almost or quite exclusive attention to "crown and bridge work." It is no argument to say that this specialty has been fearfully abused, and that too many of these "specialists" are the worst kind of empirics and quacks. Every new discovery drives unbalanced men daft for a time, but in a few years it gets shaken down into its proper place. It will be so with all the new discoveries in dentistry, and then—it makes one dizzy to think of what are the possibilities of the future.

All these considerations must presuppose an educated profession. In 1925 the standard of preliminary qualifications will not be the ability to read and write. Undoubtedly there will then be a class

of dental mechanics in which a classical education will not be a necessity. But for those who shall pretend to occupy any of the higher walks, erudition will be the first prerequisite. Our colleges will be teaching branches that will require trained intelligence to comprehend. Those who are not possessed of this will be shaken through the meshes of the professional net, and will bring up on the lower levels, while the larger men, those having a liberal education with a degree of native intellectuality, will keep their place at the top. Patrick Henry said that his feet were guided only by the lamp of experience. It will be well for us if we permit its rays to light up our future professional path.—*Dental Practitioner and Advertiser*.

Tit Bits from the Editors.

AS the literature of a profession must keep even pace with it to be of either historical or didactic value, so too the literature of dentistry must continually broaden and endeavor to include within its grasp all that pertains not only to the science and practice of dentistry by itself, but all that is correlative to it.—*Pacific Medico-Dental Gazette*.

DR. MOORE, of Frankfort, has recorded a case of symptoms of poisoning which he affirms was caused by the application of cocaine to the dental pulp by means of the electric current. After thorough investigation to discover the cause of the accident, he is convinced that the apical foramen was very patent, so that the cocaine rapidly entered the system.—*Brit. Jour. Dental Science*.

AS a matter of every-day experience it is not the best educated practitioner who has the inclination to treat cases which would be referred to some one else; on the contrary, it is the ignorant general practitioner who fails to see the advisability of calling in the consultant, the ignorant dentist who treats a case that should be in the hands of a surgeon or physician. There are plenty of dentists who hold full medical qualifications, are members or fellows of the various qualifying bodies, or doctors of medicine; but do we find even these undertaking in their practice cases which they, in one sense, properly might, but which at the same time they know would be better handled by others? Most emphatically no; but that is just what the ignorant practitioner often does, whether in medicine or dentistry.—*Journal of British Dental Association*.

IT is a pitiful fact that notwithstanding all the influence which his college connections bring to bear in the formation of his professional character, there are a few men who are apparently beyond the reach of the kind of influence alluded to (the discountenance of every act which savors of quackery), and occasionally we hear of violations of the code, both in letter and spirit, by those who have graduated from this department. Fortunately these are but few in number, so that the walls of "Dental Parlors and Local Anæsthesia Joints" are rarely adorned with the diploma of our institution. The very rarity of such an occurrence makes it all the more flagrant when found, and the just indignation of all reputable alumni should express itself without hesitation against the man who would thus besmirch the fair name and fame of his *alma mater*.—*Pennsylvania Dental Journal*.

THE Dentists Act has narrowly escaped one of the most deadly blows it could have received—a blow which would have destroyed many years' work of the executive of our Association, and again opened the floodgates for the rush of incompetence and pretentious ignorance to swamp and sweep away the educational efforts which have raised our profession to its present level, and which, we are proud to think, has stimulated dental education throughout the whole world.

There is no foreigner excluded from our profession if he chooses to go through the curriculum which we exact from our own countrymen. Such exactions are imposed upon us by other countries and other governments, and we are quite prepared to accept such conditions, but no amount of law-breaking or any number of doctorate diplomas are likely to be received here in lieu of the primary requirements.—*Journal of the British Dental Association*.

Dominion Dental Journal

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THE CHARTER OF PROFESSIONAL ETHICS.

A correspondent in Nova Scotia, who thinks we are too hard on the semblance of quackery which appears in his advertisement, bluntly asks us who appointed us the judge of dental ethics? We are indebted to him for his frankness, because it never occurred to us before, that there was any one so unreasonable as to suppose that we arrogate for this Journal any such position. Whatever has been said editorially from time to time on this subject, has certainly been the expression of our personal opinion; but it has been based upon professional law and codes of ethics, which were framed before our correspondent was born, and which are directly applicable to licentiates in every Province of the Dominion where the code has been accepted. It constitutes the text for all our action, and if the editor is to be censured for demanding obedience to laws and regulations by which all licentiates are, or should be governed, who is blameless? We are all in the same boat; but when we find any of the crew trying to scuttle it, shall we help him or choke him? Perhaps the best answer we can give our correspondent is the following extract from the code of ethics of the Dental Association of his own Province, adopted five years ago, and at the head of which "Special attention is called to Section 6." We may add

this extract is precisely the same as the code used in the other Provinces.

"Sec. 6. It is unprofessional to resort to public advertisements such as cards, hand bills, posters or signs, calling attention to peculiar styles of work, prices for services, special modes of operating, or to claim superiority over neighboring practitioners; to publish reports of cases or certificates in public prints; to go from house to house soliciting or performing operations, to circulate nostrums, or to perform any other similar acts. But nothing in this section shall be construed so as to imply that it is unprofessional for dentists to announce in the public prints, or by card, simply their name, occupation, and place of business; or in the same manner, to announce their general absence from or return to business; or to issue to their patients appointment cards, having a fee bill for professional services thereon."

The above is very clear and comprehensive. It encroaches only upon the liberty of licentiates who want the public to believe that they are in some way superior to the ordinary run of dentists. If the code is oppressive let it be cancelled. But while it is the one sign by which we claim a right to dignify dentistry as a profession, and so long as the professional organizations of our Province stand by it, so shall we. Our correspondent could find a few friends, who might join him in popularizing a movement, for the independence of dentistry from any professional code which restrained a licentiate from blowing his own trumpet from the house-tops of Ontario and Quebec.

"LAISSER-FAIRE."

It is not easy to touch pitch without defilement. A white lie is close neighbor to a black one. A dentist cannot safely venture beyond the legitimate limits of advertising, without risk of getting into depths he never expected. We have witnessed instances of this many times. Quacks never take their models or methods from reputable practitioners, but if reputable men think they can refine the models of the quacks to reputable appearances, they take a first step towards full imitation. We can never be converted to the belief, that sensational advertising methods of any sort—even if they tell the truth, are professional. Imagine the degradation to law or medicine as professions, were reputable men to imitate the models of some of our dentists. We see dental advertisements in the Canadian press, copied almost *verbatim* from the worst quacks of New York and Chicago. They appeal to the lowest sentiments of human nature; they lie, and of course they do worse when they get the chance. Some of our friends advise

us to leave the quacks alone. They are like the weak women who waste their sympathy and flowers upon the vile criminals condemned to die for vile crimes, frequently against women. We have no sentimentality to spare in the direction of quackery, or its imitation, and we believe, in spite of their weak-kneed apologists, we have the support of the profession at large. A little more resolution and straightforward policy on the part of our associations, would have made it as impossible among licentiates in dentistry as it is among licentiates in law and medicine. Our policy has been one of equality of opportunity. These advertisers seek one of monopoly by pretensions of superiority which are fraudulent. If we begin to condone what we know should be condemned, the future is not a hopeful one.

Moreover, it is our duty to young practitioners to guide them in ethical principles. Quack advertising is morally and socially wrong, and has not resulted in any permanent benefit to any dentist who has indulged in it. It has been the ruin of half a dozen dentists in Montreal alone. The mere fact that few have made a few dollars is no moral encouragement. It is poor compensation for the life-long stigma of being a quack.

We have done our duty in this business, and without in any way reversing our opinions, we shall watch with interest, how the policy of *laissez-faire* will work.

A TRUCE.

We have been so severely criticised by several friends who are not quacks or quack imitators, for "quacking so much about the quacks," that we have decided upon a truce as a test. The ethical policy of this Journal and its predecessor has influenced some to abandon objectionable methods of advertising. It has persuaded many to avoid an imitation of quack methods. At any rate, it has stuck to its principles through thick and thin, and if in doing this it has not spoken for the profession as a whole, it would be less ashamed of itself than of the profession. To excite an honorable ambition towards decency and dignity seems to be wrong policy in the minds of some of our critics. We have, too, good friends who advise us to "let the quacks alone." We shall take the advice, and watch for results; it is not one of the joys of journalism to make foes, even out of quacks. The object of all our preaching has been to convert them from the error of their ways, for their own good. There is neither fame, fortune nor favor in the labor for us. The journalist gets no reward on this earth, and will not likely share any with the preacher in the next.

OUR ONTARIO NUMBER.

Our May issue will be devoted exclusively to the reports and interests of the Ontario Dental Society. In addition to the reports, we will publish the portraits of Dr. B. W. Day, the first President of the Ontario Board, Dr. J. B. Willmott, the first Dean of the College, and the officers of the Ontario Dental Society. Our readers will be pleased to learn, too, that we will also present to them the portraits of Dr. G. V. Black and Dr. C. N. Johnson, of Chicago.

EDITORIAL NOTES.

OVERCROWDED professions in the older provinces of Canada. There will be lots of scope for our young men in the Klondike. If you are going for the purpose of making your fortune as a miner you had better prepare so that you can make a good business. "The bird in the hand," etc.

DR. C. H. WELLS, of Huntingdon, Que., has got tired of putting gold into teeth, and has gone to the Klondike to put it into his own pocket. He has lots of grit. We hope he may get lots of gold. All that glitters *is* gold in that part of our Dominion. Among his "supplies," he took a dental equipment, just to keep his hand in.

CARELESS CRITICISM.—The editor of the *British Journal of Dental Science* editorially informs his readers that he has discovered a typographical error in a headline, and repeated in the text of an article last October in the DOMINION DENTAL JOURNAL. If he had taken the trouble to look at the "list of contents" published in the December issue, he would have seen that it was there correctly recorded. The editor of the *British Journal of Dental Science* was a careless critic.

WE wonder to what depths of professional humiliation some of our dentists will go. Many who ought to be the leaders in thought and action, are following the lead of those who have no respect for the dignity of the profession. The business of "shopping" from office to office has become so general that the only way to stop it, is to charge for consultations. Young men waiting on practice may afford to give consultations free, but they often take up more time than an operation, and men of experience especially, should not demean themselves by permitting "shoppers" to get the benefit of this experience, without any more

thought of paying a fee than if they were consulting a laborer about digging a drain. These remarks would often apply to country as well as city practice. Country dentists and doctors do far too much for nothing, but they do not get their merchandise from country stores for nothing. The opinions and advice of the physician is one of the things he has for sale. We do not see why the farmer who will not throw in an extra bushel of oats in a sale, has any right to get an extra advice for nothing.

It is thought by some of the youngest generation of dentists that the existing state of educational affairs should not continue. They do not blame themselves for the supineness of the support they gave to the college at its inception. A number of them joined an early effort to split it, by a puerile belief that there was room for two schools, in one of which they would hold office. On the other hand, among the juniors who make bold to believe that the French and English cannot pull together in a united college, there are several of our most promising young men who are worthily ambitious and thoroughly ethical. They think it would be easy to establish a good English school, but not a good one, French and English. There is no reason in existence why a good English faculty cannot be established as matters are. The idea of creating a strong English and endowed school will be against the interests of the profession and the public for a long time to come. Matters are bad enough as it is in Quebec, but the endowed business of manufacturing dentists would very soon prove the ruin of the profession as a means of living. The fad for professorships, however, seems to rush some men on to financial suicide. The younger men should not rush in where their more experienced seniors know it would be unwise to tread. It would be a very easy matter indeed to remedy existing evils.

QUEBEC as a Province has offered many perplexing national problems to the statesman. It presented several to the pioneers of dentistry as an organized profession. Any one at all familiar with the average composition of the Local Legislature, does not need to be told that the difficulties to be overcome in that quarter have no parallel anywhere else in the world. It needed cool heads as well as patriotic hands to lift the bantling out of insignificance into the cradle of its being. Had there been any racial clash there would have been certain smash. Dr. Chas. Brewster, the father of the profession in Quebec, clearly foresaw the absolute necessity for unity of aim and action. Men like the late Hon. Dr. Baillargeon, Dr. C. F. F. Trestler, Dr. Ed. Casgrain and Dr. L. J. B. Leblanc who represented the pioneers among the French dentists at the time, met our efforts in a fraternal spirit which has never been relaxed. It has ever been one of the pleasantest incidents of our

history. The English saw the difficulties in the way of their French brethren. Dental education everywhere on the continent was in a language foreign to most of them. The text-books of most value were in English. Various other circumstances conspired to handicap our French students. It would not only have been ungenerous, but most likely unsuccessful, had the English element asked the Legislature, overwhelmingly French, to strengthen the professional interests of one race at the expense of the other. We owed a patriotic duty to the public as well as the profession. The union of the two races in a common association has proved a success, and an object lesson of harmony worthy of study by national and racial cranks.

THE contemporaries of the pioneers knew the personal sacrifices of time and money made by the few men who originated the Association in Quebec. The result was that there was very general appreciation, and certainly no jealousies. As Dr. Brewster once remarked, "the positions of trust seek the men, not the men the positions." It is easy to imitate a state of affairs already in existence; but the political conditions of Quebec were so peculiar, that conditions elsewhere had little or no application. The English students had the whole world of English dental schools open to him. Their language closed them to the French. When the time seemed ripe for a school, the same spirit of good-will and fraternity prevailed, and the local conditions were met precisely as they had been in the organization of the Association. The profession has grown until it is overgrown. The college was not yet born before certain members of the profession set to work to produce a criminal abortion. They were incapable to be its obstetrician, but they were anxious to be its wet nurse, and when in spite of them the bantling opened its eyes, they hankered to be professors and clinical instructors, and to receive honorary degrees, and because they were disappointed no good could come out of the little school. Such churlish conduct was a crime against the interests of the profession. It is unnecessary to recount the various assaults on the college, from inside as well as outside our ranks. What seemed most desirable by its projector was not attainable, owing to faction. What was attainable was accepted from a sense of duty and necessity. There were men who did their full duty. There were others sharing the responsibilities, and enjoying whatever honor existed, who shamefully neglected the duties they agreed to perform. They could afford to sit as critics of the workers, could they not?

Reviews.

A MONUMENTAL WORK.

A Treatise on the Irregularities of the Teeth and their correction. Including, with the author's practice, other current methods. Designed for practitioners and students. Illustrated with nearly 2,000 engravings (not embracing the classification of mechanism in third volume). By JOHN NUTTING FARRAR, M.D., D.D.S., Esq. Vol. II. New York City: The International News Co., 83 and 85 Duane St. Toronto: Toronto News Co., 42 Yonge St. Montreal: Montreal News Co., 386 St. James St. Price, each volume \$6.00, \$7.00 or \$8.00, according to style of binding.

We are in receipt of the second volume of this magnificent work by Dr. Farrar. It represents an enormous amount of thought and hard work. We propose to review it fully in a future issue. In the meantime our readers need not wait for any outside opinion about the book. It is a splendid investment, and has no rival in our literature.

The Habitant: And other French-Canadian Poems. By WILLIAM HENRY DRUMMOND, M.D., with an introduction by LOUIS FRECHETTE, and with illustrations by FRED. S. COBURN. New York and London: T. P. Putnam's Sons, 1897.

We have departed several times from the path of professional literature to bring before the notice of our readers, some specially Canadian work of *belles lettres*, but never before with such genuine pleasure. In the make-up of our Dominion, we enjoy a happy freedom from the presence of races of people, who, if they contribute to the material interests of a country, do not compensate for the problems and difficulties they add to the future of the state. For a century the French-Canadian was regarded by those who were entirely ignorant of his true character, as the national thorn in our progress, and it is a fact that otherwise intelligent English-Canadians at the time of Confederation, especially in Ontario, despaired of the future of the Dominion because of the French-Canadian questions. Many times in visits to Ontario, we had private and public opportunities to remove erroneous impressions of this character. It was a figment of the imagination and pure ignorance, which only more fraternal meeting could dispel. Dyspeptic writers like Goldwin Smith, sitting in their closets settling the fate of the world in general and Canada in particular, pointed to the French-Canadians as an obstacle to Canadian and

imperial unity ; but they failed so repeatedly in their prophecies in everything, that they now serve for amusement as a sort of prophetic Punch-and-Judy show. No one but themselves takes them more seriously than the Millerites. To-day we rejoice in Canada, the two races, in a fair and full appreciation of each other's idiosyncrasies, each other's service to the common interests of the country, and in each other's rights. The prefix of each is disappearing. The language of a common loyal duty may be expressed in two tongues, but it has but one common meaning. All the time that our French brother was being misrepresented, he was learning our language, and getting advantages thereby to which his activity entitled him. His native geniality and politeness, his ready instinct to oblige, made him, in whatever capacity he was engaged, a desirable servant, a convenient employe. Many awakened only a few years ago to realize, that instead of a vexatious problem, such as the negro and the socialist is to the United States, the French-Canadian was a providential blessing to Canada, and formed a substantial part of our national backbone.

Dr. Drummond has done a work for the English-Canadian as well as the French. Unconsciously he has picked up the hidden virtues and humanity of the happy French-Canadian peasant, and linked them so firmly to our affections, that Jean Baptiste must be forever recognized as our brother in every family and national sense. The picturesqueness and pleasantry, which his whole life from childhood to old age, give to our existence, is indeed most charming; and those of us who have enjoyed his simple hospitality, who have shared his humble meal, who have gloried in adventures with him in the woods and on the waters, who have spent happy days in his canoe and his old *burleau*, would not exchange him for any one else under the sun. No descriptive or historical work in existence brings us into such intimacy with him as Dr. Drummond's poems. You seem to hold the good fellow by both hands, in a common brotherhood that makes you positively love him, as the soldier in battle loves the comrade beside him. If we were able we would present every dentist and dental student in Canada with this delightful book. The next best thing we can do, is to urge them to own it. If you borrow it, you will feel like keeping it, and you might be induced to commit theft. Perhaps no better test of a true poem can be offered than that it is one whose repetition increases its charms. There is not a poem in Dr. Drummond's book which is not a literary *bonne bouche*, and though it is impossible to introduce the reader to our dear old habitant, through a verse, Dr. D. has made it possible through a volume. The first poem is a recital of his content on his old farm. We wish every English farmer in Canada owned the book. It breathes a gospel of simple content and happiness which they might largely imitate.

His enjoyment of nature may perhaps be somewhat idealized, but his enjoyment of the little good things of life, is true to nature. "The Habitant's Jubilee Ode:" a verse or two will give our readers an idea of the style.

"Bà non, an' dat was de way we feel, w'en de old Regime's no more.
An' de new one came, but don't change moche, w'y it's yus' lak' it be before,
Spikin' Francais lak' we always do, an' de English de make no fuss,
An' our law de sam', wall, I don't know me, 't was better mebbe for us.

"So de sam' as two broder we settle down, leevin' dere han'-in-han',
Knowin' each oder, we lak' each oder, de French an' de Englishman,
For it's curi's t'ing on dis worl', I'm sure you see it agen an' agen,
Dat offen de mos' worse ennemi, he's comin' de bes', bes' frien'.

"Yass! dat is de way Victorian fin' us dis Jubilee,
Sometam' we mak' fuss about not'ing, but it's all on de familee,
An' w'enever dere's danger roun' her, no matter on sea or lan',
She'll find that les Canayens can fight de sam' as bes' Englishman."

The work can be bought from any Canadian bookseller. To our friends over the border we especially commend it.

WE have received the *Philadelphia Medical Journal*, a weekly, owned and published by the Philadelphia Medical Publishing Co., and conducted exclusively in the interests of the medical profession. \$3.00 per annum. Dr. George M. Gould and Dr. Augustus A. Eshner are the chief editors. It is not only well edited, and its selections carefully condensed, but it takes the new departure in refusing the advertisements of "secret" and "proprietary" preparations. Some restraint is evidently demanded upon the use many proprietors of quack remedies make of the respectable medical and church press.

"CONSIDER what you have in the smallest library: a company of the wisest and wittiest men that could be picked out of all civilized countries in a thousand years have set in best order the results of their learning and wisdom. The men themselves were hid and inaccessible, solitary, impatient of interruption, fenced in by etiquette; but the thought which they did not uncover to their bosom friend is here written out in transparent words to us, the strangers of another age."

THE Publishers' Syndicate of Ontario, 88 Yonge St., Toronto, meets a want of the profession in supplying not only dental literature but general literature, at from twenty-five to fifty per cent. saving on the cost. It is worth while writing for information. Mr. A. Hirst, 434 St. Dominique St., Montreal, is the agent for Quebec Province.

TEMPERANCE A PHYSIOLOGICAL NECESSITY.—In like manner the influence of all drugs which affect the nervous system must be in the direction of disintegration. The healthy mind stands in clear and normal relations with Nature. It feels pain as pain. It feels action as pleasure. The drug which conceals pain or gives false pleasure when pleasure does not exist, forces a lie upon the nervous system. The drug which disposes to reverie rather than to work, which makes us feel well when we are not well, destroys the sanity of life. All stimulants, narcotics, tonics, which affect the nervous system in whatever way, reduce the truthfulness of sensation, thought, and action. Toward insanity all such influences lead; and their effect, slight though it be, is of the same nature as mania. The man who would see clearly, think truthfully, and act effectively, must avoid them all. Emergency aside, he cannot safely force upon his nervous system even the smallest falsehood. And here lies the one great unanswerable argument for total abstinence; not abstinence from alcohol alone, but from all nerve poisons and emotional excesses.—*From The Evolution of the Mind, by David S. Jordan, in Appletons' Popular Science Monthly for February.*

Post-Card Dots.

1. WHAT is the Licence fee in Quebec Province? (T.)
\$60.00.

2. WAS there ever a set of teeth made for a lower animal? (R.F.)
Somewhere we read of a set made for a horse. Lots of donkeys, who should have had their teeth filled, wear them. At the Kennel Show in London, England, a little aged dog was exhibited, wearing a full upper and lower set made for him by his owner, a dentist. They are quite as useful as ornamental.

3. WANTED—a convenient way of keeping carbolic acid, etc., on the bracket. (M. A.)

Fill a wide-mouthed, flat-bottomed bottle with cotton-wool. Saturate it with as much of any solution you use. Dip in a pellet, and you can get all you want without fear of spilling. If the bottle upsets, nothing spills.

4. WHO suggested quills for tooth-picks? (B. W. D.)
Martial.—See Lib. XIV., Epgr. 22.

5. WHO was the first to scarify the gums for difficult dentition?
Ambrose Paré. His first experiment was upon his own son.