TAKING IMPRESSIONS OF THE MOUTH

A Practical Summary from Eminent Authors

FIRST EDITION

TAKING THE BITE

RÉSUMÉ EN FRANÇAIS

PUBLISHED BY
PURE GOLD CROWN CO.
MONTREAL
1903

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TAKING IMPRESSIONS OF THE MOUTH.

Preliminary Considerations.

There is probably no other department of dental practice in which so large a number of practitioners find themselves at times unsuccessful as in the taking of impressions of the mouth. It is hoped that in these pages, in the preparation of which advantage has been taken of all the available literature of the subject, practical hints are presented which will be of service, to beginners at least, in helping them to the attainment of better results in practice.

Importance of a correct impression.

A correct impression of the mouth is absolutely essential to the construction of a satisfactory denture. Without this to begin with, no subsequent care or skill can secure a good result, no matter of what material the base may be composed.

Conditions of the mouth.

The first thing to be considered is the character and condition of the mouth, — 1, whether there are teeth remaining or not ; 2, if so, their shape and position ; 3, the character of the arch, large or small, deep or flat ; 4, the ridge, irregular or smooth.

If an artificial denture with a vacuum-chamber has been worn, or a plate or appliance of any kind has imbedded itself in the soft tissues, or caused irritation, it is well to have the patient dispense with its use for several days previous to taking an impression.

If a patient long accustomed to wearing a vulcanite denture desires it replaced by one of metallic base, several days and sometimes weeks are required to restore the mouth to the normal firmness of tissue and insure continued satisfaction to the patient.

Selection of the Tray.

Shape and size of first importance.

Having ascertained all the difficulties to be overcome, the next step is to select a suitable tray with which to take the impression. This should be of such shape and size as will adapt it to the particular case in hand, and to the material to be employed. It should be large enough to embrace the alveolar ridge, leaving a space of an eighth to a quarter

of an inch between its outer rim and the gum. The nearer within these limits it comes to fitting the mouth the easier will be its introduction, less material will be required, with consequently less surplus to annoy the patient, less pressure is necessary, and the impression is likely to be more perfect. On the other hand, it must not fit too exactly; else *drawing* or stretching, if the impression be of wax, or comminute *fracture*, if it be of plaster, will be almost certain to occur. The proper size and shape should be determined by trial of the empty tray in the mouth.

The inferior jaw more difficult than the superior.

More care is required in the selection of a tray for the inferior than for the superior jaw, as, owing to the divergence of the former at the posterior part, and the extreme narrowness of the ridge, a slight variation will cause it to cut into the soft tissues and so become painful to the patient, besides preventing a correct impression. The tray should pass well back toward the rami of the jaw and cover the border completely.

When teeth remain.

If teeth are remaining, a tray specially adapted to such cases should be used, either deep enough to receive them or with a portion of the tray cut out to permit their passage.

Trays for every need.

Adjustable trays.

A varied assortment of special trays is supplied by the manufacturers. These are adapted for entire or partial upper and lower cases, and for crown- and bridge-work; others adaptable to varying necessities, the shape and size being readily adjustable by bending or twisting to meet unusual presentations of the teeth, gums, or palatine arch. In some the side-walls are cut free from the bottom, and in others the palatal portion is cut free, with slots running across the bottom toward the rim. Some are made with flat bottom and square sides, and others with raised palatal edges, to prevent the plaster slipping off the tray; still others with the rim of the tray adjoining the handle cut away, so as to procure a perfect impression of undercuts or shelving gums. For partial lower dentures trays are provided with an opening to allow the front teeth to pass through, and the tray to pass down to the maxillary ridge.

Adapting trays to special cases.

A tray of the ordinary form may readily be built up with modelling composition or with wax, or bent or refashioned in some instances with better results, to adapt it to a special case, provided it is of sufficient size to admit the necessary additions. In any case, the tray should possess a reasonable adaptation to the alveolar ridge and palate, if a perfectly satisfactory impression would be secured. The objections to the porcelain

tray are that it cannot be modified to suit special cases, and is so smooth that the impression material may leave it and cling to the mouth. This latter objection may sometimes obtain with a metal tray, but in such case a little roughening of the surface will cause the plaster to adhere. If in a special case it is desirable for the impression to remain in the mouth when the tray is withdrawn, it is only necessary to oil the metallic tray before putting the plaster in it.

Porcelain trays objectionable.

Tray leaving the impression in the mouth.

An emergency tray which will answer a very good purpose may be made by taking an impression in modelling composition or gutta-percha, and enlarging it to make room for the impression material, either by cutting out or pressing with the fingers before it is perfectly hardened.

A temporary expedient.

Selection of Impression Material.

Having decided upon the tray to be used, the next question to determine is the material to be employed.

The object sought in taking an impression is to obtain a correct representation of the parts as they are in their normal condition. To effect this there is needed a substance plastic at a moderate temperature, and which will admit of having the parts concerned pressed into it without the use of force enough to cause pain or *disturb the relative position and form of the different surfaces.* It must also possess sufficient body or consistence to be retained in the tray under the pressure necessary to obtain an impression of the parts. It must solidify or harden in a brief time, and under conditions as to heat and moisture not incompatible with those of the mouth. It must not materially contract or expand in cooling or hardening, and should as nearly as possible be free from objections as to taste, smell, and appearance.

Necessary properties.

The substances or compounds in use differ widely in their physical characteristics,—wax, white and yellow ; combinations of wax with paraffin, gutta-percha, and other materials ; modelling composition ; gutta-percha, alone or in different combinations ; plaster of Paris, alone or conjoined with the use of wax. It would doubtless be unsafe to say that in all cases one of these materials will answer as well as another. Plaster of Paris is more largely used than any of the others. Next in order as to extent of use is modelling composition, then wax and wax compounds, and lastly gutta-percha. A knowledge of the distinctive properties and applications of each is advisable.

Various materials.

Their relative importance.

Some special advantages of wax and plaster.

When it is desired to displace soft parts to obtain a uniform bearing for a denture, the absence of elasticity in wax is considered an advantage. If an exact copy of the parts as they present is wanted, the impression to be subsequently carved to displace soft parts to adapt it to the requirements of the denture, plaster of Paris is the most desirable material for taking the impression.

Shrinkage and expansion set off.

A metallic plate struck up on a zinc die is smaller than the mouth from which the impression was taken, by reason of the shrinkage of the zinc in cooling,—unless this shrinkage is compensated for by the enlargement of the sand impression in the removal of the mold; a vulcanite plate is larger than the mouth, because of the expansion of the cast,—unless this expansion is counteracted by the shrinkage of the material in vulcanizing; consequently the compression made by the force required, in taking an impression in wax, or the contraction of gutta-percha, may be made to serve a useful purpose. It is evident, therefore, that no definite rule can be given applicable to all cases; very much must be left to the judgment of the operator. It is frequently difficult to decide in advance which is the best material for a given case; experiment alone can decide.

Difficulties to be Overcome.

Nausea and its prevention.

In cases of irritable fauces, inducing nausea, it has been recommended to lessen the irritability by previously gargling with a strong solution of tannin, or potassium bromid, or with camphor-water; others have recommended that the fauces be accustomed to the presence of a foreign body, by passing the feather end of a quill over the parts a few times before taking the impression, or by directing the patient to manipulate the parts frequently with a spoon a few hours previous to the impression being taken. Such manipulation will, however, sometimes cause nausea and vomiting, especially if practiced soon after taking a meal. Others consider that the surest way to prevent retching is to force the patient's chin well down upon the breast, after the tray is in place, and so retain it until the impression is removed. Some direct the patient to place the tongue upon the posterior portion of the tray, and retain it in that position. The act of swallowing is likely to produce a sensation of nausea by bringing the soft palate into contact with the foreign body; the patient should therefore be advised to avoid swallowing during the operation. Nausea is frequently induced by the tray extending too far

SOME IMPROVEMENTS

RECENTLY MADE IN

The Sharp Seamless Crown Outfit.

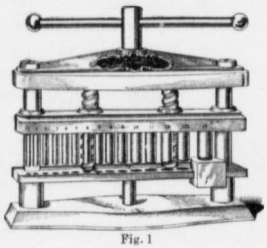

Fig. 1

The New Model "B" Press is shown in Fig 1. It will be noticed that the punches are all in a straight line, immediately in front of the operator at all time. The motion is positive, the pressure being divided between two screws moving in unison. There are fifteen punches; two more than on the round press (Model "A") one larger and one smaller. At a slight additional cost this press can be made to work both 28 and 30 guage gold on the same machine.

The New Tooth Form is the most notable improvement. The form itself is entirely separate from the base, as shown in Fig. 2. It is attachable to the base by means of a metal pin, firmly fixed in the bottom as shown in Fig. 3.

Fig. 2

Each form has two measurements as shown at "A" and "B" Fig. 3 thus **providing for a short and medium length crown from the same form,** and if a long crown is required, the form is set the required height above the base as shown in "C" Fig. 3 and the space filled in with "moldine" or other suitable material. **Thus crowns of from three to five different lengths can be made from each form.**

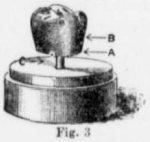

Fig. 3

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back in the median line (a fault with many of the trays as now made), and by the *use of too large a quantity of impression material.* In cases of extreme sensibility of the mucous membrane to contact with any impression material, a 2 per cent. solution of cocain applied carefully and lightly over the soft palate is said to have proven satisfactory. In like cases the administration of a few inhalations of nitrous-oxid gas has effected good results.

Insertion of the tray.

The insertion of the tray may seem a trifling matter to the operator, but it is frequently not so to the patient. Few lips will admit an impression-tray direct without an amount of stretching at once inconvenient and painful; and in some cases, to secure a correct impression without subjecting the patient to serious discomfort, will require much care and expertness on the part of the operator. Unusual width of the jaw is not infrequently associated with a contracted commissure, and in addition, the muscles of the mouth may be rigid and unyielding. Another difficulty is in the common attempt of the patient *to open the mouth wide in an effort to assist the operator.* The patient should be directed to allow the jaw and the lips to be entirely under the control of the operator, who, standing partly to the right of and behind the patient, should present the tray obliquely, one side resting against and pressing outward one corner of the mouth, the opposite corner being extended with the first and second fingers of the left hand; the tray should then be passed in with a rotary movement to bring it into line. No more impression material should be used than enough to take the impression without overrunning the tray, and so increasing its width, under which circumstances the impression would be squeezed out of shape during its withdrawal from the mouth.

Let the operator control.

Preparation of the Mouth.

Impression of the superior jaw.

Direct the patient to rinse the mouth with warm water before taking the impression, to remove the mucus. When the modelling composition is in a soft, plastic state, it should be immediately placed in the tray, which is previously heated to secure adhesion, avoiding the use of too large a quantity (the usual error of beginners); the surface warmed, and promptly inserted in the mouth, care being taken to secure the proper position of the tray with reference to the ridge, so that no portion of the rim may cut into the soft tissues; it should then be gently but steadily forced up against the parts (*passing the finger around the outside of the tray to permit the rim*

Avoid too much composition.

Secure proper position of tray.

to pass up between the cheeks and gums without drawing the mucous membranes) until the ridge is completely imbedded, and the wax closely pressed against the palatal surface, and held there for a few moments to allow it to cool and harden. To insure uniform pressure the tray should be held steadily and firmly, with two or more of the fingers of each hand on the under surface at about the position of the first bicuspids, *the operator standing partly to the right of and behind the patient.*

Imbed ridge completely.

Hold tray steady.

It is better to have the sides of the tray high enough to give the composition support at all points; but if any is pressed above the edges, it should be brought into contact with the gums by pressure of the finger against the cheeks and lip, so as to insure the filling of all depressions, irregularities, or interdental spaces. Special care should be observed in cases having a prominent ridge. The composition extruding at the palatal edge of the tray should be pressed back into the vault with the finger. The composition must be kept in the mouth long enough to cool and harden. To facilitate the hardening process, cloths dipped in ice-water, or a thin piece of ice wrapped in a napkin, may be applied to the under side of the tray, though there is some risk that the sudden reduction of the temperature of one side may cause unequal contraction. If too much composition has been used, and the impression is injured thereby, trim off the surplus, dip into warm water, and introduce it a second time; this plan will not answer so well, however, in partial cases, as the teeth will not enter precisely where they belong in the impression. If the natural teeth have been recently extracted, the composition should be quite soft to avoid pressing the soft tissues out of place.

Must cool before withdrawal.

How to cool the impression

Surplus composition.

Great care is necessary in withdrawing the impression. The partial adhesion by atmospheric pressure tends to draw the composition out of shape, as does also that produced by the adherence of the composition between the approximal surfaces of the teeth; the impression-tray must therefore be held perfectly firm, allowing no vibration in any direction until clear of the teeth. If the attempt be made to draw it forward, the composition will be forced out of form by the lips of the patient when the mouth is opened too wide, and the impression rendered proportionately imperfect. Care must also be taken to have the tray sufficiently depressed to avoid abrasion by the teeth in its removal, the patient being instructed not to open the mouth too much, as by so doing the width is contracted, and there is liability that the impression may be distorted in passing it through the lips.

Care in withdrawal.

Withdrawing adherent impression.

If the impression should adhere tightly to the mouth, as is sometimes the case, its removal may commonly be effected by *lifting away the tissues of the cheek, or lip, or by directing the patient to give a slight cough*, or to blow through the mouth, which admits air, and so breaks up the atmospheric pressure.

Immediately on the removal of the impression, it should be put into a bowl of cold water, or held under the stream of a hydrant, in order to restore its normal hardness, and thus lessen the liability to a change of its shape from handling.

Impression of inferior jaw.

To take an impression of the inferior ridge, a tray adapted to the case in hand having been selected, it should be filled flush with its margins, and introduced in the same manner as directed for impressions of the upper jaw, the operator standing either behind and to the right of the patient or in front. If behind, pressure should be made upon the tray with the thumbs about over the position of the bicuspids; counter-pressure with the fingers under the jaw. If the position of the operator is in front, two fingers of each hand should make pressure upon the tray, while the counter-pressure should be made with the thumbs beneath the jaw, which may be protected by a folded napkin. *It is important to draw out the cheeks before making pressure upon the tray*, as the soft tissues are apt to overlap the posterior margin of the alveolar border. The patient ought then to be requested to thrust the tongue out of the mouth as far as possible, so as to free the soft tissues from entanglement. Firm and steady pressure should thus be made, until the ridge is entirely imbedded, when the composition should be pressed around the margin of the tray into all irregular surfaces or depressions, especially against the overhanging ridge at the angles of the jaw. Composition protruding along the lingual margins of the tray may be manipulated by the tongue of the patient.

Pressure and counter-pressure.

Modelling Composition.

Composition and qualities.

This material is composed of gum copal, stearin, and French chalk. When of a good quality it takes a very sharp impression, and is adapted to cases of irregularly placed or bell-crowned teeth, wedge-shaped spaces, or where the teeth incline inward, and in cases of overhanging ridge; its elasticity at a certain stage of cooling causing it to regain its original form after displacement in the act of withdrawal. By judicious

Impressions of irregular teeth and overhanging ridge.

manipulation it can be made serviceable in displacing soft tissues where such a result is desired.

Special directions.

The directions for its use are to bring water to the boiling-point in an open vessel ; remove from over the flame and put in the composition, which when soft take out with a spatula or spoon, and knead with wet hands into shape to fit the impression-tray, which should be previously warmed. Pass through the flame to glaze the surface, and place at once in the mouth. Hold steady a half-minute ; push the lips and cheeks in firmly, and with the finger in the mouth press against the palatal or lingual parts. When properly cooled, carefully remove from the mouth and plunge into cold water, *allowing it to remain there until hard.*

To determine when to remove from the mouth.

To determine when the impression should be removed is a matter requiring some experience and judgment. A test of its condition may be obtained by pressing the finger-nail into any protruding portion, and observing the degree of hardness.

To remove from tray.

Hardened modelling composition may be detached by tapping the tray with a light hammer. Treated in this manner, the composition leaves the tray as clean as before using.

The whole secret of the successful manipulation of modelling composition lies in working it at such a degree of softness as will carry it beyond its contractile condition, and in making discriminating use of its elastic properties.

To separate model.

To separate model simply boil water, draw vessel from fire and put impression and model in water. When the composition is very soft draw gently from model. Be sure the composition is very soft thorough.

Plaster of Paris

This material has been for many years in general use for taking impressions, and its merits are fully established. It requires nicer manipulation, and is not so cleanly as wax ; but the results are so nearly certain, with proper manipulation, that they counterbalance any inconveniences attending its use. It readily conforms to the minutiæ of shape and irregularities of the parts to be taken, and if broken presents clean, sharp, well-defined fractures which permit accurate replacement ; the pieces being retained in place by a little melted wax dropped upon the lines of fracture on the outside of the impression.

Advantages.

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Expansion of plaster.

A question has been raised in regard to the expansion of plaster in the process of recrystallization or setting. That it does expand is admitted, but only about $\frac{1}{100}$ of its own measure, which is not sufficient to interfere materially with the success of an artificial denture. It is claimed, and if true it is a curious fact, that it expands less or not at all when salt or potash-alum has been added.

Nature and preparation.

Plaster of Paris is chemically a native sulfate of lime, found in great abundance in many parts of the world. In its crude state it is called gypsum, and is prepared for use by being reduced to a fine powder, and subsequently calcined in ovens at a temperature between 300° and 400° F.

Factors which control "setting".

When pure, properly ground, and calcined, if mixed with water, a chemical union takes place, which is commonly called a "setting". This chemical action liberates latent heat, with a consequent elevation of temperature. If overheated in the calcining process, it parts with all of its water, and fails to recrystallize when mixed with water. This accounts, perhaps, for the imperfect solidification of some specimens of plaster. It is sometimes impure, by reason of original or subsequent admixture of foreign substances.

Results of imperfect preparation.

A difficulty may also arise, if the plaster has not been ground sufficiently fine, in consequence of the setting taking place before the coarser particles have absorbed their quantum of moisture. In this case, the expansion, instead of taking place, as it should, while the plaster is soft, is continued after it has solidified.

This quality of setting depends, moreover, not only upon its original purity and correctness of manipulation in the manufacture, but largely upon subsequent care in keeping it, and the manner in which it is mixed for use. As it has the property of absorbing moisture from the atmosphere, *it should be kept in a metallic, earthen, or glass vessel*, perfectly covered, and in a dry, *warm* place. Frost injures its quality. Plaster which does not work well, by reason of the absorption of moisture from the atmosphere, may frequently be restored by submitting it to the ordinary temperature of the baking-oven of a cook-stove until it is thoroughly warmed through. It will not work satisfactorily if cold.

Keep plaster dry and warm.

Preparatory to mixing.

Presuming that it is a pure article, has been properly calcined and ground, and carefully kept, the next item of importance is, that it be properly mixed. It should

be passed through a sieve of bolting cloth previous to being used. Ordinarily, the temperature of the water for mixing should be about 70° F. Ice-water should never be used. Warm (not hot) soft water is the best, if it is desired to have it set quickly. The temperature of the water used will decide largely the time required for its solidification. There is less liability of air-bubbles if warm water is used. The quantity of water used will also determine the period required for the setting; the less water the quicker it will set; but plaster mixed stiff will always contain bubbles.

Tepid water best.

Best way to mix.

The best method of mixing is to take the required quantity of water (easily determined by experiment), sprinkling the plaster into it, by the use of a sieve, until of sufficient consistence; if the reverse plan is pursued — the water poured into the plaster — it will crystallize unequally, and be filled with air-bubbles. A teacup or bowl is the best form of vessel to mix it in. Thorough stirring or beating makes it tough and pasty. The longer it is agitated and beaten, the less subsequent expansion there will be, for the reason that each granule becomes saturated before solidification takes place; whereas, if too little water is used, or the plaster is allowed to set before the center of the granules is saturated, they will continue to absorb from their surfaces, and expansion will continue with some plaster for a considerable time.

To hasten the setting.

To facilitate the setting, many different substances have been recommended, such as common salt, potash-alum, potassium sulfate, sodium silicate (liquid silex), etc. Of these, the alum and silicate are unpleasant in the mouth, and the latter is unreliable, making the plaster set too quickly, while the potassium sulfate does not appear to possess any superiority over common salt (except that a very small quantity suffices, and in making models it causes no efflorescence). A small pinch of salt is all that is required for an impression; an excess will cause too prompt setting, and will effloresce, and make the impression rough on the surface,—the tendency to which, however, will be obviated by promptly varnishing it after its withdrawal. A *large* excess of salt will retard the setting. The varying effects of different quantities are shown in the following results, obtained from a single sample of plaster, the quantity of water and plaster being in each case the same: The plain plaster set in five and a half minutes. The addition of two grains of salt caused it to set in five minutes, of four grains in three and a half minutes, of eight grains in three minutes, of sixteen grains in two minutes, of thirty-two grains in one minute, of sixty-four grains in two and a quarter minutes, of one hundred and twenty-eight grains

Influence of salt.

in eight minutes, and a saturated solution required twenty-four minutes.

When to add the sulphate.

The best way is to add a pinch of sulphate to the water; others consider that the best time for adding it is when the plaster is ready for use, and just before it is put in the tray, the sulphate thus beginning to act as the plaster is introduced into the mouth, allowing the use of a thinner batter, and yet insuring a speedy setting. The addition of the sulphate prevents the plaster from becoming as hard as it otherwise would; but for impressions this is not an objection.

Fluid ready for mixing plaster

Some operators keep ready a quart bottle of water in which has been dissolved a heaping teaspoonful of potash-alum for use in mixing plaster for impressions.

Time of setting.

Plaster should not set too rapidly, nor should it be too long in hardening; but if a choice has to be made between the two conditions, the latter is to be preferred, for the reason that the slow-setting plaster gives the operator ample time for preliminary management. He should never be hurried, as is likely to be the case in quick-setting plaster. This is of more importance than is generally considered. If it is desired to retard the setting, a solution of white glue, sugar, molasses, or vinegar may be added to the water with which the plaster is mixed.

To retard the setting.

Flavoring.

The suggestion has been made that three or four drops of oil of wintergreen, or cinnamon, added to the water with which the plaster is mixed, agreeably modifies the objectionable taste of the plaster.

Adding pumice.

Dr. L. C. Ingersoll advises adding to plaster of Paris from one-third to one-half of pulverized pumice, according to the strength of the plaster. By this means he claims that adhesion to the teeth is almost entirely prevented, and that there is less liability to fracture of the impression on its removal from the mouth.

Wax and plaster impressions.

Some prefer to take an impression first in wax, giving it a lateral, anterior and posterior movement in the mouth, or subsequently enlarging it by cutting, so as to give space for the batter of plaster with which the final impression is taken. This method is considered specially applicable when the mouth is not uniformly hard,—in some places soft and yielding,—the object being to allow trimming off the impression corresponding to those places where the tissues are yielding, and have been pressed out of place, in order that a greater depth of plaster may be brought into contact with them, as, being softer than the wax, it will allow them to retain their relative normal positions. After the wax impression is taken

for this purpose, the surplus wax should be trimmed off, and the surface scored, to make retaining-points for the plaster. To prevent the wax from leaving the tray, its surface should be warmed over a spirit-lamp.

Plaster and wax impressions.

Others employ a method the reverse of the one just described. Plaster is first used in taking the impression, which, after becoming hard, is uniformly trimmed over the surface sufficiently to admit of a layer of wax or modelling composition. Either of these materials, when well softened, will yield an impression of the softer tissues of the ridge under pressure, as would normally result from the force of the opposing jaw upon the finished denture when placed in the mouth.

This method will often prevent rocking of the plate.

Impressions wholly of plaster of Paris.

For a full upper impression wholly of plaster, the mouth should be carefully examined, and the proper tray selected, one as near the size of the jaw as possible; if it is a high arch, the center of the tray should be filled up with wax, and with the same material any deficiency in the size of the tray at the palatal margin or around the outside edge, especially over the cuspids, should be supplied. Many failures are unquestionably attributable to a want of support in the summit of the arch, permitting the too great bulk of plaster to drop before solidification takes place; a difficulty obviated by having a smaller quantity of the batter sustained by a dome of wax. Some operators recommend a rim of wax to be carried entirely around the periphery of the cup, including the posterior margin; the object being to enable the operator to press in the plaster above the alveolar border, and to prevent in part its being forced too rapidly or in too large quantities over the posterior margin; but care should be taken that this rim be not deep enough to press unduly upon the soft palate, and distort the impression.

Obviating failures.

Posterior margin.

Deep alveolar ridges.

If the alveolar ridge is very deep, or the vault presents the form of a fissure, making considerable space between the tray and the floor of the palate, the tray should be driven up on a mold, corresponding in shape with the form of the mouth; otherwise the plaster will not be carried to the deepest portion of the arch, and thus there will be an imperfect impression of the palatal surface. Another plan is to take up a small portion of plaster on the finger or a spatula, and apply it to the deeper parts of the arch just prior to the introduction of the tray.

Arranging Patient to Take Impression.

The patient being seated,—a common chair is preferred by many operators,—instructions should be given as to position and the reasons therefor; the patient inclining the body *slightly forward*, and in readiness when the plaster is introduced to allow the head to be thrown *still more forward*,—the object being to determine any excess of plaster to the front of the mouth, and prevent it from falling into the fauces. Too many directions and an ostentatious preparation will, however, cause failure with timid patients, by inducing undue nervous irritability, from a magnified fear of the operation.

Cover the patient's lap.

When about to take a plaster impression, a towel or large napkin should be spread on the front of the patient's dress to receive any excess of plaster which may be dislodged.

Preparing the mouth.

The patient may be directed to dry the mouth with a soft napkin if there is an excess of saliva; but it is rarely if ever necessary in taking impressions of the upper jaw, and some mouths are naturally so dry that the difficulty is rather to prevent the plaster from adhering too firmly to the tissues. In such cases, it is not well to absorb what little moisture there may be. Some operators direct the mouth to be rinsed with warm water, which, it is claimed, by removing the mucus, facilitates a more even flow of the plaster, diminishes its liability to an undue adherence to the membranes, and produces a smoother and more delicate impression. Other brush the parts over with glycerol, if the mucous membrane appears abnormally dry.

Impression adhering to the mouth.

Instructions to patient about breathing.

Before introducing the tray, some operators instruct the patient to breathe through the nostrils, considering that the liability of fragments of plaster being drawn into the pharynx is much increased when the patient breathes through the mouth.

A contrary view.

The late Dr. Joseph Richardson took, however, an opposite view, arguing that in the act of breathing through the nose the velum palati is depressed to cut off the passage of air through the mouth, and is thus brought more immediately in contact with any portion of plaster that may de protruding from the heel of the tray; that the stimulus of contact produces involuntary contraction, and that thus fragments of hard plaster may be drawn back into the fauces, producing the very evils which nose-breathing is thought to avoid; and that if patients are instructed at all in this respect, they should be advised to breathe through the mouth.

To hasten the setting of plaster of Paris.

The required quantity of water, say two tablespoonfuls, should then be put in a bowl or teacup, a pinch of sulphate added, and plaster sufficient to make a batter about the consistence of thick molasses should be *sprinkled* in.

To mix plaster of Paris.

If put in carelessly, it will become lumpy, and may prove disastrous to the impression. The batter should now be well stirred and transferred to the tray.

The consistence to mix.

The filling of the tray should be commenced before the plaster has set to the point suitable for insertion in the mouth. The rule generally given, to wait until the plaster fails to

A common error.

fall from the spatula, is an error. It is then too stiff to put into the tray; allowance must be made for the time required to place it in the mouth. So long as the surface glosses, when smoothed with the spatula, and does not begin to leave sharp edges, it will take a perfect impression with *very moderate* pressure; but if too thin, difficulty will be experienced from its spreading and running from the tray. The perfection of the impression will mainly depend on the insertion of the plaster, when the smallest possible pressure will

How much plaster to use.

be required. Sufficient plaster should be used to insure the filling of all spaces, with a *small* quantity to spare. A knowledge of the amount necessary can only be acquired by experience; too much makes it difficult to insert, and will also cause a larger amount to be forced over into the mouth,—a result always disagreeable to the patient and unpleasant to the operator.

Introducing the Filled Tray.

When the tray is introduced into the mouth, it should be passed up to the palatal arch, touching the posterior portion of the palate first, to throw all excess of plaster toward the front of the mouth. It should then be brought gently up over the anterior surface until the parts are completely imbedded and the plaster is seen to protrude around the margins of the tray. When the tray has fairly covered the ridge, a slight vibratory motion should be given to it to settle the plaster and dislodge any bubbles of air; at the same time the head of the patient should be thrown well forward and the body still more inclined. The formation of air-bubbles in the

To avoid air-bubbles.

roof of the mouth cannot be thus prevented; this liability must be guarded against by having the plaster high enough in the center of the tray. The tray, when once placed, should

The operator to hold while plaster sets.

be retained in its *exact* position with great care until the plaster sets. The operator himself should always hold it, using no more pressure than is necessary to keep it

in place and retaining it, not by the handle, but by one or two fingers of his right hand upon the center of the tray, with his left hand resting upon the patient's head. The tray should never be intrusted to the patient. At the same time the lip should be extended and brought down over the tray, subsequently making pressure on the lip and cheeks to force the plaster well up on the outside of the ridge. When the alveolar ridge is much absorbed, the foldings of the mucous membrane should be prevented from becoming involved by pressing them out with the fingers.

Danger in improperly introducing the tray.

The liability of having an excess of plaster pass backward toward the pharynx is a real danger. A serious accident of this nature might readily occur. It not infrequently happens, when the tray is pressed anteriorly first, that a large excess will pass over and interfere with respiration. This excess is liable to fracture when hard, and, becoming loose, may pass into the pharynx and endanger the patient. To obviate this it has been suggested to place around the palatal surface of the tray pieces of string, extending slightly beyond the posterior margin, which, becoming imbedded in the soft plaster, will draw out any portion that may become loose. This precaution is, however, unnecessary, if care is taken not to use an excess of plaster, to bring the posterior portion of the tray first into contact with the palate, and to have the patient lean well forward.

How to avoid it.

When to remove from mouth.

To judge when the plaster is hard enough to remove from the mouth, the evolution of heat, as the result of the chemical action which has taken place, will be a guide. It has been recommended to test by the fracture of the plaster left on the edge of the bowl in which it has been mixed; but, while some say that the secretions of the mouth feed the plaster and prevent it from hardening as soon as that in the bowl, others contend that the heat of the mouth causes it to set somewhat quicker. The safest plan, therefore, is to test that on the edge of the impression, or to know by previous trial the "behavior" of the plaster used, and determine by the *watch*.

How to withdraw impression.

When ready to withdraw the tray from the mouth, the upper lip should be stretched upward, at the position of the second bicuspids, with the left hand, so as to admit air between the plaster and the gum; at the same time the tray should be pressed downward with the right hand. If the plaster is left in the mouth too long after it hardens, it is likely to adhere very strongly to the mucous membrane, owing to the absorbing property of the plaster. In such cases no undue force should be used in

Danger in leaving too long in the mouth.

the withdrawal, as there is liability to tear the membrane; the only plan is to *coax* it out. The tissues of the lip and cheeks should be lifted alternately, and, if necessary, the patient directed to give a slight cough; or, upward pressure upon the handle of the tray may be made, which will depress it at the heel; or, with a suitable instrument, the soft palate may be pressed up to admit the air. These means will generally, with a little patience on the part of the operator, effect removal without damage to the mouth or to the impression. A pair of foil- pliers should always be at hand, to take out of the mouth any pieces of plaster which may break off during the withdrawal of the tray. These pieces should be rinsed clean of saliva, and replaced on the impression, after hardening, with great care and nicety, and held in place with sticky wax previously heated.

Pieces of plaster which break off.

In taking impressions of the lower jaw, for a full denture, the tray should be adapted to the case in hand as to depth and shape of rim, which should extend downward on its lingual extremities so as to secure an accurate impression of the lingual aspect of the ridge. It is necessary to allow the plaster to set until it will not drop from the inverted impression-tray. It should then be placed in the mouth, and carefully depressed at the posterior portion first. When the patient has an excess of saliva, care should be taken to have the mouth dried with a soft napkin. After filling the tray flush with its margins the operator should introduce it into the mouth in the manner heretofore described, standing either to the right and over or in front of the patient. If the latter position is chosen, after having adjusted the tray — which of course is bottom upward — properly over the ridge, the first two or three fingers of each hand should be placed upon the top of each side of the tray, over the position of the biscuspids, and the thumbs underneath the jaw, steady and firm pressure being made until the ridge is wholly imbedded, the patient sitting in the position recommended in taking upper impressions. If the operator stands behind the patient, pressure should be made upon the tray with the thumbs, and counter-pressure with the fingers under the jaw, care being taken to draw out the cheeks before making pressure upon the tray, as the soft tissues are apt to overlap the posterior margin of the alveolar border. The patient should then be requested to thrust the tongue out of the mouth as far as possible, so as to free the soft tis-

Plaster impressions of the lower jaw.

Plaster to partially set before introduction.

Proper methods of applying pressure.

Freeing the soft tissues.

sues from entanglement. When the plastar has set, the tray may be freed by pressing the finger of the left hand against the inner surface of the cheek, outward and downward, so as to admit air under the impression.

Make model cast before the impression becomes too dry.

The model should be taken before the plaster impression becomes dry, having previously coated it with something to prevent the adhesion of the plaster,—a solution of soap, a thin wash of collodion, or impression lining. The solution of soap should be bottled, and poured out as needed for use, avoiding using it from the bottle, as it is rendered turbid by contact with a brush that has been used on plaster. Soap is best on a very moist impression ; collodion or lining on one partly dried. If the impression has become very dry, it is necessary to saturate it with water before pouring the plaster for the model.

Coatings for plaster casts.

The best way is to use a varnish or impression lining first and as soon as it is dry pour a few drops of soap and with a brush make a good foam which should be well washed off.

The latter plan of varnishing the impression with an impression lining is strongly advocated,as the coloring matter by penetrating a short distance affords a guide in separating the model, and thus diminishes the liability to fracture or mutilate the cast,—an accident often occurring when there is no line of demarkation, and one is obliged to rely upon his mental outline of the case. The water with which the plaster is mixed for taking an impression is sometimes colored for the same purpose by the use of a few drops of a solution of carmine or anilin, or by the addition to the dry plaster of a small quantity of Venetian red, Spanish brown, burnt umber, cochineal, indigo, washing-blue, or vermilion. Enough of either to answer the purpose is not detrimental to the plaster, and gives it an appearance pleasant to the eye of the patient.

Coloring impressions.

To make model.

After the impression has been coated and soaped as above described, mix plaster, using two or three tablespoonful of water, to which you add a pinch of sulphate, add plaster gradually,stirring well to insure every particle of plaster coming in contact with the water, until it has the consistency of thick cream, pour little at the time in the impression which must be shaked and tapped gently on the table, so as to be sure that the plaster goes in every corner of it. This precaution must be carefully observed specially when filling a partial case, so as to prevent any air-bubbles forming in the teeth.

To separate model from impression.

When the plaster has become hard, tap the under side of the impression tray with spatula handle or a small mallet, the whole will readily come out of the tray, then with a knife break off the impression plaster, small pieces at a time, beginning generally at the sides and back.

If your model has not well separated from impression or if you have broken small pieces, it is better to take an other impression.

To fill composition impression.

When there are teeth left in the mouth use composition to take the impression with. To make model, simply wet the composition with water, using neither varnish nor soap, and fill with plaster as above said.

TAKING THE BITE.

Taking the bite may properly and best immediately follow taking the impression without loss of time by either the patient or the dentist.

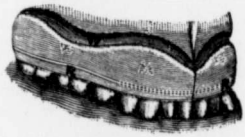
Base.

Take a sheet of wax, heat it over a spirit lamp until soft, do not melt it, put it over model and with fingers give it shape of model, bringing it down the gums all around, then with knife slightly heated over flame cut all excess of wax around the gums and at the back in line with the condyles (see Fig. 1).

FIG. 1.

FIG. 2.

FIG. 3.



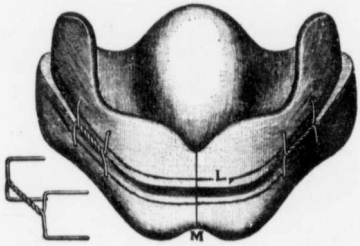
Then heat one or more sheets of wax very soft, make one mass of it, roll it in your hands and put it on the wax base all round (see R. Fig. 3), cut the surplus with knife, leaving about one-fourth of an inch

thick. Heat spatula and with it unite roll and base, then put it in patient's mouth.

Taking bite. Head being thrown back to bring the face nearly horizontal and then held as far back as possible in the act of closing the teeth through the wax as in Fig. 3. It is best to make several such closures into the freshly softened wax, to be sure that the final bite is as *far back as possible and in every way exactly right*. Modeling composition may be used instead of wax. Having the patient put his tongue well on the roof as if to hold the base in place insures good articulation.

Median and lip lines. Before removing the bite mark well on the wax the center or median line (M. Fig. 2), also the lip line (L. Fig. 2) which is obtained in having the mouth and lips well closed and marking on wax exactly how low the upper lip comes down.

FIG. 4.



Full upper and lower bite. The wax is prepared the same as above said, making a base for both the upper and lower jaws. Care must be taken not to use an excess of wax. When put in the mouth be sure that they are well into place and have the patient close the mouth, then remove or add wax as necessary so as to insure perfect contact between both bases. Then repeated softenings and trials in the mouth, and marking the median and lip lines, after repeated occlusions will produce a correct bite. Then have the patient keep the jaws tightly closed while, with several warmed wire staples, or the wire bite-blocks devised by Dr. J. A. Robinson, the double bites are locked together for safe removal, as seen in Fig. 4.

In partial cases. Fig. 5, 6 and 7 show how to prepare the base in partial cases; fig. 7 shows after bite has been taken.

It is preferable that you give us the shade of teeth wanted, also if patient is male or female, young or old, as this will help us in selecting shape and form of teeth. **Color of teeth.**

If you prefer send us the impression and we will fill it and return to you with wax base on. For which we will charge you 20 cents and postage. **We cast the model.**

It is preferable to wait three months after teeth have been pulled before making a set of teeth, though you can take it only a few days after it you wish. **When to take impression.**

FIG. 5.

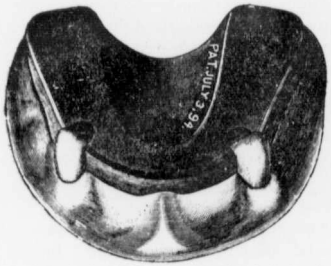
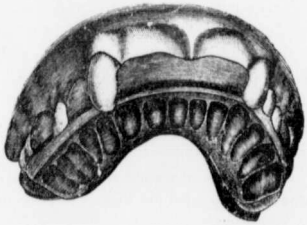


FIG. 6.

FIG. 7.



The gums shrink for one year. Generally the greatest shrinkage is done in the first three months. A set of teeth made before one full year has elapsed after teeth have been pulled will certainly become loose, and is for that cause named temporary set. After a year or more the teeth have been extracted the set of teeth then made is called a permanent **Shrinkage of gums** **Temporary and Permanent sets**

Aluminium Lining set. Many practitioners use and strongly recommend a pure aluminium lining on all vulcanite plates as it increases fitness, prevents heating of the mucous membrane by the rubber and gives a much nicer finish.

In Delivering Plates

In delivering plates observe that the front and side muscles when extended do not cause the plate to fall. Most plates that do not hold in place have no other cause.

All you have to do is to file the gum generally at place W. Fig 3, then smooth it with scraper and sand paper.

Bear in mind and have the patient to well understand that if the plate does not hold well at first, it will after a few days, when the bearer gets used to it. It is important to keep it at night. To have much patience and not to get discouraged if it is found hard to keep at first. To try to use it for eating at every meals.

It is still more difficult to get used with a lower plate, as there is nothing to hold it in place, the upper having atmospheric pressure, which the lower has not.

Patience, patience, lots of patience is needed.

When a plate hurts, or is too high, or too long, or too tight, alter with file or scraper, taking care to take off only a little at a time. It is better to take a little off more often than to take too much off all at once and so ruin the plate.

Dry plate. Never put a *dry plate in the mouth, be careful to always wet it well before introducing it.* Do not leave in it any filings and scrapings as they are liable to hurt the mucous surface.

In cases where the plate will not hold at all, sprinkle a little gum tragacanth on the plate and this will make it hold.

Cleanliness is essential to wearing plates. Always recommend to wash plates several times a day.

Antiseptic wash. A few drops of a good antiseptic, poured on the plate after washing, will do much to keep the mouth in a good and healthy condition.

Syringe clean. It is very important that your syringe be kept perfectly clean and aseptic. Always boil it after and before using it. Keep the little wire, furnished for that purpose with the syringe, in the needle when not in use, it will prevent clogging.

The needles for dental use should have strong shoulder and short point.

Local anæsthetics.

Waite's & Evans' local anæsthetics we believe are the best: with them, anæsthetia is perfect and there is no sloughing of the gum.

To clean plaster bowl.

To clean rubber bowl, let the plaster harden then squeeze the bowl and plaster will detache itself very easily. Whatever is left can be scraped off with spatula.

Prevention of adherence in partial impressions.

To prevent plaster or other material adhering to the teeth, the patient may he requested to take a mouthful of Phillip's Milk of Magnesia, and hold it for a few minutes previous to insertion of material to be employed. This will cleanse the teeth and mucous surfaces of adherent secretions, leaving a slight film of Magnesia, preventing sticking of material in hardening. A clear, sharp impression results.

TABLE DES MATIÈRES

COMMENT PRENDRE L'IMPRESSION.

RÉSUMÉ SOMMAIRE DE CE QUI PRÉCÈDE.

Choix du porte-empreinte.

Il faut prendre un porte-empreinte un peu plus grand que la mâchoire ; il est préférable de l'essayer avant de préparer le plâtre. Si le palais est très profond on rehausse le milieu du porte-empreinte avec une feuille de cire que l'on chauffe pour faire adhérer.

Préparation du plâtre.

Pour une empreinte, il suffit de deux ou trois cuillerées d'eau à laquelle on ajoute gros comme une noisette de sulphate, pour hâter le plâtre de durcir. Ajoutez le plâtre peu à peu, ayant soin de brasser tout le temps, pour que chaque particule du plâtre vienne en contact avec l'eau et absorbe ce qui lui convient. Quand le plâtre a atteint la consistance de la crème, mettez dans le porte-empreinte la quantité nécessaire, les novices en mettent toujours trop.

Introduction du porte-empreinte.

Le porte-empreinte s'introduit de biais dans la bouche. Aussitôt rentré, mettez-le droit et appuyer la partie postérieure sur le palais, puis la partie antérieure ; soutenez le porte-empreinte fortement tout le temps que dure la crystallisation du plâtre. Aussitôt le porte-empreinte introduit à sa place, passez un doigt entre les joues et le porte-empreinte pour bien distendre les muscles, puis appuyez avec les pouces à l'extérieur de la lèvre supérieure, aussi sur les joues pour que le plâtre s'introduise bien partout.

Impression du bas.

La préparation préliminaire est la même que pour le haut. Quand le porte-empreinte est bien en place faites tirer la langue du patient pour bien dégager les muscles et passez les doigts entre le porte-empreinte et les joues, en éloignant fortement les joues.

Quand retirer l'empreinte.

N'attendez pas que le plâtre soit trop dur, pour retirer l'empreinte. Avec les ongles, vous pouvez voir si le plâtre a atteint assez de dureté.

Difficultés à retirer.

Si le plâtre est trop dur, il adhère plus fortement à la muqueuse, pour retirer alors soulevez les joues en passant les doigts à l'intérieur, faites tousser le patient et forcez le porte-empreinte en soulevant la partie antérieure pour que l'air puisse pénétrer entre le palais et l'empreinte à la partie postérieure. C'est

là d'ailleurs la meilleure manière de retirer l'empreinte en toutes occasions.

Position de l'opérateur.

Pour prendre une impression du haut, l'opérateur doit se tenir à droite et un peu en arrière du patient, le bras gauche autour de la tête, et tenir l'empreinte fermement appuyée sur le palais avec les deux premiers doigts de chaque main, les pouces reposent sur les lèvres, sur lesquelles ils appuient pour faire parvenir le plâtre dans toutes les sinuosités du palais et des gencives.

Pour prendre une impression du bas, l'opérateur se tient en face et tient le porte-empreinte en place avec les deux premiers doigts de chaque main, ayant soin, aussitôt le porte-empreinte bien enfoncé en place, de passer un doigt sur l'intérieur des joues pour empêcher les muscles de rester pris sous l'empreinte, il faut aussi faire tirer la langue du patient ce qui dégage tous les muscles intérieurs.

Position du patient.

Le patient doit être assis sur une chaise ordinaire, non pas appuyé sur le dossier, mais plutôt le corps incliné en avant,et au moment de l'introduction du porte-empreinte dans sa bouche on lui fait incliner la tête sur sa poitrine pour prévenir ainsi que des morceaux de plâtre tombent dans la gorge et provoquent des nausées.

Ayez soin de toujours mettre une serviette sur la poitrine du patient, pour que le plâtre qui tombe ne souille pas ses vêtements et aussi pour recueillir la salive qui est très abondante chez beaucoup de personnes durant cette opération.

Morceaux.

Très souvent il se casse des morceaux de plâtre en retirant l'impression ; il faut alors tous les recueillir, les mettre à leur place sur l'impression et les faire tenir au moyen de la *sticky wax* que l'on chauffe au-dessus de la flamme de la lampe à alcool. Ne mettez jamais de cire à l'*intérieur* de l'empreinte.

Quand il y a des dents dans la bouche.

Quand il y a des dents dans la bouche on se sert, pour prendre l'impression, de la composition à empreinte. Pour amollir, faites bouillir de l'eau dans un petit vaisseau ; dès que l'eau bout *retirez du feu* et mettez-y un ou deux morceaux de composition. Quand celle-ci est bien molle mettez dans le porte-empreinte et faites comme il est dit ci-dessus pour le plâtre. Attendez que la composition soit bien dure avant de la retirer de la bouche. Aussitôt retirée, placez-la dans l'eau froide, et elle est alors prête pour faire le modèle.

Comment faire le modèle.

Si l'impression a été prise avec du plâtre, dès qu'il a un peu séché appliquez une légère couche de *impression lining;* aussitôt que celle-ci est sèche,mettez-y quelques gouttes de *liquid soap* et avec le pinceau faites une bonne mousse

qui doit être toute lavée ou enlevée. L'impression est alors prête à remplir. Pour ce, préparez le plâtre, comme déjà dit, et dès qu'il a la consistance de la crème, versez-le, peu à la fois, dans l'empreinte que vous tapez légèrement sur la table pour que le plâtre aille partout, et empêche la formation de bulles d'air.

Si l'impression a été prise avec de la composition, il suffit de mouiller celle-ci. N'y mettez ni vernis ni savon.

En remplissant l'impression, mettez assez de plâtre pour couvrir amplement le palais.

L'ARTICULATION.

Dès que votre modèle est séparé de l'impression, prenez une feuille de cire que vous amollissez en échauffant au-dessus de la flamme de la lampe à alcool. Puis mettez votre cire sur le modèle lui en faisant bien prendre la forme et les contours, coupez avec un canif le surplus pour obtenir une base telle que Fig. 1, page 31. Puis prenez une ou deux autres feuilles de cire, amollissez-les bien, pétrissez-les dans vos doigts, faites-en un bourrelet ou rouleau que vous mettez sur la base que vous venez de faire sur le contour gingival. Voir Fig. 3, page 31. Enlevez avec un canif chauffé à la flamme le surplus de la cire, laissant juste assez pour prendre une bonne empreinte des dents de la mâchoire opposée. Mettez la base dans la bouche du patient, faites-le mordre, enlevez la base et ajoutez ou enlevez la cire au besoin pour obtenir une articulation parfaite. Voir Fig. 3, page 31.

Pour faire adhérer le rouleau à la base, chauffez la spatule à cire au-dessus de la lampe à alcool, puis passez-la sur le rouleau et la base de manière à faire fondre un peu de cire sur chaque morceau. Il est important que le rouleau de cire adhère bien à la base.

Pour prendre l'articulation, envoyez la tête du patient très en arrière, introduisez la base, mettez-la bien en place et conseillez au patient de la tenir avec sa langue, faites-lui fermer la bouche fortement pour que *toutes* les dents fassent empreinte dans le rouleau ou bourrelet de cire. Faites ouvrir et fermer la bouche plusieurs fois pour être certain d'une parfaite occlusion, ce qui est indispensable pour qu'un dentier fasse bien.

Avant de retirer l'articulation, marquez sur la cire le centre de la bouche ou ligne médiane, vous guidant sur le centre du nez et du menton (voir M., Fig. 2, page 31), puis faites fermer les lèvres et marquez jusqu'où la lèvre supérieure descend (voir L., Fig. 2, page 31). Dites nous toujours aussi si le patient découvre beaucoup la gencive supérieure en riant.

Pour haut et bas faites comme dit ci-dessus. Faites **Haut et bas.**

une base pour le bas, mettez un petit bourrelet de cire que vous faites adhérer à la base, au moyen de la spatule chauffée, mettez bien à sa place et opérez pour le haut comme dit plus haut. Avant de retirer, marquez la ligne médiane, et la longueur de la lèvre, puis faisant mordre le patient fortement, insérez dans les deux bases deux ou trois petites crampes à droite et à gauche (voir Fig. 4, page 32).

Couleur des dents. Donnez toujours le numéro de la nuance que vous désirez avoir les dents, surtout si c'est un dentier partiel. Dites-nous aussi si le patient est jeune ou vieux, homme ou femme. Cela nous aidera pour faire un choix judicieux de la forme et des autres particularités des dents. Dans les cas plus particuliers dites-nous si le tempérament est bilieux, sanguin, lympathique ou nerveux.

Nous faisons les modèles. Si vous ne réussissez pas à faire le modèle, envoyez l'impression, nous coulerons le modèle et le retournerons avec la base faite. Cela vous coûtera un extra de 20 centins, plus les frais de port.

Quand prendre l'impression. Il est bon d'attendre au moins trois mois après l'extraction des dents avant de faire un dentier temporaire. Il y a travail des gencives qui diminuent pendant un an. Un dentier permanent ne peut donc être fait avant cette date ; cependant beaucoup de personnes font faire un dentier deux ou trois semaines après l'extraction.

Dentier partiel. Un dentier partiel peut être fait aussitôt l'extraction faite, s'il reste plusieurs dents dans la bouche.

Diminution des gencives. Les gencives diminuent pendant un an ; si vous faites un dentier temporaire, rappelez bien au patient que bientôt le dentier sera grand, à cause du travail des gencives. Le patient doit en subir les conséquences, s'il trouve après quelques semaines que son dentier est trop grand.

Livraison. En livrant un dentier, la première chose à faire est de bien le mouiller, afin de ne pas irriter la muqueuse. Dès qu'il est bien à sa place, pressez fortement sur le dentier en faisant glisser les index sur le palais du dentier, puis faites le suçer fortement par le patient, ne laissez pas celui-ci ôter son dentier à tous les instants. Quand même il le trouverait encombrant et nuisible, il faut qu'il persiste à le garder dans sa bouche. Après une couple de minutes de succion, faites parler le patient, et si le dentier tombe, voyez si les bords de la gencive ne touchent pas trop fortement aux muscles en W. Fig. 3, page 31, et aussi le filet.

Enlevez un peu de caoutchouc avec la lime, puis adoucissez avec le grattoir et frottez enfin avec un papier sablé. Si le dentier persiste à

Polydipsine

(Phosphopeptonate de Fer
et de Bismuth composés)

Formule : Chaque dose contient exactement la composition quantitative suivante :

Pyropeptonate de fer soluble..... 1 gr.
Citrate de Bismuth et Ammonium..... 1 gr.
Saccharate de Pepsine U. S. P..... 5 grs.
Saccharate de Pancréatine..... ¼ gr.
Elixir Sodique..... q. s.

Une cuillerée à dessert 20 minutes après les repas.

La **Polydipsine** neutralise l'hyperacidité gastrique, favorise la digestion stomacale et intestinale, prévient toutes fermentations et active une assimilation ralentie.

EN VENTE PAR

The Chemically Pure Therapeutical Specialties Co.

Birks Building MONTREAL

Echantillons à Messieurs les Médecins.

INSTRUCTIONS FOR PREPARATORY WORK

NOTE CAREFULLY

1. When ordering Plates, please send good plaster impressions or models, and wax bite. Do not use modelling compound.
2. Pack securely in strong box to prevent breakage in transportation. (Wooden box is best. Always put name on package.)
3. Do not forget the shade of teeth required, the make of teeth you wish, the length of lip line and color of rubber to use. We always use red and pink when not otherwise advised.
4. For Crowns, trim tooth, and take wire measurement and plaster impression; also wax bite if necessary.
5. Bridge Work—In ordinary cases we require only same process as for single crowns, but for difficult cases it's better to have attachments made and returned to you, you fit them in and take wax bite with same in position, also plaster impression, and return.

When our instructions are followed we guarantee every case. Guarantee good for 30 days after you receive goods. All packages nailed or sealed from postoffice inspection require double postage. Will not guarantee any work when impression is taken with modelling compound or wax.

Terms and Suggestions for sending money.

TERMS :—Our prices are net at Montreal. All carrying charges, cost of collection on C.O.D. orders, exchange, etc., must be paid by parties ordering goods.

Orders amounting to $4 00 and over will be sent C.O.D. only when a deposit of 25 per cent or over of the amount accompanies the order. All orders for less than $4.00 will be sent C O D. upon receipt of $1.00 deposit.

We accept as Cash : Post-office orders and notes, express orders, *certified* checks, postage stamps, currency or gold scrap.

ne pas tenir, saupoudrez dessus un peu de gomme tragacanthe, ce qui le fera adhérer.

Cependant, dans les neuf-dixièmes des cas, un dentier qui ne tient pas du tout lors de sa livraison tiendra très bien après quelques jours d'usage. Il faut dans tous les cas que le porteur ait de la patience, beaucoup de patience, même s'il lui faut de deux à trois semaines avant de s'habituer à porter son dentier. Le dentier du bas est toujours plus difficile à faire tenir que celui du haut, il faut nécessairement plus de patience pour s'y habituer. **Patience.**

Si un dentier blesse la bouche, vous devez en enlever un peu là où le contact est trop fort. Souvent il occasionne une légère épulie ou excroissance blanche, il suffit de gratter le dentier, comme dit plus haut, pour prévenir renouvellement. **Blessures.**

Recommandez aux patients de se servir d'un bon élixir antiseptique pour maintenir la bouche hygiénique. Quelques gouttes versées sur le dentier, après qu'il est lavé, suffisent. **Elixir antiseptique.**

La plus grande propreté ne peut être trop recommandée ; un dentier doit être lavé au moins au lever et au coucher ainsi qu'après tous les repas. **Propreté.**

Le dentier doit être porté la nuit, au moins jusqu'à ce que le porteur y soit bien habitué. La nuit, les muscles et la langue sont au repos, et permettent au dentier de faire sa place, son nid dans la muqueuse. **La nuit.**

Pour nettoyer le bol en caoutchouc, après que vous y avez délayé du plâtre, il suffit de laisser durcir celui-ci, puis de presser le bol, le plâtre s'en détache facilement et ce qui en reste peut être enlevé avec la spatule à plâtre. **Bol en caoutchouc nettoyé.**

Nous recommandons l'emploi de l'anesthétique local de Waite, de préférence à tout autre, il n'est pas toxique, il produit une anesthésie parfaite, et ne cause pas d'inflammation de la gencive. **Anesthétique local de Waite.**

La seringue doit toujours être stérélisée avant et après chaque opération, il en est de même pour l'aiguille. **Seringue.**

Les meilleures pointes ou aiguilles de seringue pour usage dentaire, sont celles ayant un fort épaulement et une très courte pointe. **Pointes.**

Beaucoup de dentistes emploient et recommandent de couvrir d'aluminium la partie du dentier qui adhère à la muqueuse, cela empêche tout échauffement, augmente l'adhésion et donne un plus joli fini. **Doublure d'aluminium.**

The following is a list of the accessories we carry in stock for the convenience of our patrons with prices :

Dental Plaster, per lb	$0.40
Impression Composition, per lb	1.00
Articulating and Basewax, per ½ lb	0.60
Sticky wax, per box	0.60
Impression trays, upper or lower, each	0.25
Rubber bowl	0.60
Spatula for mixing plaster	0.30
Spatula for wax	0.30
File, half round	0.45
File, round	0.15
Scraper	0.35
Shade guide	1.75
Alcohol stove	0.50
Dental Hypodermic Syringes, prices on application.	
Local Anæsthetic, 2 oz. bottle Waite's	2.00
Local Anæsthetic, 2 oz. bottle Evans'	1.50
Staples	0.05
Impression lining, 2 oz. bottle with brush	0.25
Liquid soap, 4 oz. bottle with brush	0.25
Sulphate of Potash, 4 oz	0.20
Standard Wood Spirits, quart bottle 50c., one gal.	1.50