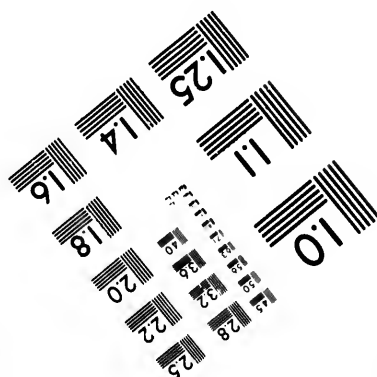
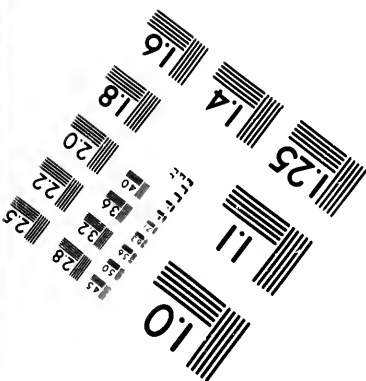
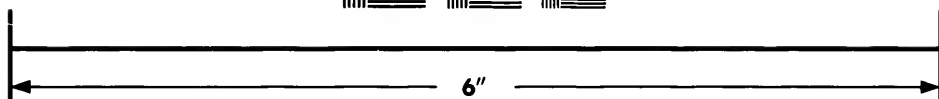
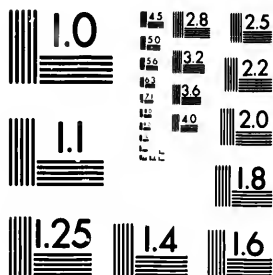


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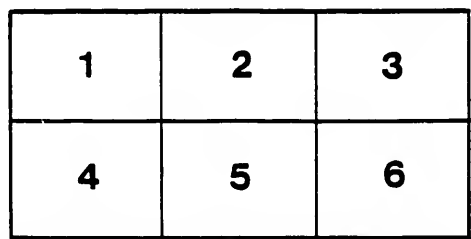
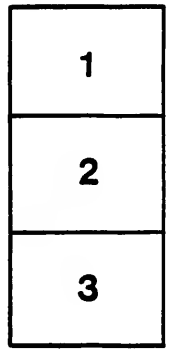
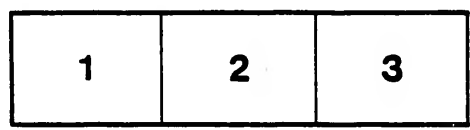
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THE
FAMILY DENTIST;
A TREATISE

9

ON THE
IMPORTANCE OF THE TEETH,
ON THEIR
STRUCTURE, DISEASE AND MODE OF CURE,
ALSO,
MANAGING AND REGULATING OF CHILDREN'S TEETH, &c.

By J. A. TROUTMAN,
DENTIST, TORONTO, ONT.

Entered according to Act of Parliament of Canada, in the year
1873, by J. A. TROUTMAN, in the Office of the Minister of Agriculture.

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PREFACE.

The presentation of this brief treatise on the teeth to friends and patrons, affords me much pleasure.

It contains instruction upon dental subjects of great practical importance. I have used this method of statement in order to impress upon the mind the great importance of preserving the natural organs, and the most simple manner by which this can be accomplished; also to give the reader a knowledge of the temporary and permanent teeth in each jaw; and the order in which they are developed, erupted, and shed, as well as the causes of their decay, &c., in as small a space and condensed a form as possible. Taking reference from the principal works that treat upon these subjects, and my own observations, I have selected those points that will come under the observation of both the Dentist and his patrons, and which will be most beneficial to parents, so that from this small book they may obtain a knowledge of the great importance of the teeth, how to preserve them, and the best method of substituting them when lost.

J. A. TROUTMAN.

TORONTO, 1872.

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THE TEETH.

The teeth are the finest features of the face, and no part of the animal organization is more important or wonderful. A fine set of teeth produces a great effect in the appearance of the owner, and as they are one of the first features to be noticed, they produce a pleasurable feeling in the beholder, and as it were, prepare him favourably for an introduction. They also preserve the outlines of the face; and when they are missing, the greater part of the expression is gone. Let a woman have fine eyes, a pretty mouth, a handsome nose, a well turned forehead, elegant hair, a charming complexion, but if she have bad teeth, blackened with caries or covered with tartar, or a viscid concretion—in a word let her exhale an unpleasant breath, (which you discover before she appears), we should cease to think her beautiful the moment she opens her mouth. On the contrary, if she have a large nose, a small eye, if she be even homely; provided her teeth are regular, white and clean, and above all if she possess all of them, or at least those that are visible, this woman's countenance, although unattractive at first, will appear agreeable the moment that a smile comes to her aid. When Nature, sparing of her gifts, has failed to bestow them on the teeth, leaving them defective in form and color; care, and extreme cleanliness must be resorted to, to supply the imperfections and hide the faults. In cases of this kind, although the teeth do not attract our regard, they do not affect us disagreeably.

Nature has provided two sets of teeth for the human race, each of which are formed before birth, and held in reserve in the bony structure of the jaws, and are entirely covered until nature has developed them sufficiently for their eruption, when the smaller or temporary teeth are the first to appear.

THE TEMPORARY OR FIRST TEETH.

The Temporary teeth are twenty in number, ten in each jaw, and are cut in the following order of time, the lower preceding the upper.

Central incisors or front teeth	..	5 to 6 months.
Lateral incisors two next in front	7	" 12 "
First Molars or first double teeth	12	" 18 "
Canines, Eye or Stomach teeth	14	" 20 "
Second Molars20	" 36 "

These comprise the temporary set. The cutting of these teeth frequently produces great local as well as general disturbance, often threatening the life of a child, and sometimes causing its death.

The source of danger to the infant is principally of a nervous character, arising from pressure on the nerves, distributed to these teeth; the pressure is due to the dense structure of the gums, covering the points of the teeth, thereby arresting their eruption or cutting. The nervous irritation caused by the pressure of these teeth is frequently conveyed directly to the brain, hence brain difficulties of a more or less serious character often supervene. If the irritation is taken from the brain

to the stomach through the reflex nervous action, as it often is, then there is a complication of stomach and bowel difficulties of greater or less severity. At such times the gums should at once be lanced, and the time to cut may be determined by the appearance of the gums, which look slightly swollen, tense as though stretched over some hard substance, and white in color, the blood being forced out of it by the pressure of the tooth endeavoring to come through. Biting upon rubber or other hard substance at this stage, affords but temporary relief, as danger to the child arises more from the general disturbance than from local causes.

After the child has cut the whole of the temporary teeth, it is highly necessary that they should be preserved with great care until the proper time for shedding them, as between the years of two and seven the jaws enlarge most rapidly. At two they have the appearance of a half circle, at seven they assume more the appearance of the letter U. The maxillary arches or jaws when prematurely deprived of the milk teeth are subject to contraction.

As the second teeth are much larger than the first, they require more room, and the jaws should naturally increase and expand with the growth of the body; but contraction instead of expansion follows the too early removal of the first teeth, and the jaws are not sufficiently developed to admit of the second set of teeth; this is one of the great causes of irregularity of the permanent teeth.

Parents often make the remark in regard to the first teeth, when they are decaying, "Oh! never mind, for they are the child's first teeth, and are in a bad condition, I know, but he will soon loose them, and in their places have better and stronger teeth, so it is of no consequence if they do decay." This is a great error, and is capable of incalculable mischief, and I would say to such persons that the importance of the temporary upon the permanent teeth *is direct and unequivocal*. They should be preserved in the strictest integrity, either by filling or otherwise, best determined by the Dentist, after an examination of the case; until their loosening by the natural absorption of the roots, when they should be removed at once to allow the permanent teeth to come in the proper places.

In their daily ablutions children should always be taught to include their teeth, nor can parents give too early attention to this subject, for it is of as much importance to cleanse the teeth, as it is the body. If the child is only taught the use of the tooth pick and brush in early life, the habit becomes so fixed, that he finds it ever afterwards absolutely essential to his comfort.

By observing these rules, irregularity may be prevented, and a fine set of teeth secured in ninety-nine cases out of every hundred; that is if attention be accompanied by judicious measures.

Frequent consultation with a good Dentist respecting the child's teeth, when any malformation or derangement is noticed, would pay the parent abundant interest for the expense

and trouble incurred, and the child would be saved a vast amount of disease and suffering in after life.

It is highly important, that the child's first teeth be preserved by filling them; until the appearance of the second teeth; for three reasons:

1st. To prevent suffering and pain from the exposure of the nerve pulp.

2nd. To properly masticate the food before taking it into the stomach.

3rd. To secure the proper growth of the jaws, adapting them to the coming second teeth, which are much larger than the first teeth, otherwise irregularity of the permanent teeth is almost sure to occur, and the supposition is that the jaws are not large enough to admit of the permanent teeth.

THE SECOND OR PERMANENT TEETH.

The Permanent Teeth are thirty-two in number, sixteen in each jaw; twenty of which (ten in each jaw), have taken the place of the temporary teeth, the bicuspsids of the second set occupying the places of the Molars in the first set, as the deciduous set has no bicuspsids. The double or molar teeth, (twelve in all), six in each jaw are cut but once, and take up their places behind the temporary teeth, as the jaws enlarge for their reception.

The eruption of the permanent teeth is as follows, the lower preceding the upper:

You will here notice that the first permanent molars or double teeth are erupted before they begin to shed the temporary teeth.

First Molars.....	5 to 7 years.
Central Incisors or front teeth...	6 " 8 "
Lateral Incisors, next in front....	7 " 9 "
First Bicuspids, or small double teeth.....	9 " 10 "
Second Bicuspids	10 " 11 "
Canine, Eye or Stomach Teeth } and sometimes late in life }	11 " 15 "
Second Molars.....	12 " 14 "
Third Molars or Wisdom Teeth..	16 " 26 "

There were but twenty of the first teeth, and now the number is increased to thirty-two, so you will readily perceive that a larger space is required for the second, than for the first set. There is a period at which the temporary teeth require removing, that the permanent ones may come in their proper places, and if this is not done at the proper time, the new ones will come through, out of place, thus a lasting deformity is produced. If the tooth decay, or ache, and require extracting before the permanent tooth has developed itself sufficiently, the permanent tooth is robbed of a great amount of nourishment which it absorbs from the roots of the temporary teeth if they be allowed to remain; thus the permanent teeth are frequently deformed, or of a soft nature; therefore much depends upon the well-timed removal of the infant tooth which should be neither too early nor too late, but must be judged according to circumstances and appearances in each individual case. The principal indications for removing the temporary teeth are the loosening of the teeth. In some cases the tooth does not

loosen, and the permanent tooth begins to press outwards, this may be detected by a slight fullness on the outside of the gums, directly below the temporary tooth; this fullness frequently has a light appearance, caused by the pressure upon the part, and at this stage the temporary tooth should be at once removed to allow the permanent to grow in its proper place. And when there is a tendency to irregularity it may be prevented by timely and judicious interference.

The first four molars, two in each jaw, (the sixth tooth from the centre of the arch on either side), are supposed by a great many from their early appearance to belong to the first set, and are allowed to decay under the impression that when lost they will be *replaced* by others; this is a great mistake; they are permanent teeth, and once lost are never replaced.

Have your children's teeth looked after about the sixth or seventh year, with special reference to these teeth. *The permanent* teeth are of great importance, and should be preserved regardless of expense; such investments, if judiciously made, will be found cheapest in the end. We should look with suspicion upon those dental operations whose chief claim upon our attention is in their cheapness, if the price is very low, it is certain the generality of the work will be very poor. In the scramble for business, low prices are often the principal considerations held out, and it is chiefly owing to this imperfect class of operations, that so many teeth continue to decay after being filled, and are eventually lost; while the reason *assigned* for their loss is the frailty of the tooth

or some constitutional cause. Under these circumstances, you not only pay your money for naught, (a very small matter), but allow the infliction of positive injury upon the most serviceable and important organs you possess. Questions of a much higher moment should be settled when about to employ the services of a Dentist. Is he honest and skillful? Will his operations preserve the teeth? If these and other questions are answered affirmatively, his tariff of prices *unless absolutely extortionate* should not have the slightest influence in determining your choice; for filling at almost any price is cheap, that saves the tooth, compared with the one, though it be a gift, if it does not preserve the tooth. The generous and honest Dentist, however, will always respect the circumstances of his patient, and will estimate the price of the operation before he begins, if the patient requires or asks it; and in no instance will he perform his operations at the expense of the teeth.

DECAYING OF THE TEETH.

The rapid and early decay of the teeth may be attributed to two causes, viz.:

Defects in the structure of the teeth, frequently hereditary, and chemical decomposition.

Defects in the structure of the teeth are traceable to a defective nutrition during the formation or growing period of these organs. Defective nutrition arises from two causes, the quality of the food; and its proper assimilation.

If during the growth of the teeth the food is deficient in animal, vegetable, or mineral elements, such as gluten, albumen, and the different combinations which enter largely into their substance; or if the food, rich in the above elements, be not appropriated to the proper nourishment of these organs, they will be more or less defective in their structure; hence they are predisposed to rapid decomposition. Such teeth may be considerably improved by judicious local treatment; and by filling, be rendered serviceable for many years. In many cases this kind of decay might be prevented by the mother taking proper nourishing food while nursing the child, and above all by seeing that her own teeth are in a healthy condition; for if the mother's teeth are in a bad condition, the gases which arise from the decaying of these teeth is of a very unhealthy nature, and as a great portion of this noxious gas is taken into the lungs it deranges the system, also the food that is taken into the stomach; and as the child's nourishment is derived from the food the mother has taken, it must be unhealthy, and as the child does not receive healthy nourishment it cannot give it to its growing organs, thus the child's teeth are predisposed to rapid decay, and the cause is simply hereditary.

Chemical decomposition may arise from vitiated secretions of the mouth, from chemical disintegrations of food remaining on or between the teeth after eating, or from chemical actions of strong medicine taken into the system without restriction, or caution. The destructive, chemical action may be arrested

by the use of a tooth-wash, prepared expressly for changing the character of such secretions, and at the same time thoroughly brushing sufficiently hard for the removal of all foreign substances from the teeth. The teeth are constantly becoming more dense in their structure, the most critical period in the life of these organs is between the years of seven, and twenty; during this period great care is absolutely necessary, as a greater number of teeth decay during this period than later in life. After the age of twenty care taking is rewarded with an increased certainty of preserving them until old age.

CLEANING THE TEETH AND HOW PERFORMED WITHOUT INJURY.

It is certain that you cannot preserve the teeth without keeping them clean. No care or attention in other respects, however well performed, if faulty in this, can possibly save them, *and no cleaning*, however thoroughly and systematically administered will prevent the teeth from decomposition unless, when decayed, their cavities are cleaned and thoroughly filled with gold or some other indestructible substance.

People frequently make the remark that they are afraid of brushing off the enamel if they use too hard a brush, or use the brush too frequently, and if they brush them too hard their gums will bleed; this is a mistake, for the gums or teeth are not hurt by the use of the brush. Caution in this direction is unnecessary, for the more you brush the teeth and gums the harder

they become, and instead of the enamel wearing off it becomes thicker, the enamel is always thicker upon the parts that are in constant use than in any other part of the tooth, and decay is scarcely ever known to begin upon the parts where there is the most friction. The danger lies principally in using destructive tooth powders or washes, not from proper use of the brush.

By using the brush frequently, or at least once a day, and that before retiring, you can keep them clean. During the day the constant moving of the tongue and lips prevent the food from remaining long about the teeth, but when you sleep, these organs become inactive, then the small morsels of food that get between the teeth after the last meal, are allowed to remain, and the saliva of the mouth acting upon them, they ferment and throw off a strong acid, which has a direct action upon the teeth and causes them to decay; indeed it would be well to use the brush after each meal.

It is also highly important to have a properly compounded tooth-wash. The teeth are often injured very much by using highly *acid* or *alkaline* tooth-washes for making the teeth beautiful, which is manufactured and sold by irresponsible persons.

I have a tooth-wash that answers the requirements. There is nothing in this wash that injures the teeth in the least, yet it keeps them perfectly free from all stains, and free from tartar. It is pleasant to the taste, it purifies the breath, and hardens the gums.

Teeth having green stains upon them near the gums, or tartar deposited about them,

should be first cleaned by the dentist, for no amount of brushing would remove these deposits from them.

NECESSITY OF FILLING THE TEETH.

Success in filling and preserving the teeth, depends upon three things. The quality of the teeth themselves; the manner in which the operation is performed; and the character of the material employed for this purpose; or in other words, if the teeth are but poorly developed, defective in their structure, or the operation is imperfectly performed, either with good or poor material, the teeth will surely decay sooner or later.

I have seen teeth which had been filled for over forty years, and they looked as well as they did when first filled. Four essentials are requisite in the personal qualifications of every dentist. A high order of intellectual culture in the direction of his specialty; surgical and mechanical ability; integrity and faithfulness. These qualities combined will render him thoroughly acquainted with the human organism, especially the teeth, will be a guarantee of his capability to perform whatever he perceives necessary to be done; will enable him to determine the line of practice in every instance irrespective of contingencies which will result in the highest good to his patients, and secure in every case the most finished results in workmanship. Some teeth are frail and require great skill to save them, but more teeth are lost from poor operations than all other causes combined. It by no means follows that because a tooth is

filled with gold, that it will be preserved; unless certain results are reached in every step of the operation the teeth will certainly decay afterwards, no matter what the quality of the tooth may be. Of course the decomposition will be more rapid where the teeth are poorly organized, but when the teeth have the finest type of structure it is absolutely essential that there be brought to this test, the highest order of surgical and mechanical talent in order to insure their preservation. For when the filling of the teeth is performed as it should be, their durability, usefulness, and beauty may be secured for many years, and the owner will be paid abundant interest for the money expended.

In most instances gold is the best material for filling the teeth, other materials are sometimes used which are less expensive; but the choice of the material should always be left to the Dentist, unless the patient cannot afford the gold. Certain teeth ought not to be filled with anything but gold, while others are so far gone that it might be as well to fill them with some other material less expensive, as the tooth would not be worth a gold filling, but *gold* is considered the best material that can be used.

People would save a great amount of pain and expense by having the teeth filled, while the cavities are yet small, for the nearer the decay comes to the nerves of the teeth the more liable to give pain during the operation, and the larger the cavities the more material it will take to fill them, and the more of the tooth that has to be substituted with the filling, the weaker the walls of the tooth will

be ; therefore to make the most satisfactory filling the cavities should be small. Many persons remark that the tooth does not ache yet ; but when it does they will go to the Dentist and have it filled, this is a great mistake for the best time to fill it is when the cavities are yet small. Few people know how to appreciate their teeth until they have lost them ; but make the remark that as soon as they ache they will have them drawn, and will have new ones that will not ache ; but this is a great error, for one good natural tooth is worth more than all the artificial ones, and we cannot be too careful in preserving the natural organs that God has provided us with.

TOOTH-ACHE AND HOW TO TREAT IT.

There are many teeth extracted that might as well be restored to health and usefulness, as to have been removed.

It is not necessary to extract a tooth because it aches in every case, or even in one half of the cases. A person suffering with tooth-ache, by consulting a competent Dentist, can as well have the pain checked and tooth filled, as to have it removed ; that is, if the crown of the tooth is left, and the disease has not gone too far. When a tooth first begins to ache, it is no sign that the nerve is diseased or dead, for at the first attack of pain in the tooth, it is caused by the simple exposure of the nerve to the changes of temperature, arising from the decaying of the dentine covering this highly sensitive structure ; and by removing the decayed bone, then by covering the nerve with

some indestructible non-conducting substance (for the dentine was a non-conductor), the tooth can be filled and restored to its normal health and functions. But this operation is one that requires great care, for the nerve in a tooth is very sensitive, and the slightest unnecessary pressure on it causes intense pain.

Many Dentists claim that this capping of an exposed nerve is a thing that cannot be done successfully, and that they have tried and failed in almost every case; and have denounced it altogether; but in its stead they kill the nerve, then fill the tooth, crown and roots, and of course, the tooth will never ache from exposure again, since it is *dead*; but why kil' the nerve if it can possibly be saved in a healthy condition, and the tooth be filled? Is not a live tooth better than a dead one? Besides when dead they do not retain that healthy color that is characteristic of our teeth. This style of practice should never be resorted to unless the nerves are very badly diseased or dead, and the tooth ulcerated; then it requires great care to clean out all the decayed bone from the roots, or the disease is not checked; for the slightest amount of diseased bone will be an irritant, and cause a discharge sooner or later.

Dentistry has advanced more in the past ten years than it ever did before, and the one great point now is, *how to preserve the natural teeth in a healthy condition*; and within the few past years the profession has discovered a new process for treating the exposed nerve, (instead of killing it), and in the hands of the skilled Dentist, it is a perfect success.

But few of our old style Dentists have the idea, that as they learned the profession years ago, they of course should know all that is worth knowing about it, and the ideas they have are the best; and as *they* are perfectly satisfied with their practice, they never trouble themselves about the new things put forth day after day, until they actually are compelled to.

Now the failures that arise from the capping of the nerves come from carelessness or lack of skill upon the part of the Dentist; of course there are a few cases, when the nerves have become diseased, and then it is better to destroy the nerve if you cannot remove the disease; but the most of the failures are owing to the wounding of the nerve while cleaning the cavities, and not allowing it to heal; or from pressure of the capping upon this sensitive substance. Now, when nature formed the tooth, she formed it with a cavity sufficiently large to admit the nerve without pressure, and when the tooth decays to the nerve, the tooth begins to ache, and the cause is exposure, which can again be checked, by protecting it from the changes of temperature and pressure; but the unskilled Dentist prepares the cavity, and then presses the capping down firmly, making sure that all is solid, he then fills the tooth, and of course the tooth aches, and he says the capping is a failure; but why it is he does not know.

The reason is simply this, the pressure upon the nerve irritates it and causes pain. The capping should never rest heavily upon the nerve; if the operation is properly performed the tooth can be restored to health and usefulness for many years.

EXTRACTING TEETH.

It is a great mistake to have a tooth extracted the first time it aches, unless the crown has all decayed and left nothing but the roots, for in all cases of simple tooth ache the tooth can be restored to proper health with but little pain. We would not cut one of our fingers off if it pained us, or because it was inflamed, but would put something on it to reduce the inflammation and heal it. Then why not treat our teeth in the same manner, are not the teeth of as much importance as any other part of the body. People say that when they lose their teeth they will get new ones that will look better, which will not ache; but they are only substitutes, and in my estimation the natural tooth is far superior to the artificial.

There is no need of extracting a tooth, unless the whole crown is decayed away, the tooth ulcerated, loose, or the process absorbed, so there is no possibility of the tooth becoming firm again, *but in all other cases* the tooth can be restored so that it will be a useful organ for years to come. But in all cases when the tooth cannot be saved it should be *at once* removed. Persons suffer poor health for years, they experience much nervous and rheumatic pain about the face, head, and shoulders; facial neuralgia or tic-douloureux, or inflammation of the ear; are afflicted every few weeks or months with swellings and ulcerations of the jaws; have poor appetite; are tortured from indigestion, &c. These are a few of the diseases caused by such teeth. Ulceration of the jaw, and sometimes cancer are directly caused by these teeth.

Necrosis or destruction of the bone of the jaw sometimes attends the advanced stages of decay. Other afflictions might be mentioned as originating directly, or indirectly from the teeth.

But enough has already been said to admonish the reader, that there is no safety while retaining such teeth in the mouth.

Tears, regret, and sorrow may come too late, when a little timely attention would have averted such sad and distressing results.

IRREGULARITY OF THE TEETH.

There is nothing that mars the appearance of a person more than great deformity of the jaws, and nothing that is noticed quicker; for upon being presented to a stranger the first thing that he will notice are the lips, mouth, and teeth, and from these observations he forms his first opinion of his guest. From the mouth the most expression is given, as regards character, and even though deformed teeth are no fault of the young person, they receive no sympathy from the beholder, and gain no commiseration from him. But on the other hand, present a person with a fine set of teeth, and they being well cleaned every one will admire them, no matter whether the form is all grace or not. Take a young lady whom nature has endowed with a beautiful form, and if her teeth are irregular or gone, the greatest ornament of human nature is gone.

This deformity may be prevented in a manner which I explained when speaking of the temporary teeth. Irregularity of the teeth may be remedied by proper treatment, and

is accomplished with the most ease between the years of ten and twenty. I have succeeded with very difficult cases as late as twenty-five, but at that age they do not yield as readily, and the operation is attended with more pain than when performed earlier in life, but in all cases of irregularity when the patient is under twenty, I can insure perfect success in regulating their teeth. In many cases irregularity of the teeth might be entirely prevented by consulting a Dentist as soon as you observe the irregularity, or even before the tooth has made its appearance, and you notice a prominence upon the outside of the gum, as though the tooth was trying to force its way through the gum out of its proper place, there would be much less trouble in securing an even set of teeth if all such cases were taken in childhood, or as soon as possible after the malposition is discovered.

Therefore visit a Dentist at once, do not suffer the child to pass through life with deformity, ever present to remind and rebuke your carelessness, which timely professional counsel and aid would have entirely prevented, give proper attention to this matter, and your children, or those placed under your guardianship will rise up in after years to bless you.

I have had considerable experience with these cases, and have had the opinion and advice of some of the most prominent Dentists upon these cases, and can safely say that cases of this description entrusted to me, will receive every attention; success being guaranteed or no charge will be made. Professional advice in regard to the *teeth* given free of charge.

ARTIFICIAL TEETH.

The natural teeth should never be sacrificed with the expectation of finding the artificial a substitute in every particular, although in some instances the looks are improved by the artificial; but their use is seldom, if ever, equalled. I do not wish to convey the idea that artificial teeth cannot be made serviceable, for the function of mastication can be secured in a very high degree, *providing the artificial piece has been constructed properly*. All I wish to say is, that many persons allow their teeth to decay, (when filling might have preserved them), with the expectation of finding the artificial superior in every sense. I simply wish to correct this idea. *Save the natural teeth if possible*, but should any one be so unfortunate as to lose his natural teeth, he can have an artificial set so constructed as to secure in a very important sense the appearance and use of the natural teeth.

Many persons suffer from indigestion, and poor health for years, when the principal cause is, the lack of some, or all of their back teeth, which are *very important* in masticating the food.

Teeth can be inserted with great success in two days after the roots are drawn, for then the cavities are open, and the points of the artificial will set in the openings, and look very natural for a long time, or until the gums have fallen away sufficiently to admit of the permanent or gum teeth. After the teeth are drawn the gums continue to shrink for about a year, and when they have become hard, the

permanent teeth are put in to restore the face to its natural shape.

In some cases gold, in others platinum is the best for inserting artificial teeth upon; rubber is used to a great extent owing to its cheapness, and its being more easily manipulated; while it is lighter than either of the previous mentioned bases.

There is a new material for artificial dentures called Pyroxyline, which promises very favorably, it is a base that is about one half the weight of rubber, can be made a great deal thinner than rubber, and is a clean semi-transparent base, so strong and elastic, that it is almost impossible to break it. It is much easier kept clean than rubber, as the food has no tendency to adhere to its surface. This base is beginning to be used in the States a great deal, and while visiting some of the Dentists in Boston, they spoke very highly of it. I have had considerable experience with it, and can safely recommend it as one of the prettiest and most durable bases for artificial teeth.

Great care should be taken in selecting a set of teeth for a person, that you get the size, shape, and color, suitable to the person. There are over three hundred patterns of artificial teeth, and from such a variety, a Dentist should be able to make a very good selection.

Now there is very nearly as much expression in the teeth, as there is in the face, and to have a natural set of teeth the Dentist should judge the character of his patient, and then select the teeth to compare with the character. There is the generous, the shrewd, and the miserly tooth, which in many cases show as

much of the owner's character as the face itself. Why is it that some have broad, long and full teeth (generous), as wide at the gums as they are at the points? Others have long narrow tapering teeth, in which case the eye teeth are quite sharp at the points (miserly), while others have broad short and thin teeth (shrewd), then some teeth are much whiter than others, according to the complexion, all of these give great expression of character, and may be found among the small as well as the large persons of our country. Frequently a small woman will have very large teeth, and a large woman will have very small ones. Now if God designed our teeth to bear expression in keeping with our nature, why should not the Dentist exercise the same care in selecting the artificial ones. How frequently the remark is made, that such a person has got a new set of teeth, and they don't become her at all, or she looks so odd with them; now the reason is simply this, that the shape of the teeth and the form of the arch are not at all in keeping with the character of the person wearing them. Frequently the generous person will get the miser's tooth, and the miser get the generous tooth, and it would look odd indeed to see a miser in actions and looks trying to smile, and exposing generous teeth.

I can make two sets of teeth for the same person, and in the hand you would not notice much difference; but put one set in the mouth, then retire and change them, and upon entering you would hardly know the person until you had taken the second look; her expression would be so changed.

I hold myself responsible in every instance for the appearance, and nice adjustment of the artificial piece to the mouth and gums ; which is absolutely necessary in order to insure success in final adaptation and use, as well as appearance.

I would say to those having cleft palates or defects in the palate, that I can so adapt an artificial one by Dr. Kingsley's patent, that they will be able to articulate in a very short time without difficulty. I have seen several of these soft rubber palates worn, and have taken considerable trouble to learn how to make them, and I now have great pleasure in saying to those afflicted in this way, that I can make an artificial one which will enable them to speak properly and without difficulty.

DIGESTION OF FOOD.

Although the purpose of this work has been to present considerations relative to the care and preservation of the natural teeth, it may be interesting to add for reference the following table, prepared by Dr. Beaumont from actual observation of the time required for the digestion of food of ordinary daily use. The table was prepared from observation in the stomach of Alix St. Martin, a French Canadian Soldier, his stomach having been laid open to view by a gun shot, and although it became so far healed that its functions could be properly discharged, it never closed.

The average time for the digestion of ordinary food was as follows :

	Hours.	Minutes.
Beef with salt only boiled	2	45
Beef Steak, boiled	3	00
Fresh Beef, lean, roasted	3	30
Beef Corned, boiled	4	15
Beans, boiled	2	30
Bread Wheat, fresh baked	3	30
Codfish Cured, dried, boiled	2	00
Cabbage Raw, with vinegar	2	00
Cabbage, boiled, with vinegar	4	30
Cheese	3	30
Duck, domestic, roast	4	00
" wild, roast	4	00
Eggs, whipped	1	00
" fresh, raw	1	30
" soft boiled	3	00
" roasted	2	15
" fried	3	30
Fowl, roasted	4	00
" boiled	4	00
Goose, roasted	2	30
Lamb, boiled	3	30
Liver, Beef, fresh fried	2	00
Mutton, fresh boiled	3	15
" broiled	3	00
" roasted	3	00
Oysters Fresh, raw	2	55
" stewed	3	20
Pork, roasted	3	20
" salted, fried	4	15
" " boiled	5	30
Pig Suckling, roasted	2	30
Pig Feet, boiled	1	45
Parsnips, boiled	2	30
Potatoes, boiled	3	30
" roasted	2	30

Minutes.		Hours.	Minutes.
45	Salmon Salted, boiled.....	4	00
00	Sago Fresh, boiled.....	1	45
30	Soup Vegetable, with bread.....	4	00
15	Turkey Wild, roasted.....	2	18
30	" Domestic, roasted.....	2	30
30	Trout Salmon, fresh, boiled.....	1	30
00	Tapioca Pudding.....	2	00
00	Venison, boiled.....	1	35
30	Veal Fresh, boiled.....	4	00
30	" " fried.....	4	00
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REFLECTIONS.

Having spent three years and a half with Mr. W. C. Adams, Dentist, of Toronto, and after finishing my studies with him, I spent eighteen months travelling through the United States, attending many Dental Conventions, and visiting some of the most prominent Dentists of that country; I have had the opportunity of seeing and learning every new style of work or operation of benefit to the profession, and of getting the opinion of some of the best operators, in regard to the most proficient manner of operating upon the natural organs; and I now have great pleasure in informing those requiring the services of a Dentist, that in the *Surgical, Operative and Mechanical*, departments of *Dentistry*, I promise to all the most modern and the highest results obtainable in our profession, at prices not out of the reach of any person. I will give consultation upon any subject connected with Dentistry, free of charge.

Hoping these few pages will be of interest to those who give them a careful reading.

I remain, yours respectfully,

J. A. TROUTMAN,
DENTIST, Toronto, Ont.

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