A WORD ABOUT FAILURES.

BY FRANK R. WOODS, D.D.S.

Instructor in Orthodontia, College of Dental Surgery, University of Michigan, Ann Arbor.

WE all dislike to drag these skeletons from their closets, and so, perhaps, the greater need. Our successes are their own monuments, and beholding them; attendant difficulties are forgotten in the joy of accomplishment, but if success be but qualified, or even substantially lacking, then is no time to assign unsatisfactory memories to forgetfulness, but rather by careful analysis, to fix responsibility though it may not always reflect unlimited credit upon the analyst.

We may give but short shrift to those cases which are doomed by the neglect or persistent indifference of the patient, or the lack of insistence upon proper care on the part of the parents, for they occasionally constitute circumstances beyond our control.

The greatest enemy of fully successful results is the lack of the highest ideals, or failure to adhere to them strictly, under trying conditions. It may seem so much easier to accept a compromise which seems to promise a pretty good working occlusion, but of all the snares ever set to vex the orthodontist's soul, this is the most surely Satan's own. There is but one arrangement of the human denture that is truly efficient and in harmony with normal physical development of the head, and for that matter, of the whole body, and that is the arrangement described by Doctor Angle as "Normal Occlusion". To be sure there are cases of advanced development where the deviation from this ideal is of such a nature and of so great extent that it is impossible, or at least, impracticable, to restore and maintain the denture in pure normal occlusion; but if we resign our attempt only after the utmost patience has proved unavailing and every expedient insufficient, we shall certainly have accomplished a much nearer approach than if we begin by desiring a compromise, which orthodontically, is but a qualified failure. For a given tooth in a given denture there can be but one correct position, i.e., for each tooth there is an intersecting point in the mesio-distal, buccolingual, and vertical planes which a given point in the crown of that tooth must coincide with in order that it may be in harmony with its fellows in the same arch, and that that arch may functionate efficiently with its opponent. In just the degree that it deviates from this point, will harmony in the arch be marred, efficiency of function be impaired, and facial symmetry and the beauty of harmonious features be destroyed. The time is now with us when careful parents bring their children to the orthodontist while they are yet little tots of four or five years for his opinion as to whether or not normal development is occurring. In many cases in which nature seems reluctant to provide needed space for developing teeth, a simple appliance placed in good time is sufficient to provide the necessary stimulus for growth, and we have excellent reason to believe that a long and tedious treatment has been averted, and a more nearly ideal result attained than if the child had been allowed to go on and erupt a considerable part of its denture in a

more or less serious malocclusion, because by early interference, the departure from the normal ideal at any time has been minimized. It is obvious that the less deviation from the ideal a case presents at any point of treatment, the more readily may it be made to conform to the ideal in its result, and conversely, the greater the deviation, the greater the difficulty of correction, and the less the approach to the ideal. In view of this, does it not seem wholly worth the while of general practitioners of dentistry and orthodontists alike to let their cry of warning to parents be to seek competent advice early and thereby lessen future trouble for themselves and promote in the highest degree possible the dental welfare of their children? So much for delayed treatment as a contributing cause for our failures.

In the matter of choice of appliances, of course the one constant requisite is efficiency, the appliance must accomplish the desired work with certainty, but only second to this is the ancient virtue of simplicity. The intrinsic relative excellence of efficient appliances will be in direct ratio to their simplicity; the simpler an efficient appliance, the more nearly ideal is it. The less number of banded teeth, the less number of contacts of arch and tooth, the less number of angles favorable to the retention of food-debris, formed by the appliances, the greater the likelihood that the teeth will survive treatment free from decalcification, and the greater the probability that the gums and peridental tissues will not have sustained serious injuries or have experienced infections which, even though apparently of but slight significance, nevertheless leave the tissue involved in a condition not quite so good, not quite so favorable to their future health, as they once were. All too little concern, in a large percentage of cases, is given to slight injuries of the soft tissues by impinging arches and unwisely placed ligatures, so that when parents considering orthodontic treatment for their children, express concern lest they suffer injury through the operation, we are forced to concede, at least mentally, that it is altogether likely that they have seen cases which furnish them just grounds for apprehension.

We shall now approach the subject from the standpoint of an unsatisfactory ultimate result, though an apparently satisfying correction was obtained, but which did not stand. A most prolific cause of this class of failures I believe to be insufficiently long retention. Assume first that the case is one of twelve or thirteen years of age when treatment is begun, and therefore of thirteen or fourteen years when active treatment is finished. The patient has erupted a nearly if not quite full denture, except third molars, before correction is attempted. This means that the teeth have accommodated themselves in their positions in the process to a considerable degree, to their conditions of abnormal stresses, and the adjacent and associated hard and soft structures are developed in conformity to this malocclusion. It is quite superfluous to say that the mere moving the teeth into approximately normal occlusal positions will not accomplish a permanent correction. We merely create again a plastic condition of immediately surrounding tissues in which the teeth are free to assume whatever positions of malocclusion the then active forces shall dictate. Each tooth will follow its line of least resistance under those forces and come to rest at their point of balance. The change of tooth position may individually be very considerable and the structural change in the immediately surrounding

tissue will be proportionately great, but the changes in the bony structures a little more remote will not occur with the same promptness, nor will changes in muscular attachment and muscular structure be as immediate as in the members to which the corrective force is directly applied. We therefore, at the conclusion of active treatment have, instead of a harmonious whole, a most complicated structure entirely out of balance. Something must undergo a change in the direction of restoring harmony in the associated parts. If the arches are restrained within due bounds, though the greatest possible freedom must be given individual teeth consistent with such restraint, for a long enough period, these more remote hard and soft tissues will answer nature's demand for harmony and a permanent correction will be much more likely to result. But this permanent correction will not be simply straightened teeth, but what is far more, it will be a regenerated facial and cranial structure. This is true Orthodontia, requiring the utmost skill, the most unfailing judgment, and the sublimest patience on the part of the operator, and the most sympathetic comprehension and fullest co-operation on the part of the patient and parents.

MALOCCLUSION AND MOUTH-BREATHING.*

BY W. F. TAYLOR, D.D.S., FOND DU LAC, WIS.

ORTHODONTIA is that science which has for its object the correction of the malocclusion of the teeth and facial deformities.

Malocclusion is a deviation from normal to such an extent as to interfere with the functions of the teeth. Orthodontia being that science which deals with the malocclusion of the teeth, I believe you, of the medical profession, might be interested in the etiology of Class II, Division 1, cases, being those malocclusions which are characterized by the distal relation of the lower arch to the upper. The upper arch is narrow with protruding anterior teeth; undeveloped mandible, with a receding chin, and the patients are mouth-breathers with short upper lips.

Mouth-breathing has long been recognized as a cause of malocclusion and the result of adenoids. There are other things which cause mouth-breathing, but a large percentage of mouth-breathing in children is produced by adenoids. Adenoids may be defined as the hypertrophy of the lymphoid tissue located in the naso-pharynx. Lymphoid tissue is present in all children and becomes the cause of mouth-breathing only when it is infected and congested to such an extent that it extends downward and forward until it comes in contact with the soft palate and closes the naso-pharynx. In some children the congested condition becomes sufficient to produce an obstruction of the nasal tract only when lying down. This mass of lymphoid tissue is a portion of a continuous ring, which encircles the pharynx, and is known as the ring of Waldeyer. Owing to the ease with which this lymphoid tissue becomes infected, it is also known as the "vicious circle."

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