

of the upper arch. Now, various nasal obstructions produce different forms of malocclusions. The mucous membrane lining the nasal cavities covers a large area. Any irritant causing the membrane to become inflamed and thickened, as in chronic hypertrophic rhinitis, or atrophic rhinitis with polypi will obstruct the air passages. This class of nasal obstruction creates a mouth-breathing that may be only temporary or intermittent, but if persisted in long enough to interfere with the development of the bones of the floor of the nose, the septum or turbinates it will also retard the development of the intermaxillary region, causing a crowding of the upper incisors.

Contrast this form with that of obstruction with adenoids. You do not have the crowding of the anterior teeth, but a protrusion and a receding lower jaw, a short upper lip, thickened lower lip, which is wedged in between the lower and upper anterior teeth. This lower lip simply acts as would a rubber wedge and forces outward the upper teeth and holds backward the lower arch and jaw. This in time spreads the upper anterior teeth like a fan. In this class of cases the malocclusion is general, in the other it is confined to the anterior region.

How important then is it that nasal breathing be maintained during the early period of development. The most critical years are those during the eruption of the first permanent molar teeth. Those of the lower jaw precede those of the upper. The cusps of the upper molar are fitted into the fossae of the lower molar. If for any reason the cusps are not occluded properly, then we have the pernicious commencement of malocclusion, and all of the teeth following will be out of harmony or normal occlusion.

In mouth breathing, the mouth is open, the lower jaw drawn downward and backward, the lower molars are almost certain to lock distal to normal. Frequently it occurs on one side of the arch only. If it has been but temporary, you will have the malocclusion of these molars with the lower jaw distal to normal, but with normal nasal and lip function. These cases show a distinct marking in the position of the incisor teeth. These teeth overlap each other in one or another of several forms. The overlap is caused by an effort of the muscles of the lips to overcome the malocclusion started in the back molars years previously during a temporary mouth-breathing. Still another form of malocclusion is the protruded and over-developed lower jaw and arch, with the upper anterior teeth occluding inside the lower, and the lower molars now mesial to normal instead of distal as in mouth-breathing. This class of cases is due to enlarged tonsils. A very important local cause is loss or decay of