

# Clinical Observations on the Behavior of Maxillary Third Molars\*

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You and I have in common, I am sure, a desire to obtain perfect and lasting results in our effort to treat malocclusion.

The purpose of this paper is to present to you my clinical observations on the behavior of the maxillary third molars. I believe that the case reports that follow will show you visually without extended description the procedure that I adopted about ten years ago.

## PART I

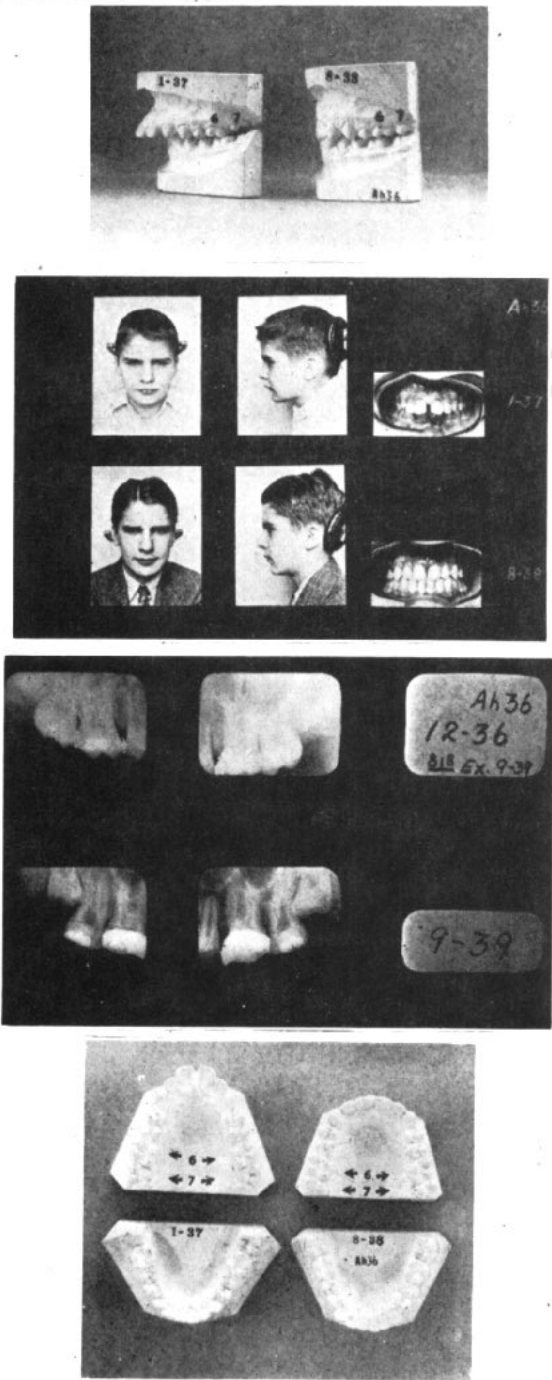
Records of three representative cases in which maxillary molar teeth were not extracted. Notwithstanding what I considered a satisfactory result at the end of a first period of treatment, detrimental changes developed subsequently.

(Ah 36, An 33, and As 9)

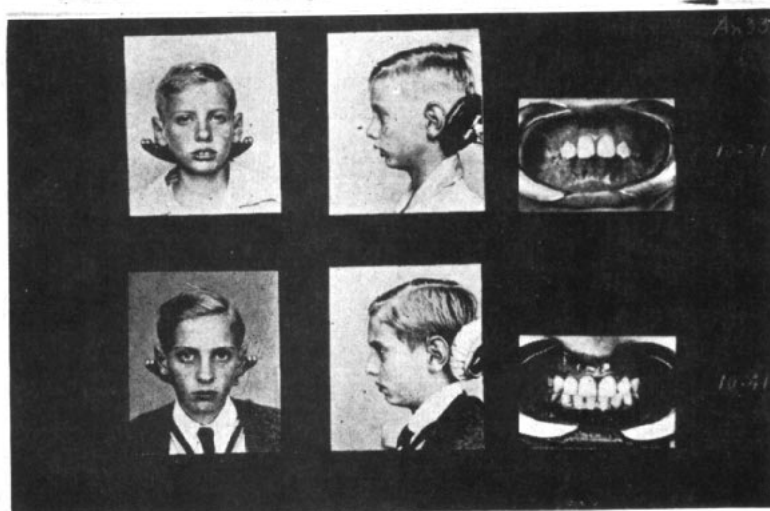
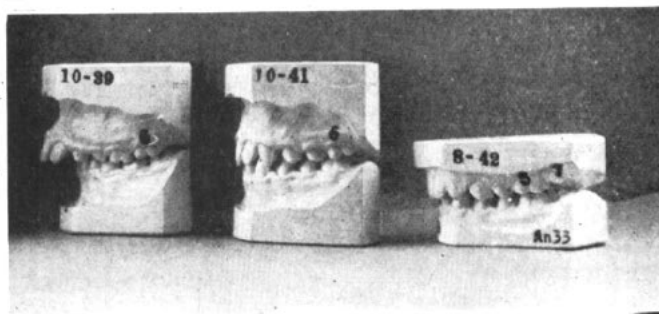
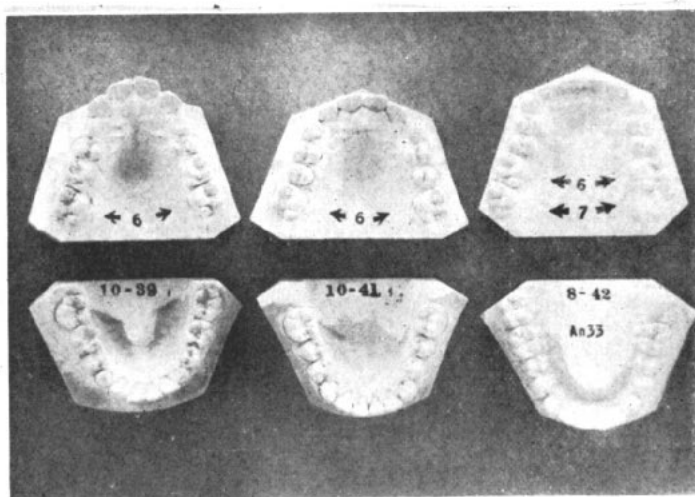
NOTE: X-ray mounting-view as though you are inside of the mouth looking out.

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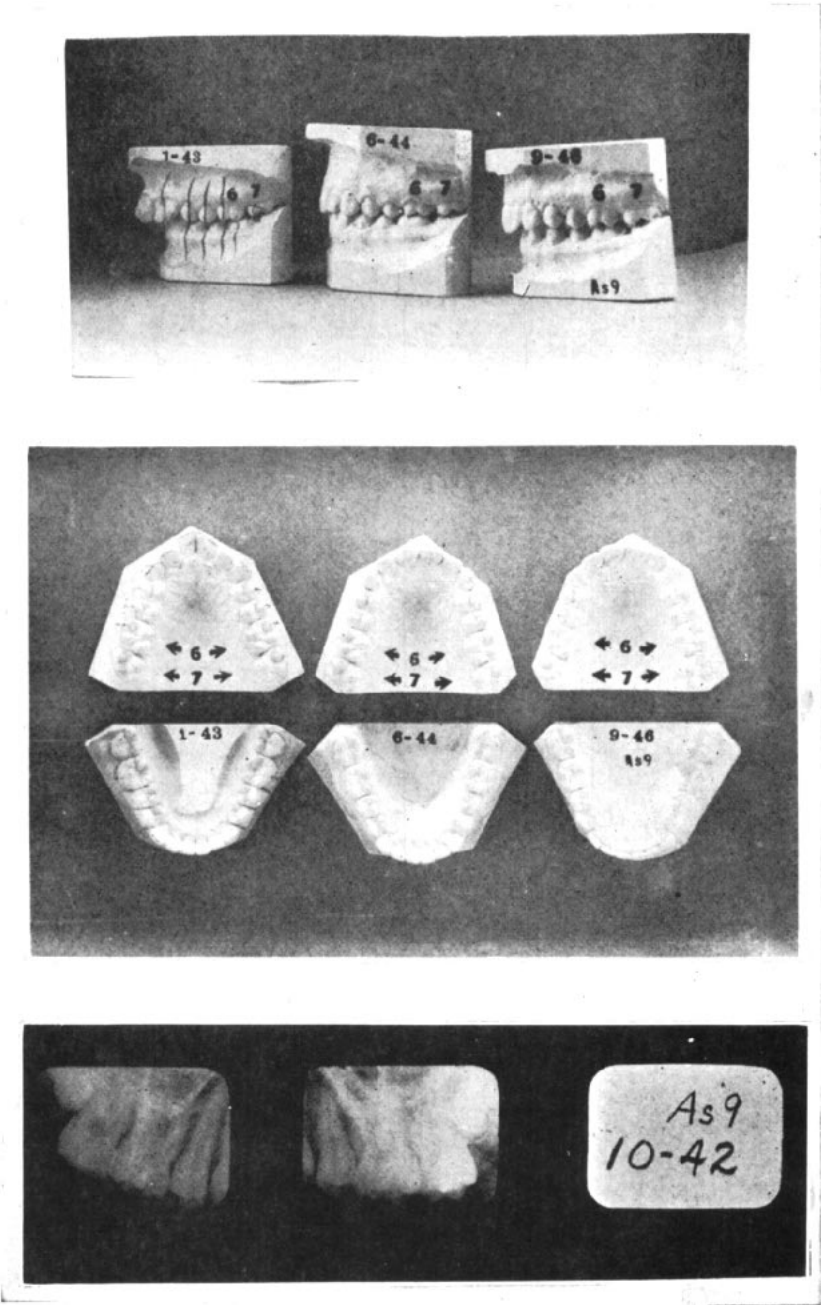
\* Presented before the Mid-Western Component of the Edward H. Angle Society of Orthodontists, Wade Park Manor, Cleveland, Ohio, November 18-19, 1946.



The first case, AH 36, presents a result which I regarded at the end of the first period of treatment as good. One year after completing the treatment in August, 1938, the maxillary teeth moved forward requiring retreatment. This was done, but *after* the upper third molars were removed in September, 1939. I did not, at the time, make additional records, but know that the second result is *very* satisfactory.



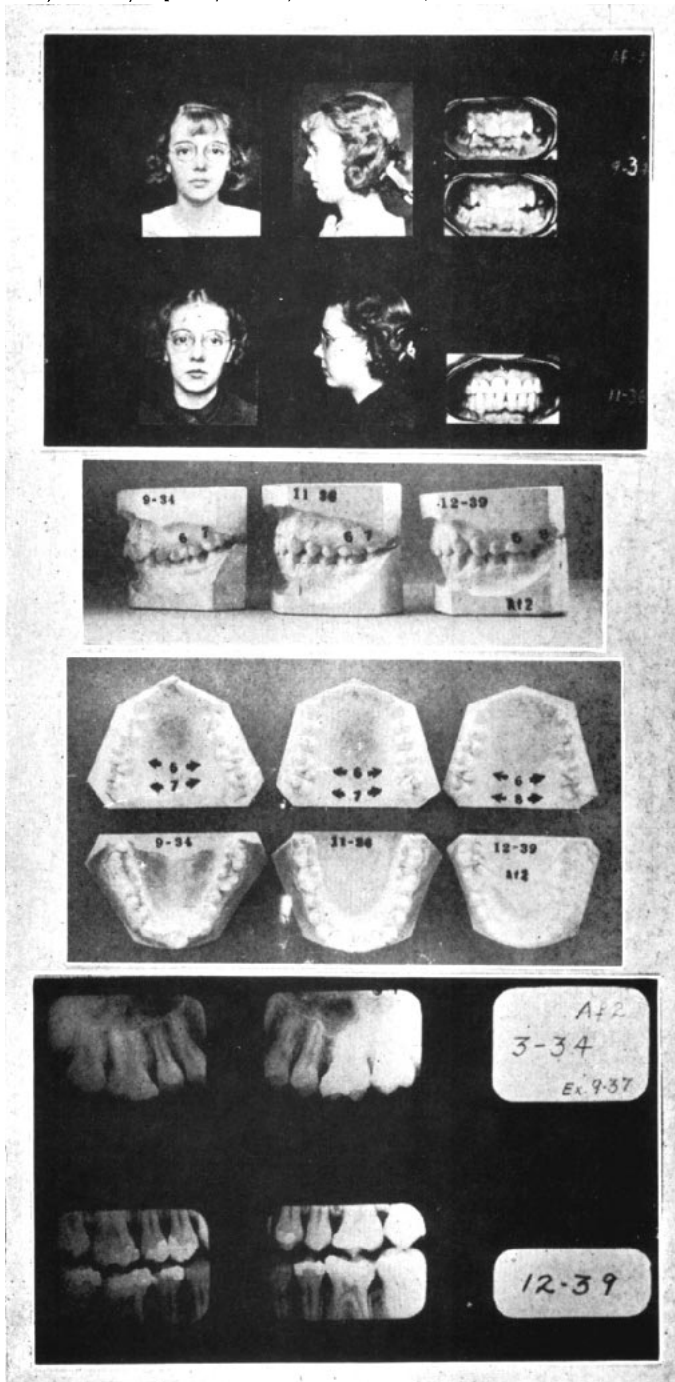
The second case AN 33, presents a good result, October, 1939 to October, 1941. Less than one year later, August, 1942, as the upper *second* molars erupted, the maxillary teeth moved forward. I regret that I do not have adequate X-rays for this patient, but do hope that in the near future he will return to this community so that I may retreat this one, *and after* either upper second or third molars have been removed.



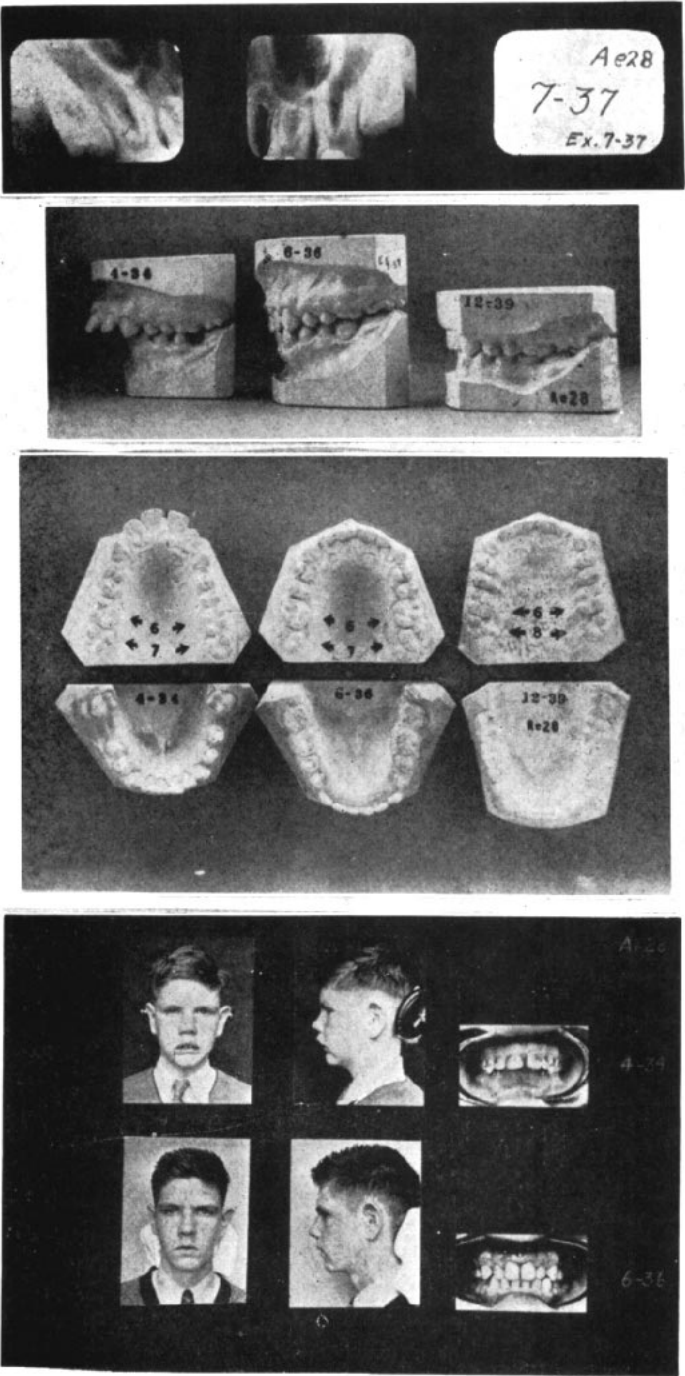
AS 9, presents a good result, treated January, 1943 to June, 1944, shortly after which, in view of forward slipping of the maxillary teeth, I advised removal of the upper second molars. This was not done for reasons beyond my knowledge, and the relapsing process is continuing as evidenced by record September, 1946.

## PART II.

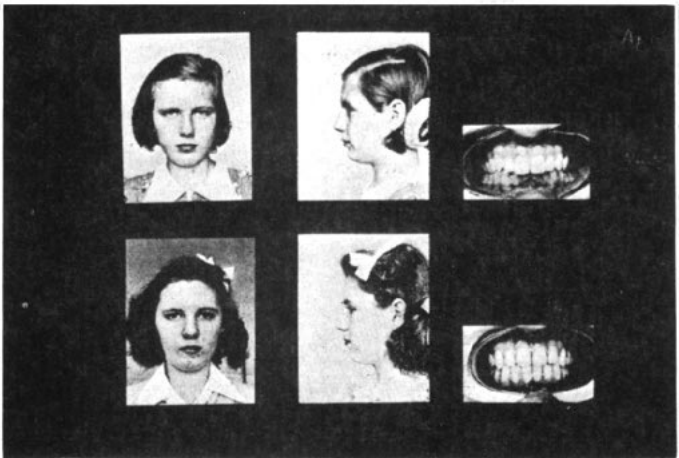
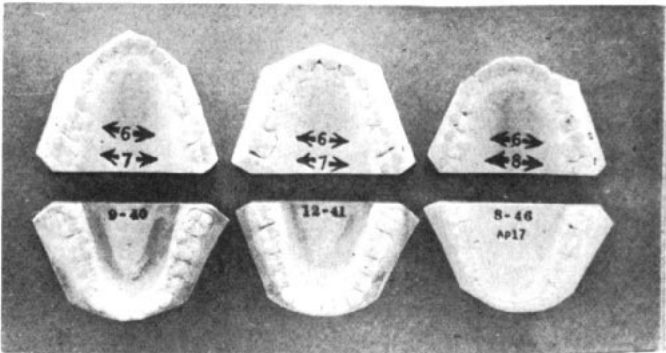
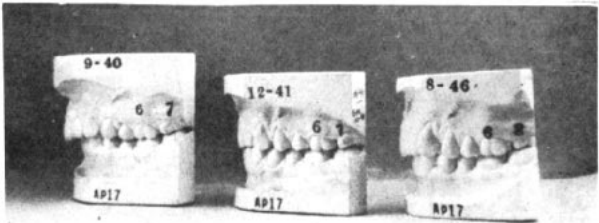
The next five case records reveal the extractions of the upper *second* molars *after* the treatment had been successfully completed.  
(Af 2, Ae 28, Ap 17, Ah 1, and An 29)



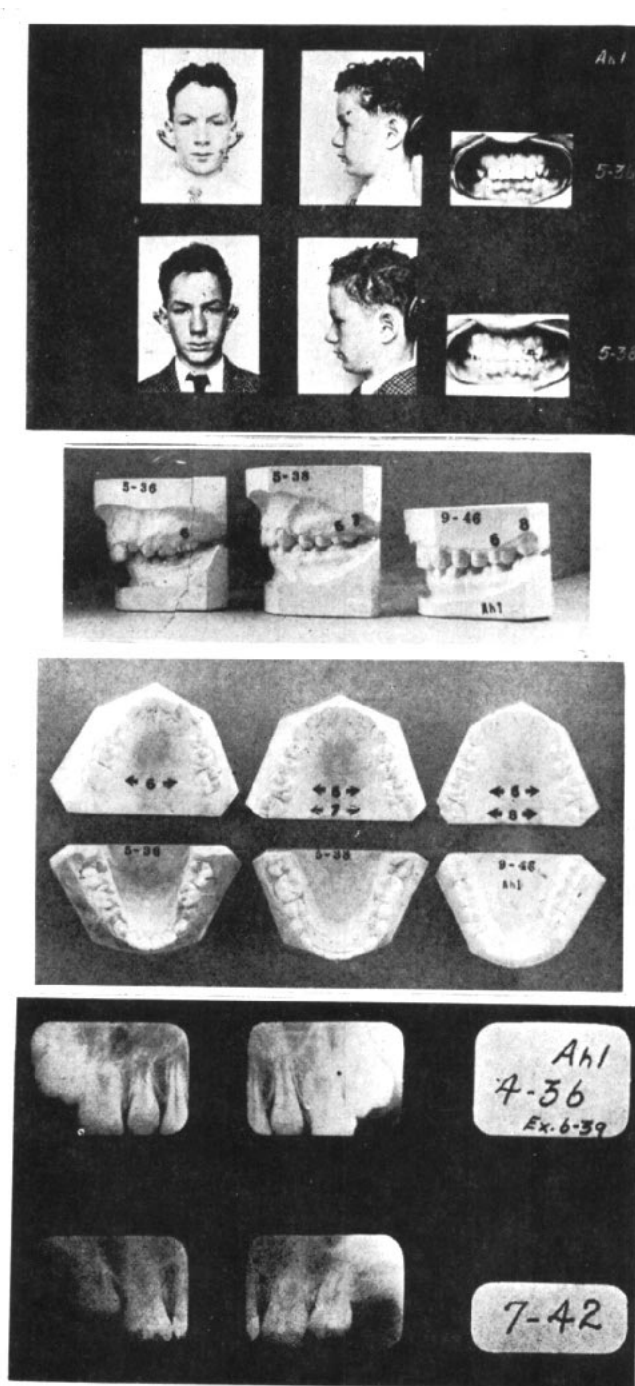
AF.Z. The bite-wing X-rays, December, 1939, give evidence of the good functional occlusion the maxillary third molars have attained in a time interval of 27 months.



AE 28.

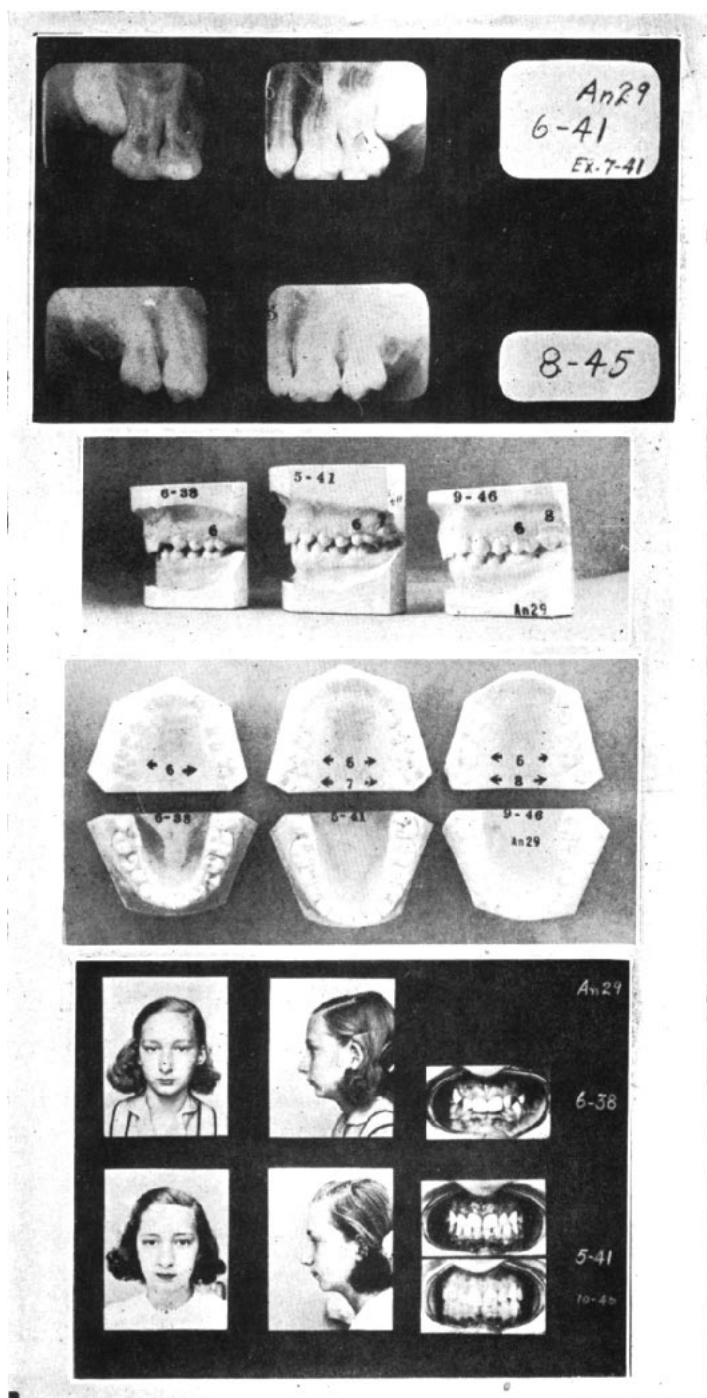


AP 17.



AH 1. The X-ray records are of interest in that those of April, 1946 show too little of the third molars to be certain of their form. Fortunately, the July, 1942 records reveal good teeth about to assume functional occlusion.





## AN 29.

The X-ray records reveal very well the antero-posterior position that the third molars assumed over a four-year period.

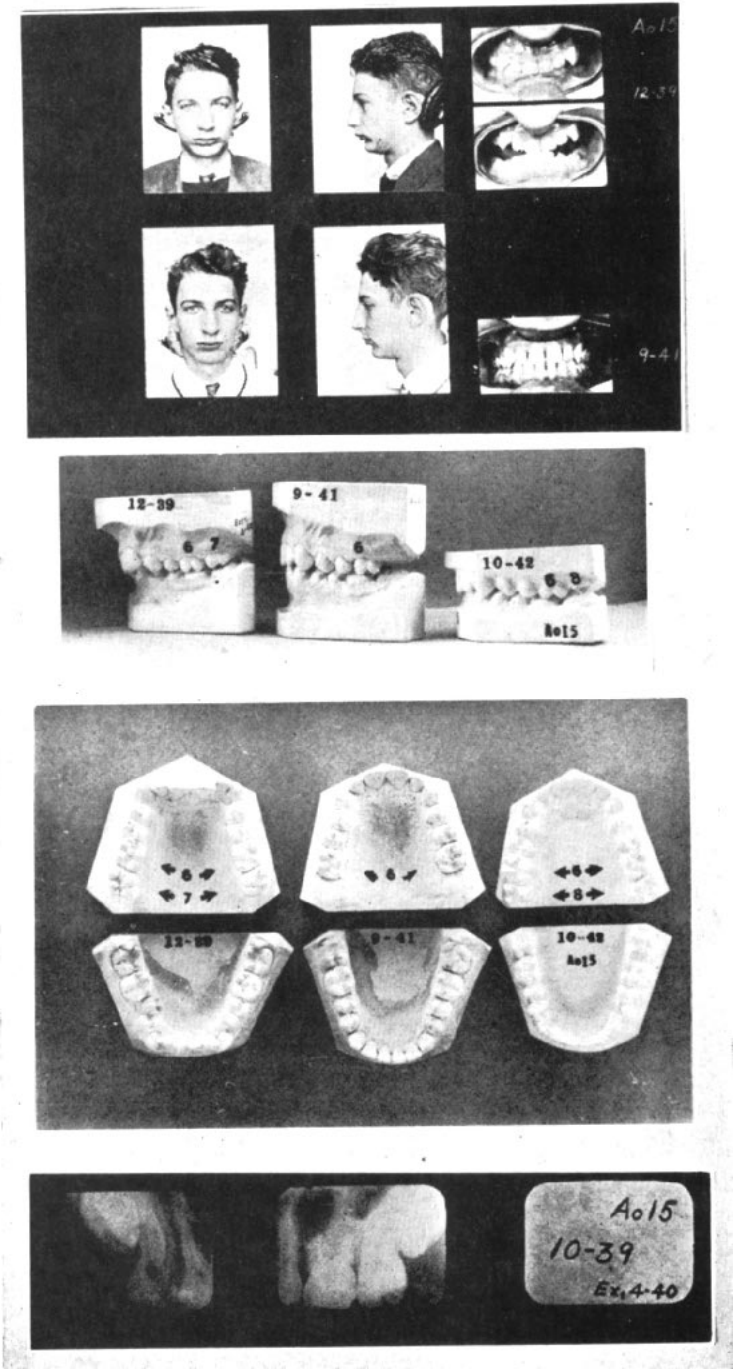
The September, 1946 model records show clearly the buccal eruption of the upper left third molar. This has since been corrected. This erratic linguo-labial eruption is the only one that I have observed.

The occlusion photograph, October, 1946, was included to show improved soft tissue tone, as well as panoramic film recording the pink tissue in a more desirable manner than verichrome. It is also advisable to make such soft tissue records at a later date than that on which the appliances have been removed. Masticatory function has then had a chance to restore tone to the tissue.

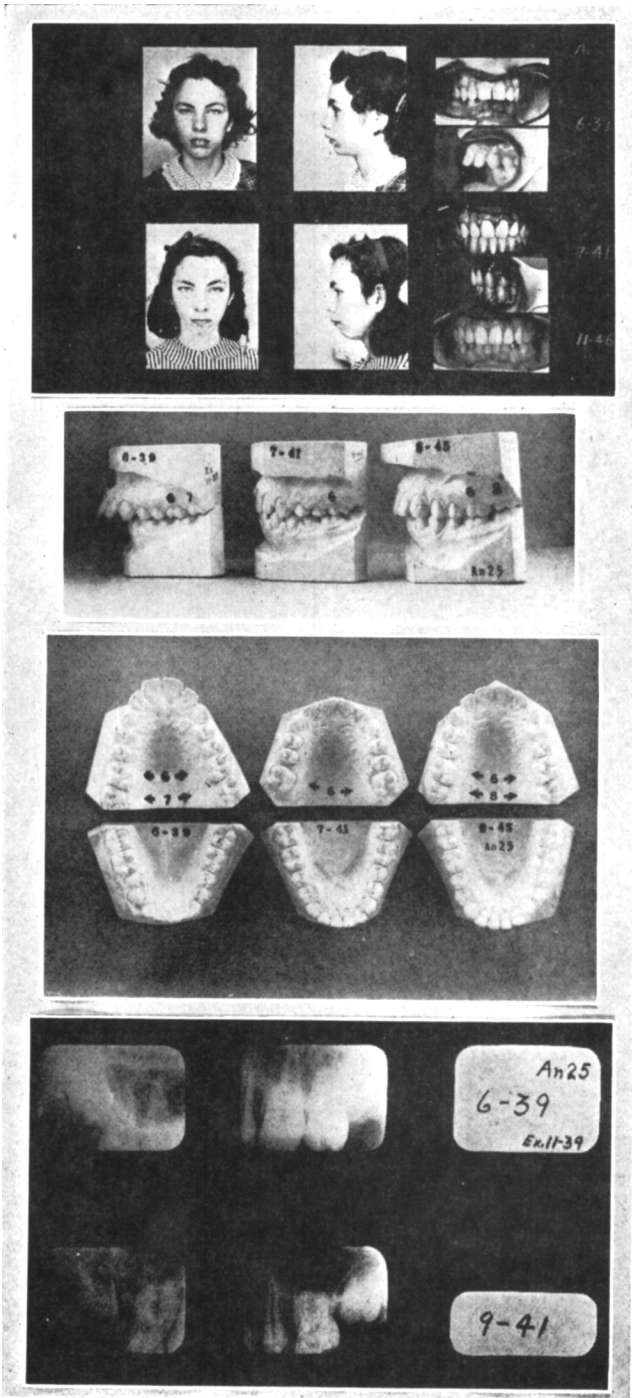
## PART III.

The series of four cases to follow are typical of those in which the upper second molars were extracted *as a part* of the active treatment procedure.

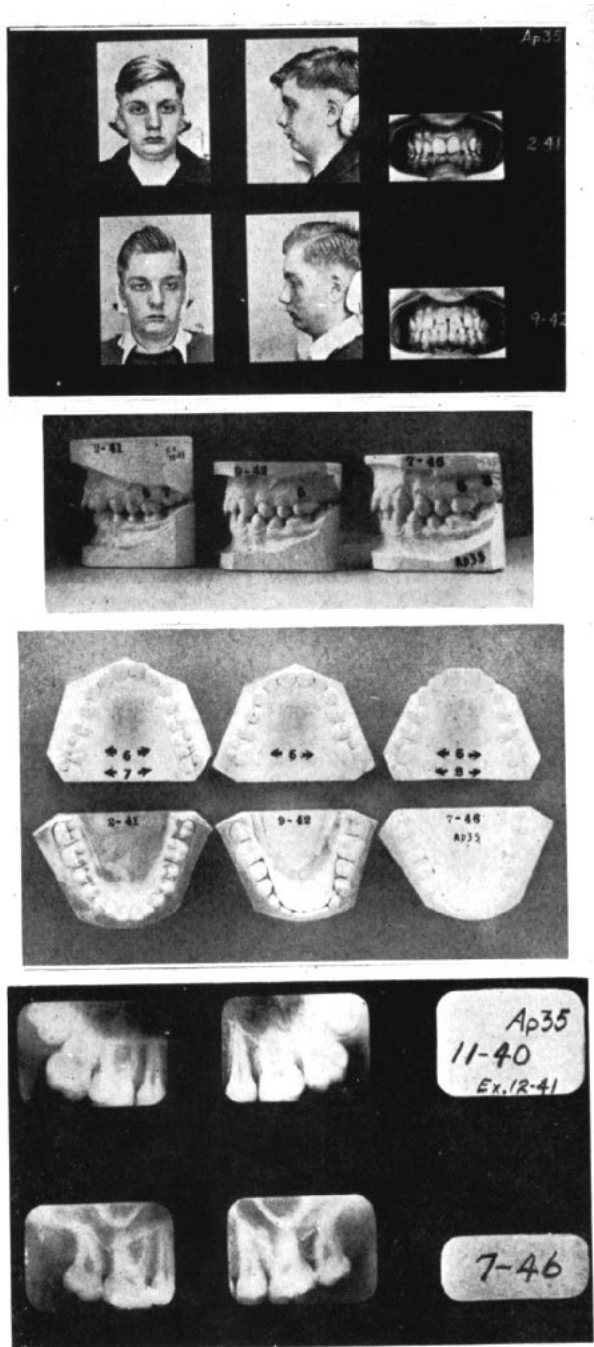
(Ao 15, An 25, Ap 35, Am 4 )



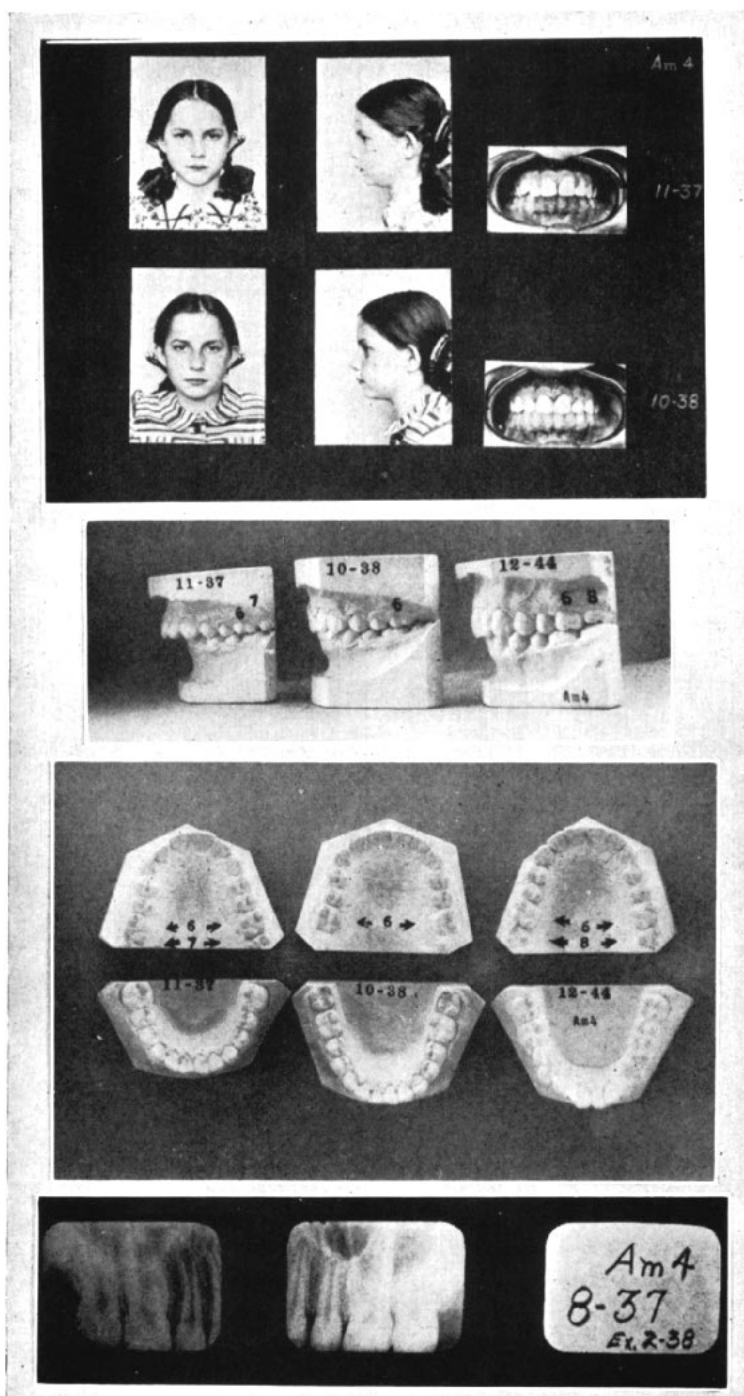
AO 15.



AN 25.



AP 35. It is of interest to note that this patient reported some discomfort when the maxillary molars penetrated the oral epithelium. However, the functional positions they assumed are good.



AM 4. The models reveal a labial tipping of the lower anterior teeth in the October, 1938 and December, 1944 records which might have been avoided had I not made the compromise of using a lower lingual arch instead of a more stationary anchorage with twelve or fourteen mandibular teeth banded together. In this observation, I, by no means, intend to infer that the lingual arch does not have merit. I use it effectively and successfully in a limited number of cases where the vertical relation of groups of teeth do *not* require mechanical influence.

## CONCLUSION

It is *not* my intention to conclude that in the treatment of *all* cases of this type, *all* second molars should be sacrificed. The factors which determine this decision vary, and must be studied carefully. For example, the occurrence, size, form, and position of the third molars, the total amount of tooth and bone tissues present, and the proportions of the face must be considered. Good X-rays of the areas studied are very important.

In the cases thus far treated where I have resorted to this procedure, I believe, (1) that the resistance to distal tooth movement in the maxilla has been decreased, (2) the possibility of maxillary third molar impactions reduced or eliminated, and (3) the corrected normal buccal tooth relationship made more stable.

In this presentation, I am well aware that you may not find anything that has not been presented by others at a previous time in a slightly different manner. It would be impossible for me to mention by name the many individuals, not only in my profession, but lay persons as well, who, in some way, are a part of this effort because of their generous and kindly assistance to me. I wish to express my sincere thanks to all of them.

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