

Case Reports

Dr. Charles H. Tweed of Phoenix, Arizona reports the following two cases.

Case No. 1 (Figures 1 to 5)

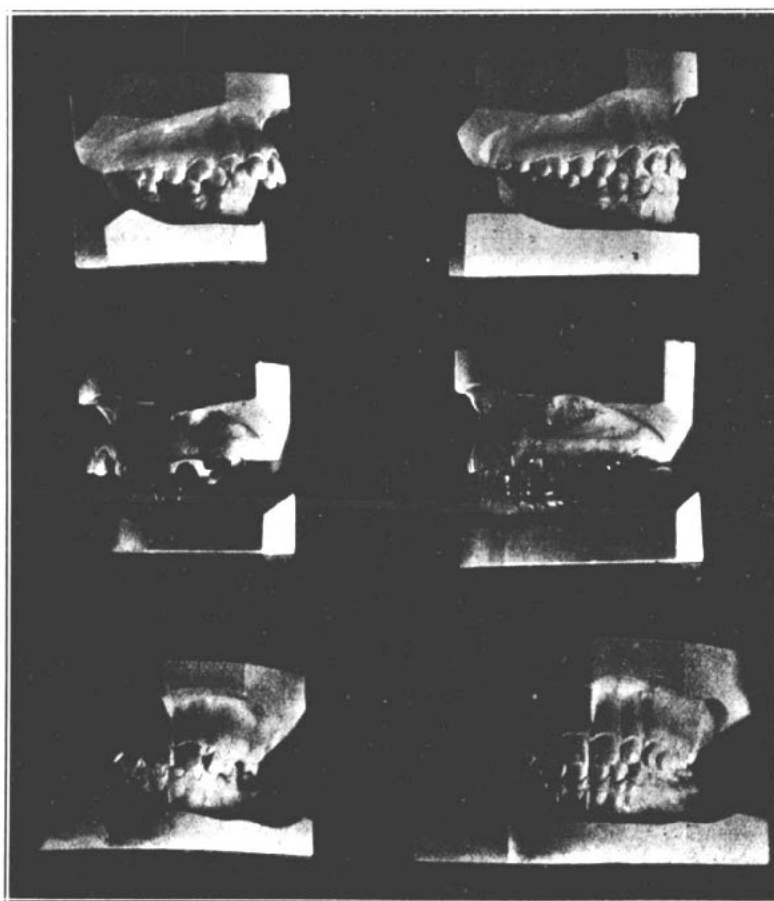


Figure 1

1. (a) Age of patient—11 years, 7 months.
(b) Female.
2. Family history.

- (a) Both parents Class II malocclusions.
- (b) No brothers or sisters.
- 3. History of early babyhood.
 - (a) Nursed for nine months.
 - (b) No difficulty in feeding; no excessive crying; normal sleep.

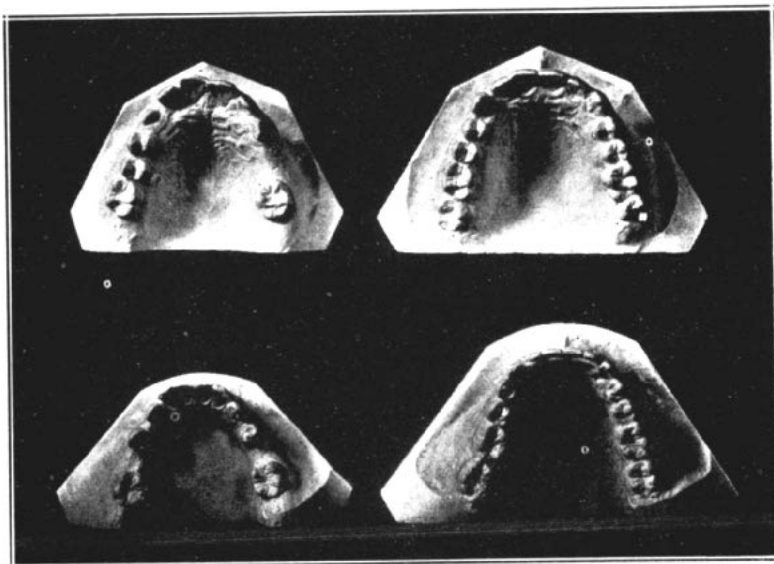


Figure 2

- (c) No digestive upsets until the eighteenth month and from then until the thirtieth month serious stomach trouble experienced.
- (d) No sucking or other nervous habits.
- (e) No serious illnesses during first year. No malnutrition, tetany or spasmophilia.
- (f) Tooth eruption delayed until after the ninth month when the first incisors appeared; no constitutional reactions during eruption of teeth.
- 4. Early childhood.
 - (a) General health good—slightly underweight.
 - (b) Rather high strung child.
 - (c) Other than occasionally biting fingernails, no nervous habits.
 - (d) Sleeping position—stomach and right side.
 - (e) No spasmodic growth periods until the thirteenth year when growth has been rapid.



Figure 3



Figure 4

- (f) Diet—until the past two years the child was under a rigid diet which allowed no heavy meats, cheese, etc., but was required to consume plenty of vegetables, milk and cod-liver oil. Plenty of sun.
5. Etiology of malocclusion was external pressure induced by improper sleeping.



Figure 5

6. Classification—Class II, Division 1, even though the patient has a well developed orbicularis oris muscle and is a normal breather.
7. Prognosis rendered at time of beginning treatment was favorable.
8. Outline of treatment in terms of tooth movement was as follows:
 - (a) The flaring lower incisors were uprighted and stationary anchorage gained by the distal tipping of the crowns of the cuspids, bicuspid and molars. This was gained prior to using intermaxillary elastics.
 - (b) Tip back bends or the picket fence principle was used, together with intermaxillary elastics to move all of the maxillary teeth back to their normal relationship with the immobilized mandibular teeth. Undesirable spaces in the region between the cuspids and molars were closed by utilizing the vertical spring loop.
9. Appliance used—the New Edgewise Arch Mechanism.

10. Corrective muscular exercises were and are now used to keep the mouth closed and the teeth in occlusion. Constantly practice the masseter exercise. With the teeth in occlusion the patient was instructed to develop the mouth muscles by puckering the lips and moving them from side to side. In addition the patient placed the little finger in the corners of the mouth—without stretching it too much—and by contracting the mouth tried to pull the fingers together. This was done until the muscles were tired and the length of time increased as the lips became stronger.
11. Duration of active treatment was 20 months—5 days. Part of this time the appliances were worn passively (five months) awaiting the eruption of permanent teeth.
12. Retention appliances used.
 - (a) Upper vulcanite plate with labial wire.
 - (b) Lower vulcanite plate with molar stops.
 - (c) Lower cuspid to cuspid lingual bar.
 - (d) Rotations banded.
13. Duration of mechanical retention—incomplete.
14. Beginning models made February 6, 1931; models October 11, 1932, immediately upon removal of bands; latest models April, 1933.
15. Beginning photographs—February 6, 1931; second photograph, July 1, 1931 and final photograph, May 12, 1933.
16. Radiograms taken May 8, 1933, show the patient free from any root resorption.

Case No. 2

1. (a) Age of patient—12 years.
- (b) Sex—female.

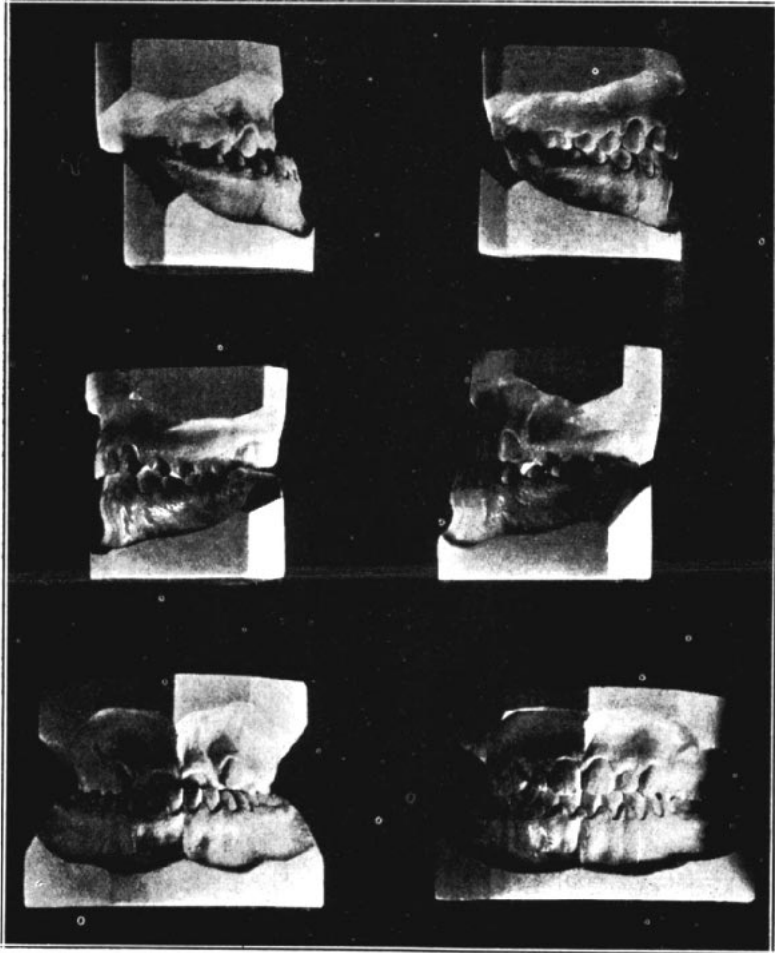


Figure 6

2. Family history.
 - (a) Malocclusion of parents—slight Class I.
 - (b) Malocclusion of brothers (2) and sister. These three children present the most beautiful mouths I have ever seen in one family. Orthodontically speaking they are practically normal.

3. History of early babyhood.

- (a) Nursed for twelve months.
- (b) No difficulty in feeding; cried considerably and was considered to have quite a temper; normal as to sleep.
- (c) No digestive upsets beyond the average.

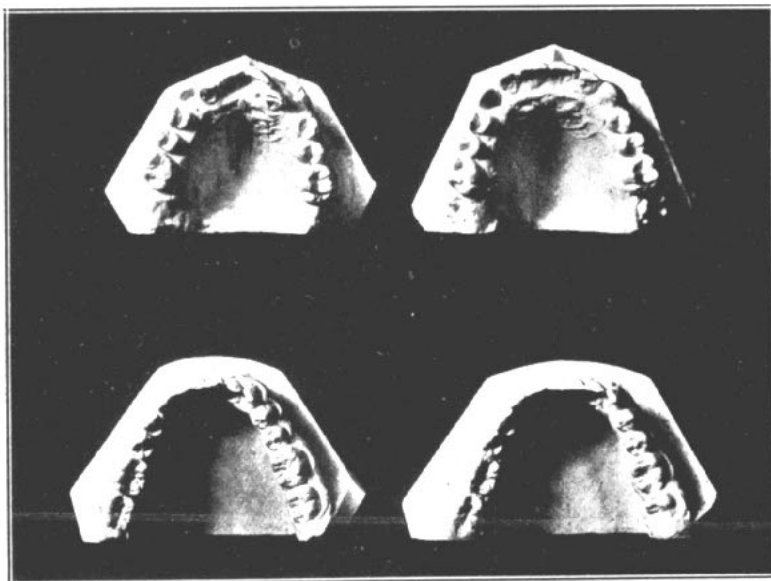


Figure 7

- (d) No sucking or other nervous habits.
 - (e) No serious illnesses during first year. No malnutrition, tetany or spasmophilia.
 - (f) Tooth eruption normal as to time; slight constitutional reactions during eruption.
4. Early childhood.
- (a) General health excellent.
 - (b) Quiet and calm child.
 - (c) No nervous habits noted.
 - (d) Sleeping position on the right side.
 - (e) A rapid period of growth during the tenth year. Before the twelfth birthday this child had the physical development of a girl eighteen. Growth has been continuous for the past three years at the rate of an inch per year.

- (f) Diet has been excellent.
- 5. Etiology of malocclusion in my opinion is glandular. A metabolism test discloses a metabolic rate of plus 16. Probably due to over active thyroid although the x-ray showed enlarged pituitary.
- 6. Classification—Class III.
- 7. Prognosis rendered at time of beginning treatment—doubtful.



Figure 8

- 8. Outline of treatment in terms of tooth movement. Immobilized teeth in the mandibular arch by means of stationary anchorage. Torqued the roots in and the crowns out. In the maxillary arch the roots were torqued out and the crowns in. Cross bite rubbers on both sides. The maxillary teeth were tipped forward. Both intermaxillary elastics and chin strap were used.
- 9. Appliance used was the New Edgewise Arch Mechanism.
- 10. Corrective muscular exercises used were to keep the tongue in the roof of the mouth and the teeth in occlusion with the lips closed at all times.
- 11. Duration of active treatment—17 months and 18 days.
- 12. Retention appliances used.
 - (a) Upper vulcanite plate with labial wire.
 - (b) Upper lateral to lateral lingual bar.

- (c) Lower vulcanite plate with molar stops.
- (d) Lower cuspid to cuspid lingual bar.
- 13. Duration of mechanical retention—incomplete at present time. The cuspid to cuspid lingual bar below and the upper lateral to lateral lingual bar together with the lower vulcanite plate were discontinued after the twelfth month. At present the patient is wearing an upper vulcanite plate to maintain breadth in the upper arch.



Figure 9

- 14. Models before beginning case were made July 7, 1930 and finished models made December 30, 1931.
- 15. Photographs before and after treatment July 7, 1930 and December 30, 1931.
- 16. Radiograms taken after treatment disclose slight root resorption of the upper and lower incisor teeth. By slight I mean not more than one sixteenth of an inch of the upper incisor roots and less in the lower incisor region. Cuspids, bicuspid and molars are free from any resorption whatsoever.
- 17. Due mainly to this individual's flawless co-operation there has been no relapse and after seventeen months the facial lines are progressively improving.