Two case reports

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A. S., a 15 year old girl weighing 115 pounds and five feet four inches tall, came to the office for treatment on November 8, 1945 with a Class II, Division 1 malocclusion. The malocclusion of the mother was a Class I, but the father had a Class II, and an older brother was thought to be a Class II malocclusion. A. S.'s birth was normal without use of instruments; she was a bottle baby who sucked her thumb during the first five years of life. Following a history of early sore throat, the tonsils and adenoids were removed. Childhood diseases were measles and whooping cough. As a young child she had the habit of sucking the lower lip, with the result that it chapped easily. Her posture was fair and in sleeping she alternated from side to side. In the four years immediately prior to treatment her diet was very poor, since she had been interned in the Bilibid prison in Manila for that period of time. It was in these years that she lost the first lower right molar, presumably due to inadequate care and improper food.

The original records were taken on November 8, 1945 and a week later the upper left and right first permanent molars and the lower left first permanent molar were extracted. A week later bands were fitted and in the next few subsequent appointments, bands were cemented on the second molars, and on the second bicuspids and cus-

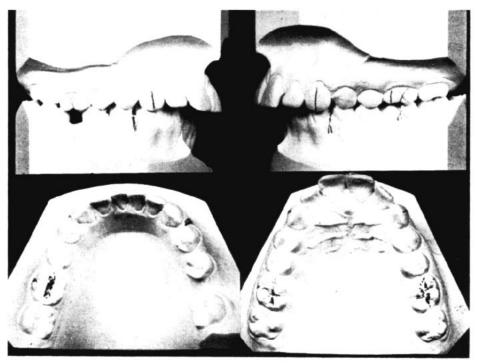


Fig. 1. Original models of case A. S.



Fig. 2A. Photographs with lips in repose taken before treatment. Fig. 2B. Smiling photographs taken at the same time. Case A.S.



Fig. 3A & 3B. Face photographs taken at the completion of treatment and the removal of bands, ready for retention.

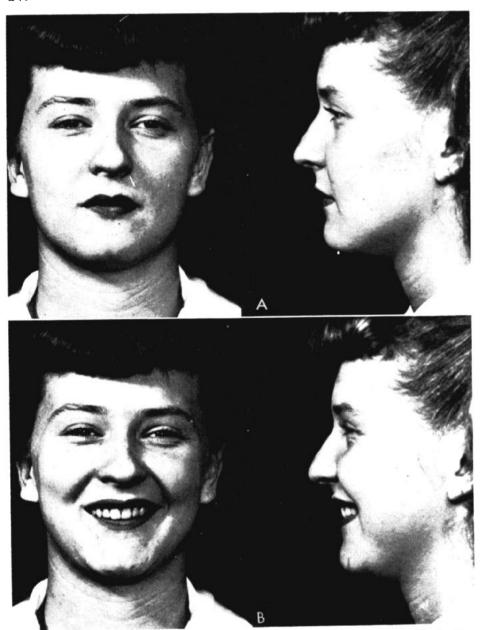


Fig. 4A. & 4B. Photographs taken thirteen months after the removal of all retention devices.

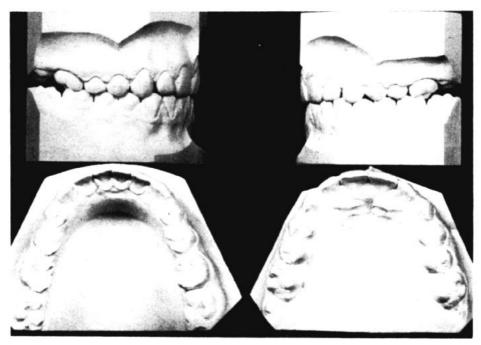


Fig. 5. Models taken at the conclusion of active treatment.

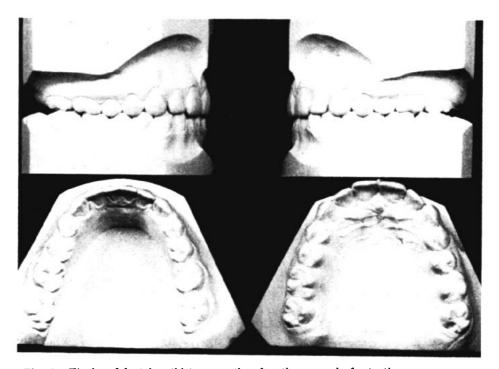


Fig. 6. Final models, taken thirteen months after the removal of retention.

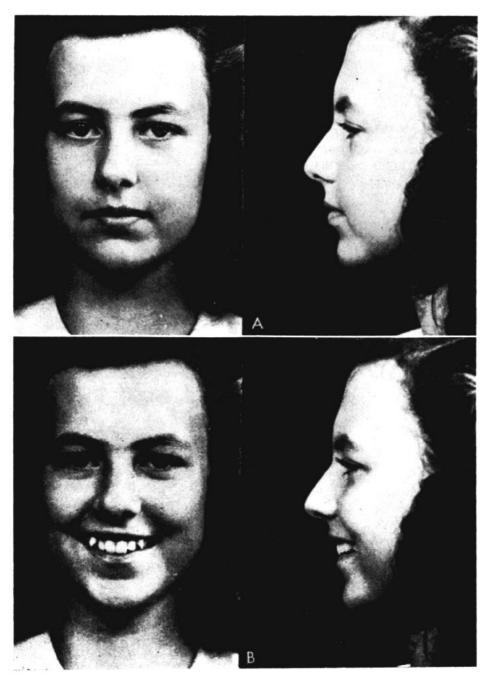


Fig. 7A. Photographs with lips in repose taken before treatment. Fig. 7B. Smiling photographs taken at the same time. Case M.A.V.

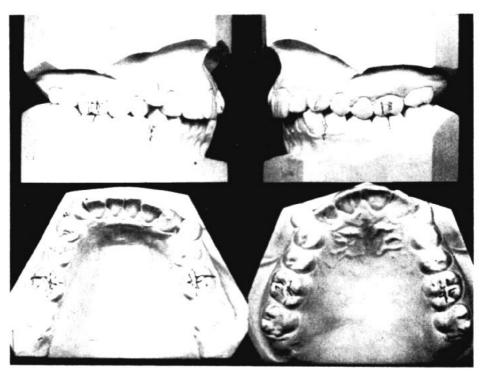


Fig. 8. Original models of case M.A.V. (See Fig. 7).

pids. On November 29, 1945, an .018 round steel archwire was inserted in the upper arch and a week later a wire of the same kind was ligated to the brackets in the lower arch, with a coil spring between the cuspids. The case was seen at two-week intervals, and on January 22, 1946 lower incisor bands were cemented and an .021 x .025 high spring ideal gold arch was inserted with tie back loops and tip back bends. From this archwire Class II elastics were used with auxiliary hooks to the upper cuspids and occipital anchorage was applied to the mandibular arch at night. This phase of treatment continued for three months. On April 23rd the four upper incisor bands were cemented and an .021 high spring gold arch with tie back loops was placed; rubber ligatures were continued. On October 27, 1946 upper and lower arches were removed and realigned and reinserted; at this time rubber ligatures and headgear were discontinued. On May 2, 1947 upper and lower cuspid, first bicuspid and second bicuspid bands were removed, and an .022 round steel arch was inserted in the upper arch and an .021 x .025 steel lower arch was placed in the mandibular brackets, each for the purpose of closing remaining spaces. On May 15, 1947 all bands were removed and clinical records were made.

The case was retained with a cuspid to cuspid retainer in the lower arch and upper and lower removable acrylic plates. All retention was removed on September 7, 1948; on October 28, 1949, approximately 13 months after all retention was removed, the final records were taken.

The second of the two cases herewith reported (M.A.V.) presented for treatment in August 1943 at the age of 12. The mlaocclusion was Class I, and virtually identical with the father's. The mother's malocclusion was also Class



Fig. 9A & 9B. Face photographs taken at the completion of treatment and the removal of bands, ready for retention.

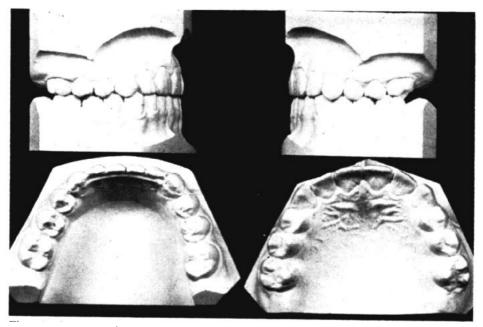


Fig. 10. Models taken at the conclusion of active treatment.

I; there were three younger girls in the family, one year apart, presenting malocclusions (in order of age) of Class I, mild Class II, and severe Class II. At the time treatment was begun on M.A.V. her general health and muscle tone were good; the history records a normal birth and later her having had measles, whooping cough and scarlet fever. In her first two years of life she had a habit of sucking her thumb and finger, but this was discontinued; at the age of five tonsils and adenoids were removed but the patient at 12 was still a mouth breather, with a resultant tendency for the lips to chap. She also persisted in the habit, while sitting, or resting her chin and cheek in her hands. Her sleeping posture was on the stomach with the head position rotated from one side to the other. Posture, diet and oral hygiene were good. The teeth were found to be in excellent condition, with the exception of the four first permanent molars, which had cavities sufficiently deep as to involve the pulp. There was, however, no loss of permanent teeth and no supernumerary teeth. There was no history of falls or blows, and the only pertinent findings in the intra-oral x-rays, apart from the carious first permanent molars, were four apparently impacted third molars. The health of the gum tissue was very good.

ORTHODONTIC TREATMENT

When the necessary original records such as models, photographs and x-rays were completed, the dentist was requested to remove the four first permanent molars; shortly after this, the appliance placement was completed. Although all of the remaining upper teeth were banded, and a .018 round stainless steel archwire was placed, this arch was not tied to the four upper anterior teeth. Within a month all of the remaining teeth of the mandibular arch were banded, a .018 round stainless steel arch was made and later a .022 round stainless steel arch; neither of these arches was tied to the mandibular incisors.



Fig. 11A & 11B. Photographs taken four years after the removal of all retention devices.

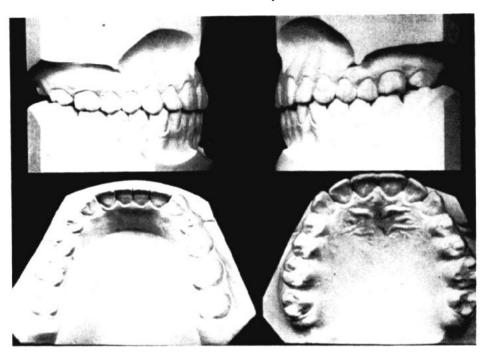


Fig. 12. Final models, taken four years after the removal of retention.

For three months the patient was seen every two weeks for tightening ligature ties and for observation. The cuspids and bicuspids were tied back to a loop between the molars and second bicuspids. At that time upper and lower .021 x .025 high spring gold arches with tie back loops and tip back bands were applied, and Class II elastics (No. 6) were started. At this time occipital anchorage was also employed in the lower arch. This program was continued, with appointments every two weeks, with no major revision of appliance mechanics but simply with re-

activation and reapplication of the archwires. On June 5, 1945 all of the bands were removed and appropriate records were taken.

The case was retained with upper and lower acrylic plates, with a lower cuspid to cuspid lingual wire. Full retention was maintained for one year and the removable retainers were on at night for one more year. On March 16, 1948 all retention was removed. The case was considered completed as of May 21, 1949 when final impressions and pictures were taken.

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