

# The retention of removable appliances with the modified arrowhead clasp

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(Transactions of the European Orthodontic Society, 1954, pp. 322–324)

The demonstration consisted of models and enlarged photographs showing the modified arrowhead clasp (Adams, 1949, 1950, 1952) and its standard variations (Adams, 1953). The following essential features of the clasp were brought out and emphasised:

*Fig. 1.* The arrowheads must be formed so that their sides are parallel with the arrowheads and parallel to each other. The bridge must stand clear of the tooth and the arrowheads must not touch the adjoining teeth.

*Fig. 2.* The arrowheads must slope to correspond with the natural curve of the gingival margin.

Other variations of the clasp shown were the use of the clasp on premolars, canines and deciduous teeth, and the single arrowhead.

*Fig. 3.* The bridge between the arrowheads must be midway between the tooth and the gum margin. The angle formed where the tag leaves the arrowhead must not project beyond the bridge into the cheek.

It is also important that the tags of the clasp should lie closely over the embrasures between the teeth and interfere as

little as possible with the occlusion. The clasp is made of 0.7 mm hard stainless steel wire and is formed with strong short nosed plier. Universal pliers (Adams, 1954) are very suitable.

*Fig. 4.* shows one of the variations of the modified arrowhead clasp which greatly extends its usefulness. It is essential to the efficiency of the clasp that each arrowhead should touch only one tooth and should not jam in between two adjoining teeth. If it is desired to obtain the utmost retention for an appliance it is usual to clasp more than one tooth on each side of the arch. If however, there are only two teeth on one side suitable for clasp and these teeth are in contact, it is not desirable to put a complete clasp on each tooth as the arrowheads adjoining each other between the teeth cannot function properly and cannot be easily adjusted. It is much better to put a full clasp on one tooth and an accessory arrowhead on the other. The tag of accessory arrowhead is welded or soldered to the bridge of the main clasp after the plate has been processed and the excess wire of the tag trimmed off.

Other variations of the clasp shown were the use of the clasp on premolars, canines and deciduous teeth, and the single arrowhead.

## Acknowledgement

Figures 1, 2, and 3 printed from blocks kindly supplied by the Dental Record. Figure 4 printed from a block kindly supplied by the Dental Practitioner.

## References

- Adams C P 1949 The modified arrowhead clasp. Transactions of the British Society for the Study of Orthodontics pp. 50–52
- Adams C P 1950 The modified arrowhead. clasp. Dental Record 70: 143–145
- Adams C P 1952 Dental Record Ixxi. 1: 8–12
- Adams C P 1953 Dental Record Ixxiii. 1: 332
- Adams C P 1954 Dental Practice iv. 10: 319–323



Figure 1

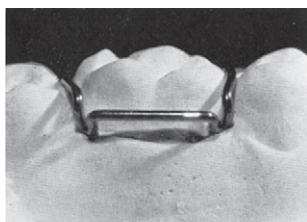


Figure 2

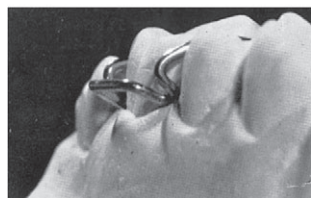


Figure 3

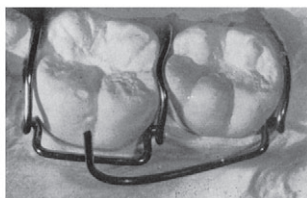


Figure 4