

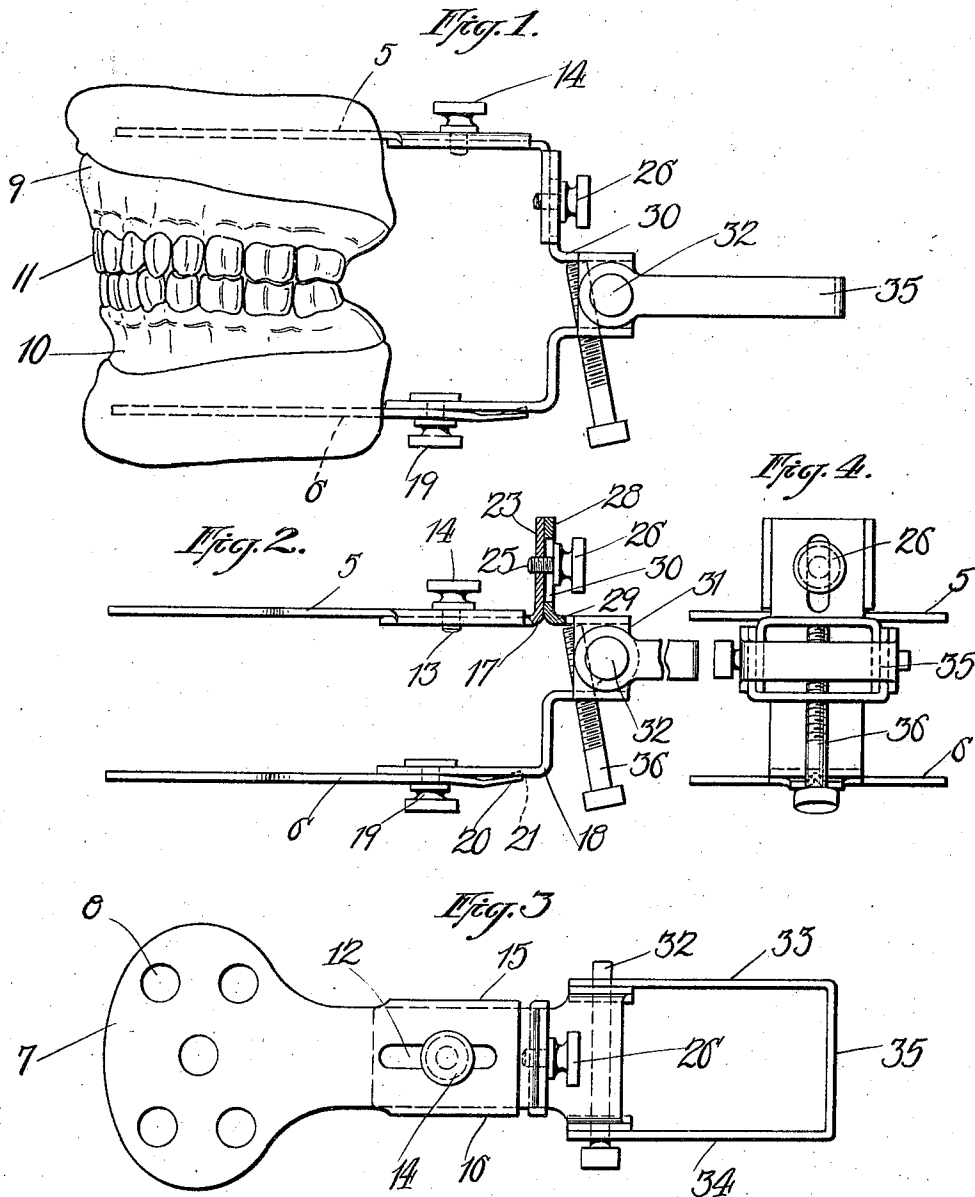
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DENTAL ARTICULATOR

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UNITED STATES PATENT OFFICE.

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DENTAL ARTICULATOR.

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To all whom it may concern:

Be it known that I, JAMES M. O'KEEFE, a citizen of the United States, residing at Brooklyn, in the county of Kings and State
5 of New York, have invented certain new and useful Improvements in Dental Articulators, of which the following is a specification.

This invention relates to improvements in dental articulators and has for its primary
10 object the provision of an articulator which will be constructed so that the upper and lower plate holding members supporting the artificial upper and lower jaws may move
15 laterally as well as inwardly and outwardly whereby the proper registration or bite of the teeth may be determined with accuracy.

One of the objects of my invention is to provide a dental articulator wherein the
20 upper and lower jaw supporting members are adjustable relatively to each other permitting lateral adjustment thereof including means whereby one of said jaw supporting
25 members may be reversed so as to permit the device to be used for bridge work as well as the ordinary plate work.

A continued and very important object of the invention is to provide a dental articulator of the character above set forth
30 so constructed as to move in the natural way to register a perfect bite of all of the upper and lower teeth when the artificial teeth are placed in position in the patient's mouth.

With these and other objects in view the invention consisting in the construction and novel combination of parts hereinafter fully
35 described, illustrated in the accompanying drawings, and pointed out in the subject matter being claimed, it being understood
40 that various changes in the form, proportion, size and minor details of construction may be resorted to without departing from the spirit and scope of the invention.

In the drawings, Figure 1 is an elevation
45 of the dental articulator in use.

Figure 2 is a longitudinal view partly in section showing the upper jaw supporting member in its reversed position.

Figure 3 is a top plan and

50 Figure 4 is an end view.

Referring now to the drawings wherein like reference characters designate corresponding parts throughout the several views, 5 designates the upper jaw support-

ing member and 6 the lower jaw supporting member, the enlarged outer ends 7 of which are provided with a plurality of recesses or apertures 8 to receive the plaster Paris or the like upon which the artificial upper and lower jaws 9, 10, are mounted with the
60 upper and lower teeth 11 secured thereto.

The said upper jaw supporting member 5 is provided with an elongated slot 12 near its inner end which slot is adapted to receive the short shank 13 of a set screw 14.
65 The outer sides of the upper jaw supporting member 5 are provided with longitudinal downwardly turned flanges 15, 16 which receive the angularly bent L-shaped plate 17, the latter being also provided with an
70 elongated longitudinal slot for registration with the slot 12 above referred to. By reason of this construction it will be readily seen that the upper jaw supporting member 5 may be moved inwardly or outwardly to
75 permit of the relative adjustment thereof with the bent plate 17.

The lower jaw supporting member 6 is mounted upon the lower angularly bent body member 18 by means of the pivot pin
80 19 and is laterally movable with respect thereto. The said lower jaw supporting member is formed with a longitudinal rib 20 which is adapted to normally rest in a longitudinal channel or recess 21 in the under
85 face of the lower body member 18 so that upon loosening the pivot member 19, the lower jaw supporting member may be readily moved laterally in either direction upon the body member 18.
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The vertical leg 23 of the L-shaped member 17 is provided with an aperture to receive the threaded portion 25 of a set screw 26 which secures the same to the vertical leg 28 of a rear supporting plate 29. A vertical slot 30 in the said supporting plate permits of the reversal of the upper jaw supporting member 5 so that the same may be used for either plate work or bridge work as desired. The ears 31 of the upper jaw
100 member and the upwardly directed base parallel ears of the lower body member 18 are correspondingly positioned and connected by the pivot pin 32 which in turn passes through suitable aligned apertures in the
105 sides 33, 34 of the U-shaped support 35. The angularly disposed screw 36 passing through the lower body member 18 to en-

gage the member 30 permits of the vertical separation of the top and bottom jaw supporting members 5, 6 as clearly understood.

On the other hand, it will be observed
 5 that the movement of the upper and lower jaw supporting member may be limited by the adjustable screw 36 which as shown, is threaded on an incline through the lower
 10 body member so as to be adjusted and engage the upper body member 30. However, the adjustability of the upper jaw supporting member 5 with the bent L-shaped plate 17 permits my novel and improved device to
 15 be used for making various size artificial plates as well as the ordinary bridge work and at the same time affords lateral movement of the lower jaw supporting member 6.

While I have illustrated and described my invention with some degree of particularity,
 20 I realize that in practice various alterations therein may be made. I therefore reserve the right and privilege of changing the form of the details of construction or otherwise altering the arrangement of the correlated
 25 parts without departing from the spirit of the invention or the scope of the appended claims.

Having thus described my invention what I claim as new and desire to secure by
 30 United States Letters Patent is:—

1. A dental articulator comprising a strap, an upper and lower work moulding jaw pivotally connected to the strap and adjustably movable toward each other, said
 35 upper jaw including a vertically adjustable

and reversible annularly bent member and a longitudinally adjustable element connected thereto, said annularly bent member and adjustable element being reversible as a unit with respect to the strap.

2. A dental articulator comprising a strap, an upper and lower work moulding jaw pivotally connected to one end of the strap, said upper jaw including a vertically adjustable and reversible annularly bent
 45 member, said member having flanges on the sides thereof, and a longitudinally adjustable slotted element slidable in said flanges and adapted to be secured to the annularly bent member, said bent member and the ad-
 50 justable element being reversible as a unit with respect to the strap.

3. A dental articulator including upper and lower complementary jaws offset toward each other and pivotally connected trans-
 55 versely thereof and intermediately therebetween, said upper jaw having downwardly extending side flanges and a slot adjacent the rear end, between the flanges, an L-shaped, reversible plate having a slot in
 60 the vertical leg thereof, adapted to be attached to the rear end of the upper jaw, fastening elements connecting the respective jaw and reversible plate permitting longi-
 65 tudinal and vertical adjustment thereof in either position, and means for spacing and maintaining the said upper and lower jaws in relative adjusted spaced relation.

In testimony whereof I affix my signature.

JAMES M. O'KEEFE. [L. s.]