

# UNITED STATES PATENT OFFICE 

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ARTICULATOR<br>Application filed July 25, 1927. Serial No. 208,354.

The invention relates to dental articulators for securing balanced occlusion in full and partial dentures, bridge work and other classes of dental work. One of the objects of the invention is to so construct the articu-
5 lator that the mounting between the jaw members inclucles but one mounting member carrying a modeling material so that accurate results may be assured. Another object is to provide an improved mounting member in With these as well as other objects in view, the invention resides in the novel features of construction and combinations and arrangements of parts as more fully hereinafter set

In the drawings:-
Figure 1 is a side elevation of a dental articulator, embodying my invention;
Figure 2 is a plan view thereof;
20 Figure 3 is a cross section on the line 3-3 of Figure 1;
Figure 4 is a cross section on the line 4-4 of Figure 2.
The dental articulator has the upper and lower jaw members 1 and 2 , respectively, and the anchoring plates 3 and 4, which are respectively secured to the bottom and top of the upper and lower jaw members, the models, as shown in dotted lines in Figure 1, being mounted upon these anchoring plates.
To mount these jaw members and provide for their proper relative movements so that they may take the normal positions assumed by the jaws in mastication and at the same time to secure accurate results, the mounting includes but a single mounting member carrying a modeling material, this being highly advantageous over a dental articulator having two or more mounting members each carrying a modeling material, since in the latter articulators it is practically impossible to heat the modeling materials to the same temperature or the same consistency. As shown, the upper jaw member 1 has the rear cupped mounting member 5 which is preferably integral therewith and the lower jaw member 2 has the rear mounting member 6 comprising the extension 7 , the post 8 extending transversely of and secured to the
extension and the head 9 at the upper end of the post. The cupped mounting member has the central portion 10 and the transversely extending pairs of radial channeled arms 11 , these arms extending diagonally of the longitudinal axis of the upper jaw member and preferably at an angle of 45 degrees. 12 is the modeling material which may be any suitable modeling compound, this material being located within the cupped mounting member and carried thereby. The head 9 has the central portion 13 and the transversely extending pairs of radial arms 14 , the arms having a circular cross section and hemi-sperical ends and the head being smaller than the cupped mounting member to provide for engaging the head within the modeling material. This head has a bodily movement in the modeling material, which latter determines the limit of movement and the head is made of porcelain so that it may operate more efficiently with the different kinds of modeling material.
The normal positions assumed by the jaws in mastication may be determined by making impressions and bites and heating the cupped mounting member with the modeling material carried thereby until the latter becomes plastic, after which the head 9 may be forced into the modeling material and given the desired motion as determined by the impressions and bites to correspond to the positions assumed by the jaws. The three normal positions assumed by the jaws are the right lateral occlusion, the left lateral occlusion and the anterior or protrusive occlusion, which may be secured with my dental articulator and inasmuch as but one modeling material is used, the individual condyle path may be accurately recorded.
What I claim as my invention is:

1. In a dental articulator, the combination of a pair of jaw members and a mounting therebetween providing for relative movement thereof, said mounting including a single cupped mounting member secured to one of said jaw members and having a series of radial channels, modeling material within said cupped mounting member, and a single projecting mounting member secured to the
other of said jaw members and having a plurality of radial arms engageable in said modeling material and having a bodily movement limited thereby.
2. In a dental articulator, the combination of a pair of jaw members and means upon said jaw members providing for relative movement thereof, said means comprising a single mounting member secured to one of said jaw members and having a series of radial channels, modeling material carried by-said mounting member and extending within said channels, and a single mounting member secured to the other of said jaw members and comprising a post extending toward said first mentioned mounting member and a head having a series of radial arms engaging in said modeling material and having a limited bodily movement relative thereto.
3. In a dental articulator, the combination of a pair of jaw members and means for mounting said jaw members and providing for relative movement thereof to record the condyle path, said mounting means comprising a single cupped mounting member secured to one of said jaw members and having a central portion and transversely extending pairs of radial arms, modeling material carried within said cupped mounting member, so and a single mounting member secured to the other of said jaw members and having a porcelain head with transversely extending pairs of radial arms engaging in said modeling material and having a bodily movement limited thereby.

In testimony whereof I affix my signature. DELBERT BENNETT.

