No. 654,109. Patented July 17, 1900.

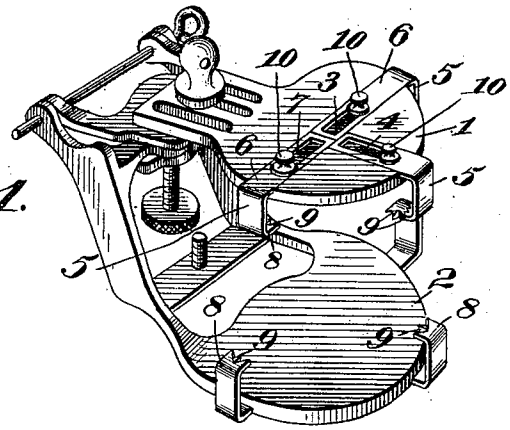
H. BACKSTROM.

DENTAL ARTICULATOR.

(Application filed May 7, 1900.)

(No Model.)

Fig. 1.



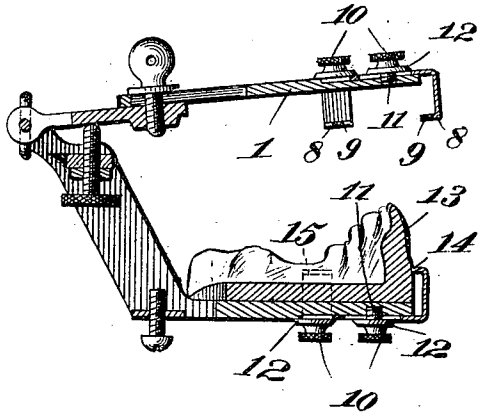
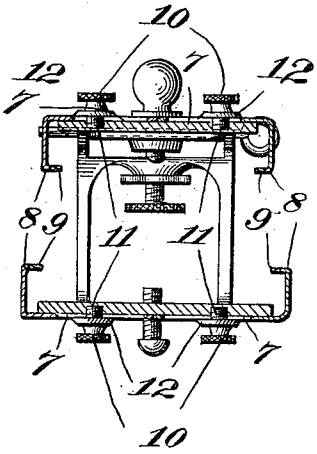


Fig. 2.

Fig. 3.



Witnesses
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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

HERMAN BACKSTROM, OF MONTPELIER, IDAHO.

DENTAL ARTICULATOR.

SPECIFICATION forming part of Letters Patent No. 654,109, dated July 17, 1900.

Application filed May 7, 1900. Serial No. 15,853. (No model.)

To all whom it may concern:

Be it known that I, HERMAN BACKSTROM, a subject of the King of Sweden and Norway, and a native of Sweden, residing at Montpelier, county of Bear Lake, State of Idaho, have invented certain new and useful Improvements in Dental Articulators, of which the following is a specification.

This invention relates to dental articulators.

In the common form of dental articulator there is great danger in breaking or injury of the plaster models when removing them from the jaw-frames of the articulator; and it is the object of my invention to provide improved clamps or holding devices on the upper and lower jaw-frames of the articulator which will securely hold the plaster models and permit them to be applied to the frames of the articulator or removed therefrom, as desirable, with ease and safety, thereby minimizing the chances of breakage or injury in the models.

I accomplish the foregoing objects by the provision of a novel form of clamp, of which two or more are applied to each jaw-frame, adapted to hold the plaster models in an improved manner and adjustable for the accommodation of models of different sizes and shapes.

The invention is described in detail hereinafter and the novel features are recited in the appended claims.

In the accompanying drawings, Figure 1 is a perspective view of an ordinary form of dental articulator equipped with my improved clamps or holders; Fig. 2, a longitudinal section; Fig. 3, a transverse section.

The upper and lower jaw-frames of a common form of articulator are shown at 1 and 2, respectively.

The arrangement of my improved clamps or holders and their construction and manner of connection are the same on the lower jaw-frame as on the upper jaw-frame, and hence I will only describe the clamps as applied to the upper frame, the only difference being that the clamps are applied to the top of the upper frame, whereas those on the lower jaw-frame are applied to the bottom of the latter.

A groove 3 extends transversely of the jaw-frame, and at right angles to said groove is the groove 4. The clamps are shown at 5, and they consist of substantially L-shaped members, of ribbon metal, having shanks 6, which slide in the grooves and are provided with slots 7, while the bases 8 of the clamps extend toward the inner face of the jaw-frame and are bent inwardly and are provided with prongs or teeth 9. Thumb-screws 10 have their shanks passed through the slots of the clamps and threaded into the jaw-frame at 11, while their heads 12 bear against the shanks of the clamps. Two clamps have their shanks sliding in opposite ends of the transverse groove, so that their teeth or gripping portions are disposed diametrically opposite, while the third clamp is disposed at right angles to the other two. As a consequence the plaster model 13 is gripped at the three points 14, 15, and 16 and in consequence is securely held.

In using an articulator equipped with my improved clamps the plaster model is first placed in position on the jaw-frame, the screws having been previously loosened and the clamp drawn upwardly, and the clamps are then adjusted up against the model sufficiently to cause the teeth or prongs to properly engage the model. The thumb-screws are then clamped down on the shanks of the clamps and the model is securely held, but can be removed very easily at any time by simply loosening the thumb-screws. It is obvious that my clamps make it possible to hold plaster models of different sizes and shapes, as each clamp is adjustable independently of the other clamps, and at the same time there is no danger of breaking the model.

The clamps can be applied to any of the common forms of dental articulators by simply grooving the jaw-frames and providing screw-threaded holes therein to accommodate the thumb-screws.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a dental articulator, the combination with a jaw-frame thereof, of three clamps for holding the plaster model to said frame, two of said clamps being disposed substantially diametrically opposite to each other and the third clamp being disposed substantially at

right angles to the other two clamps, said clamps being adjustable independently of each other.

2. In a dental articulator, the combination with a jaw-frame thereof, of clamps for holding the plaster model to said frame which are provided with slotted shanks slidable against the frame, and clamp-screws having shanks which pass through said slotted shanks of the clamps, said screws serving to secure the clamps to the frame after they have been adjusted.

3. In a dental articulator, the combination with a jaw-frame thereof, which is provided with a transverse groove and a longitudinal groove disposed substantially at right angles to the transverse groove, of substantially L-shaped clamps having slotted shanks slidable in the grooves, two of said clamps having their shanks in the transverse groove at opposite ends thereof, and all of said clamps having their bases projecting outwardly from the jaw-frame in position to engage the dental model, and clamping-screws having shanks which pass through the slots of the shanks of the clamps and heads which are adapted to bear against the said shanks whereby the clamps are locked to the jaw-frame.

In testimony whereof I hereunto affix my signature in presence of two witnesses.

HERMAN BACKSTROM.

Witnesses:
H. B. WHITMAN,
M. FITZPATRICK.