

C. Van Bommelhorst.

Dental Cup.

Nº 90,706.

Patented Jan. 1, 1869.

Fig. 1.

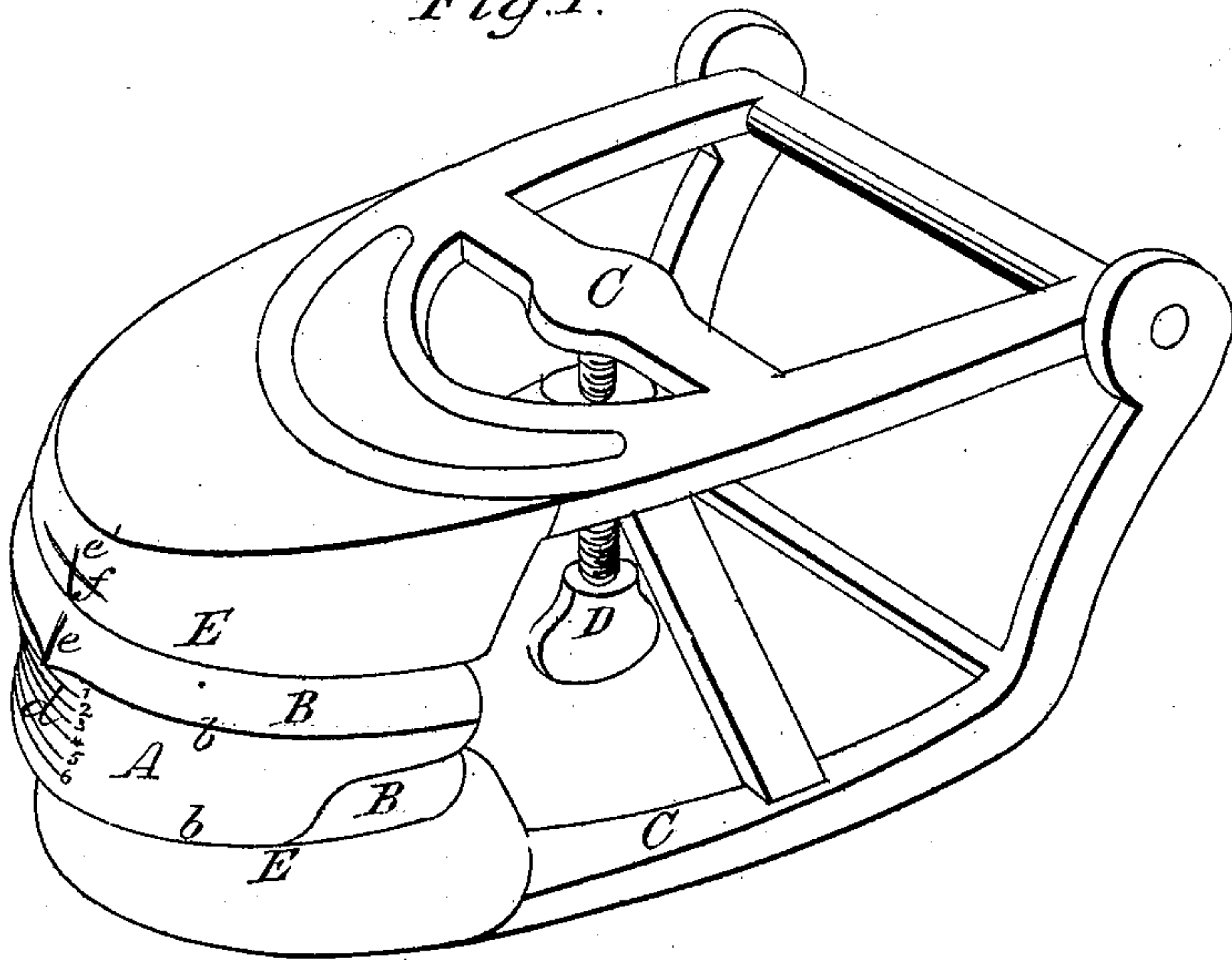


Fig. 2.

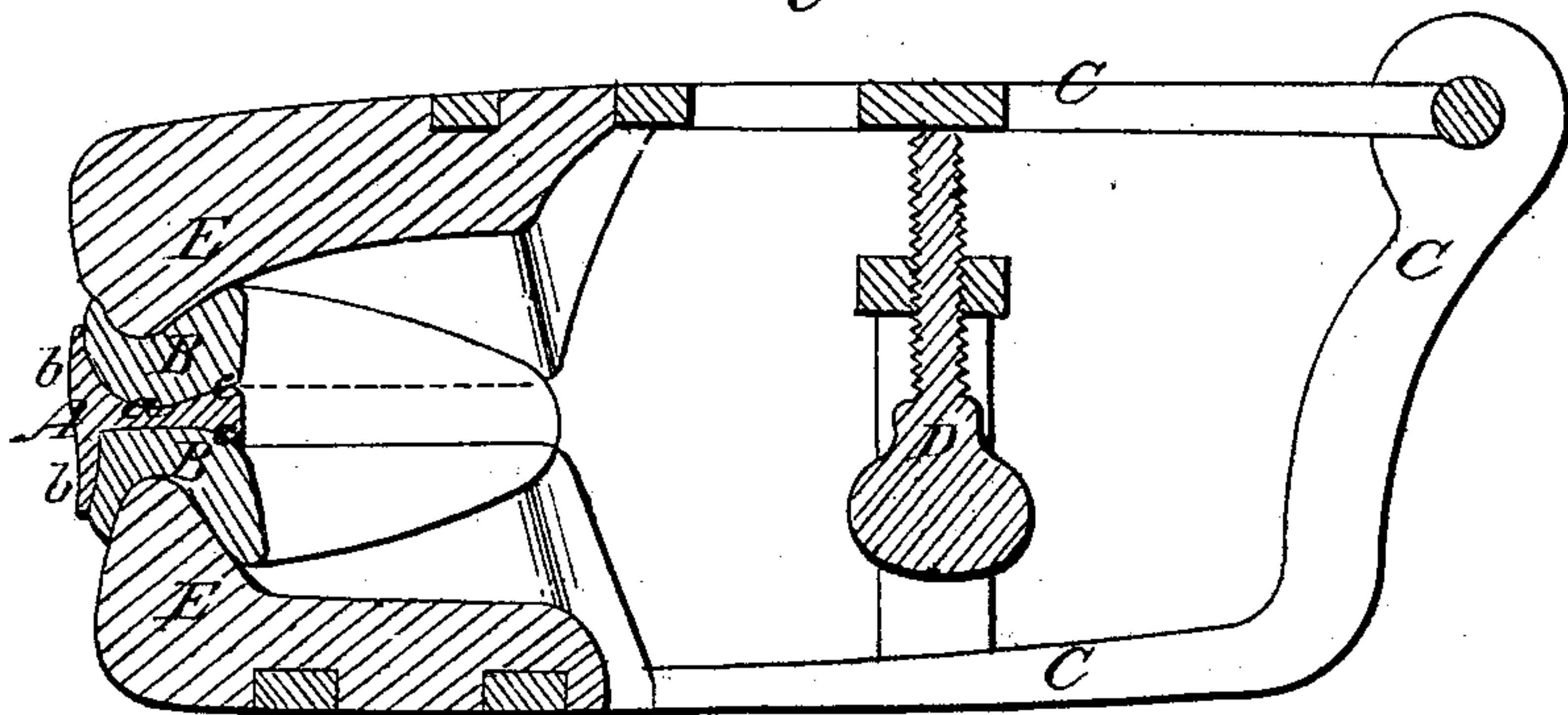
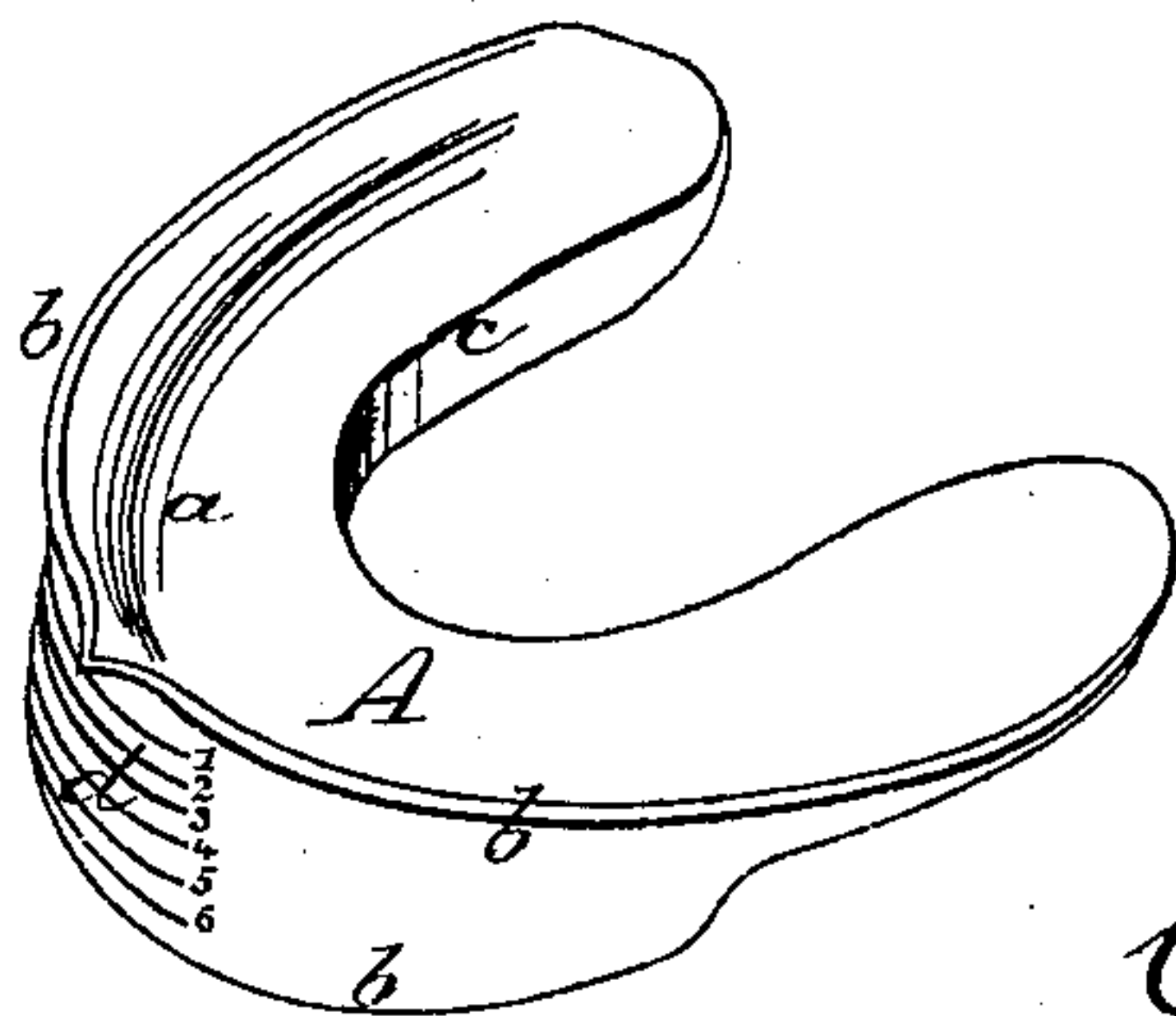


Fig. 3.



Witnesses
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Alex. Mahon.

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by his atty
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C. VON BONHORST, OF LANCASTER, OHIO.

Letters Patent No. 90,706, dated June 1, 1869; antedated May 15, 1869.

IMPROVED DENTAL ARTICULATING-CUP.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, Dr. C. VON BONHORST, of Lancaster, county of Fairfield, and State of Ohio, have invented certain new and useful Improvements in Dental Articulating-Cup; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing, making a part of this specification, in which—

Figure 1 represents a perspective view of an articulator, with the casts and my improved articulating-cup applied thereto, showing the mode of operating, or using the same;

Figure 2 is a vertical section through the same; and

Figure 3 represents a perspective view of my improved articulating-cup detached.

Similar letters of reference denote corresponding parts wherever they are used.

The purpose, or object of my invention is to facilitate the operation of getting the true "bite" of the mouth, in such manner as to save time and labor to the dentist, in the process of inserting and properly fitting artificial teeth, and to obviate the necessity for frequent visits on the part of the patient during such process; and consists in the provision of means whereby the dentist is enabled, after the first sitting, to determine, in the absence of the patient, the exact position of the jaws, or "bite" of the mouth to which the teeth are to be adapted.

In the accompanying drawing—

A represents my improved articulating-cup, made of any suitable material, such as metal or porcelain, and of a shape conforming in its general outline to the curvature of the alveolar ridges of the upper and lower jaws of the mouth.

It is composed of a thin horizontal centre, or base-plate, *a*, and outer and inner flanges, or ribs, *b c*, on both its upper and lower faces.

The outer flanges, *b b*, are represented as approaching an angle of about ninety degrees to the base *a*, but they may be made to vary therefrom, flaring outward or setting inward, and the inner flanges, or ribs *c*, may be dispensed with, if desired, and any one or all of the flanges, or ribs may be varied in depth, during their whole extent or in any part thereof, as may be found advisable, to adapt them to the various forms of mouth to which they may be applied.

The form represented is considered a favorable one for the purpose of retaining the wax, B, which is to be applied thereto as shown in figs. 1 and 2, and in which the "bite" of the mouth is to be received and retained, as hereinafter set forth.

C represents an articulator, which may be of any usual or preferred construction, provided with an adjusting set-screw, D, by means of which the relation, or distance apart of the two jaws of the articulator is regulated.

E represents the "casts" applied to the articulator.

The impressions for these "casts" are taken, and the casts themselves are obtained, or made in the usual manner.

The front, or face of the articulating-cup is graduated, or provided with a number of horizontal marks, *d*, numbered in any suitable manner, for the purpose of enabling the dentist to note the length of the upper lip, when the cup is applied to the patient's mouth, after the bite has been obtained, and while the mouth is in its natural position, determined by the judgment of the dentist.

e represents the median line, noted or drawn on the wax while the articulating-cup is in the patient's mouth, and afterward transferred or extended to the upper cast, at *e'*, after the casts have been applied to the articulator; and

f represents a line drawn on the upper cast, at right angles to the median line, as a point to measure from in determining the length of the teeth, as hereinafter described.

The manner of operating or making use of the articulating-cup is as follows:

I place soft wax in the upper part of the cup, and get an impression of the alveolar ridge of the upper jaw; then remove the cup, and place it in cold water, for the purpose of hardening the wax and preserving the impression thus obtained. Then place soft or warm wax in the lower part of the cup, and replace the cup in the mouth, in the position it occupied before, and close the lower jaw in the wax until the mouth assumes its natural position, taking care to press the chin well back when the patient first begins to bite in the wax. The cup is now ready for use, and can be set away until the dentist is ready, with his casts, for the operation of fitting the teeth, after the "casts" have been made in the usual way, as above stated. If for whole upper and lower set, adjust the casts to the bite in the articulating-cup; with a warm knife fasten the edges of the wax to the casts, so as to keep them in position; then attach the casts to the articulator in the usual manner.

Before removing the articulating-cup from the casts, make a mark, *e'*, on the upper cast, opposite the median line *e*, as marked on the rim of wax when the bite was taken. Then draw a line, *f*, on said upper cast, across the median line, as a point to measure from, and with dividers measure from said point to the number on the scale on the articulating-cup, which indicated the length of the upper lip at the time of taking the bite. This measurement is to be preserved, for regulating the length of the teeth.

The bite for either upper or lower set of teeth alone, is taken in the same manner as for a full set.

After the casts have been applied to the articulator as set forth, and before removing the articulating-cup and bite therefrom, the set-screw D should be adjusted to retain the casts at the proper distance from each

other, so that when the cup is removed, said casts will occupy the same relative position that they occupied with the cup between them.

Having now described my invention in such manner as to enable those skilled in the art to make and use the same,

What I claim as new, and desire to secure by Letters Patent, is—

1. A dental articulating-cup, constructed substantially as described, for obtaining the "bite" of the mouth.

2. The articulating-cup, provided with a graduated scale, for indicating the length of the upper lip, and of the teeth to be inserted, substantially as described.

In testimony whereof, witness my hand, this 29th day of August, 1868

DR. C. VON BONHORST.

Witnesses:

H. H. DOUBLEDAY,
ALEX. MAHON.