

(No Model.)

M. H. CARPENTER.

DENTAL FLASK.

No. 256,879.

Patented Apr. 25, 1882.

Fig. 1.

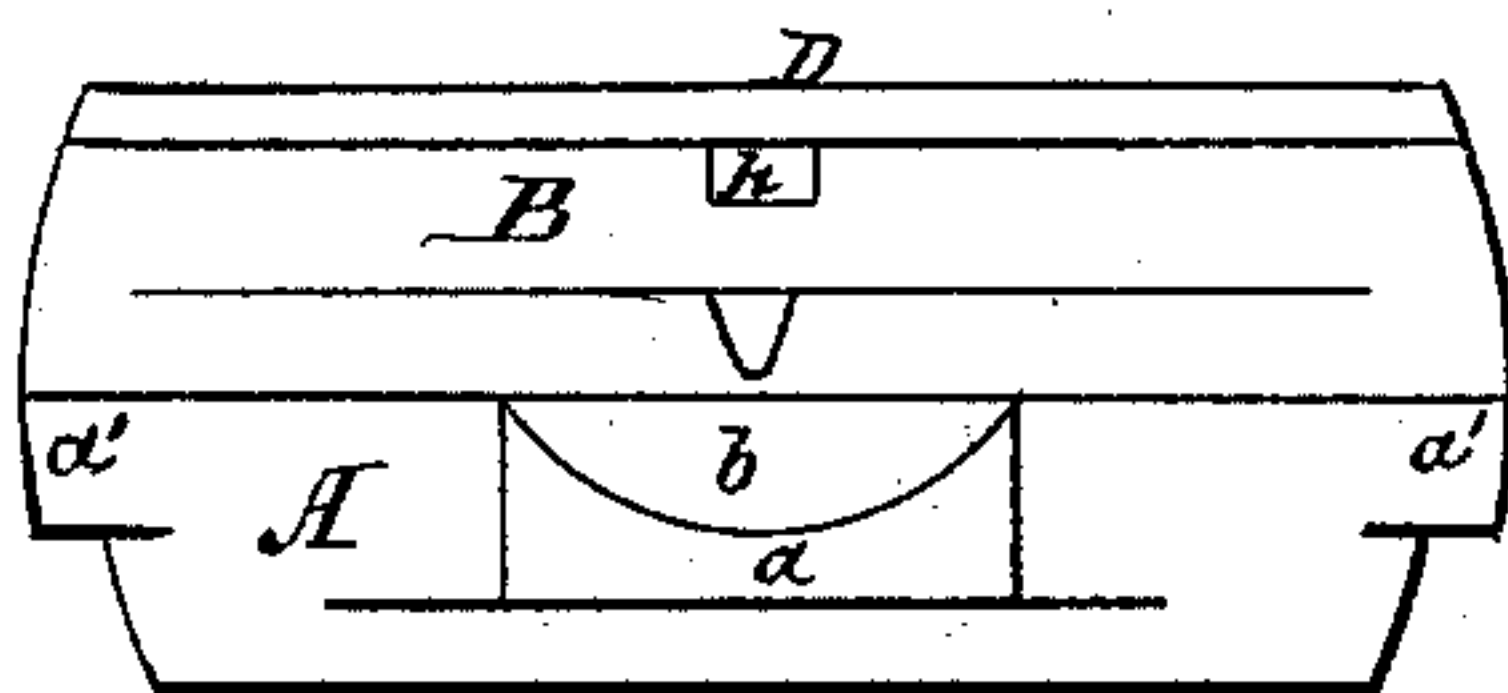


Fig. 2.

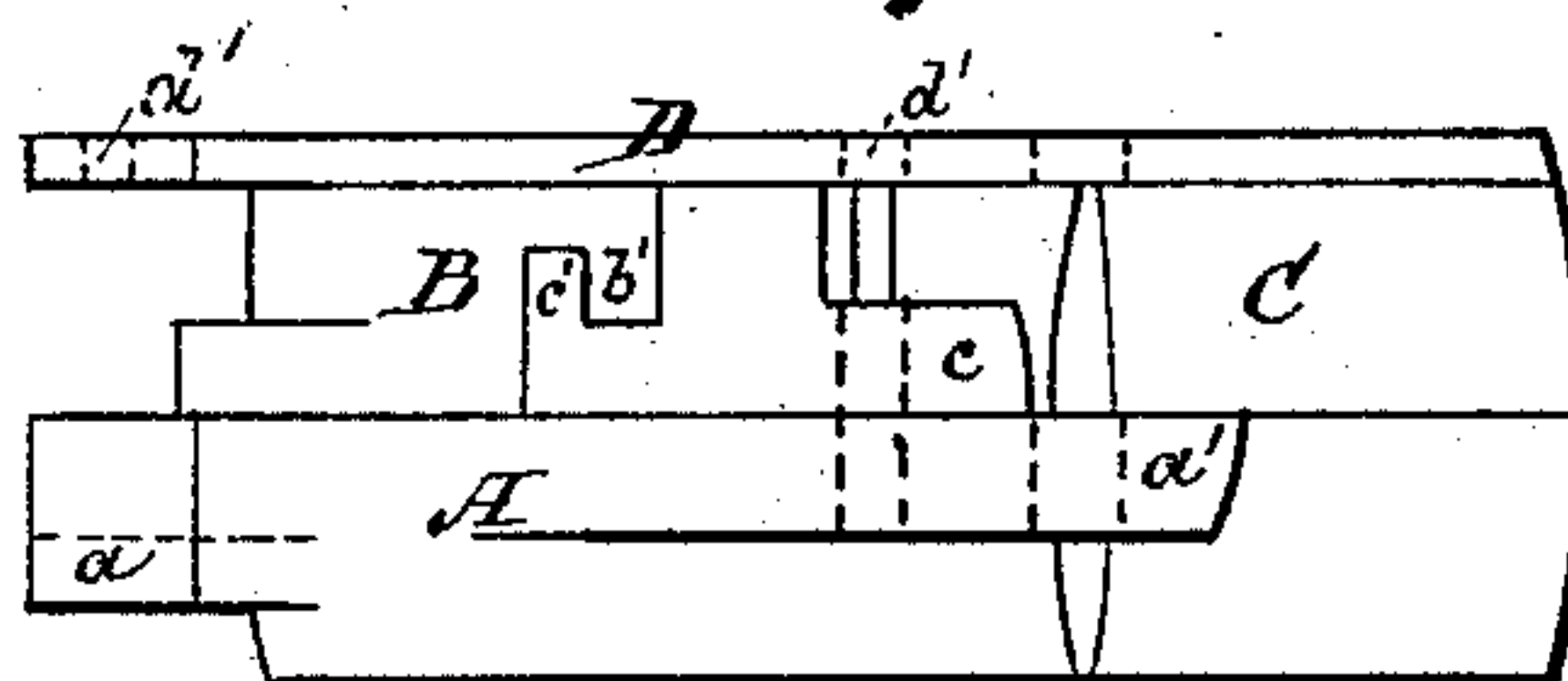


Fig. 3.

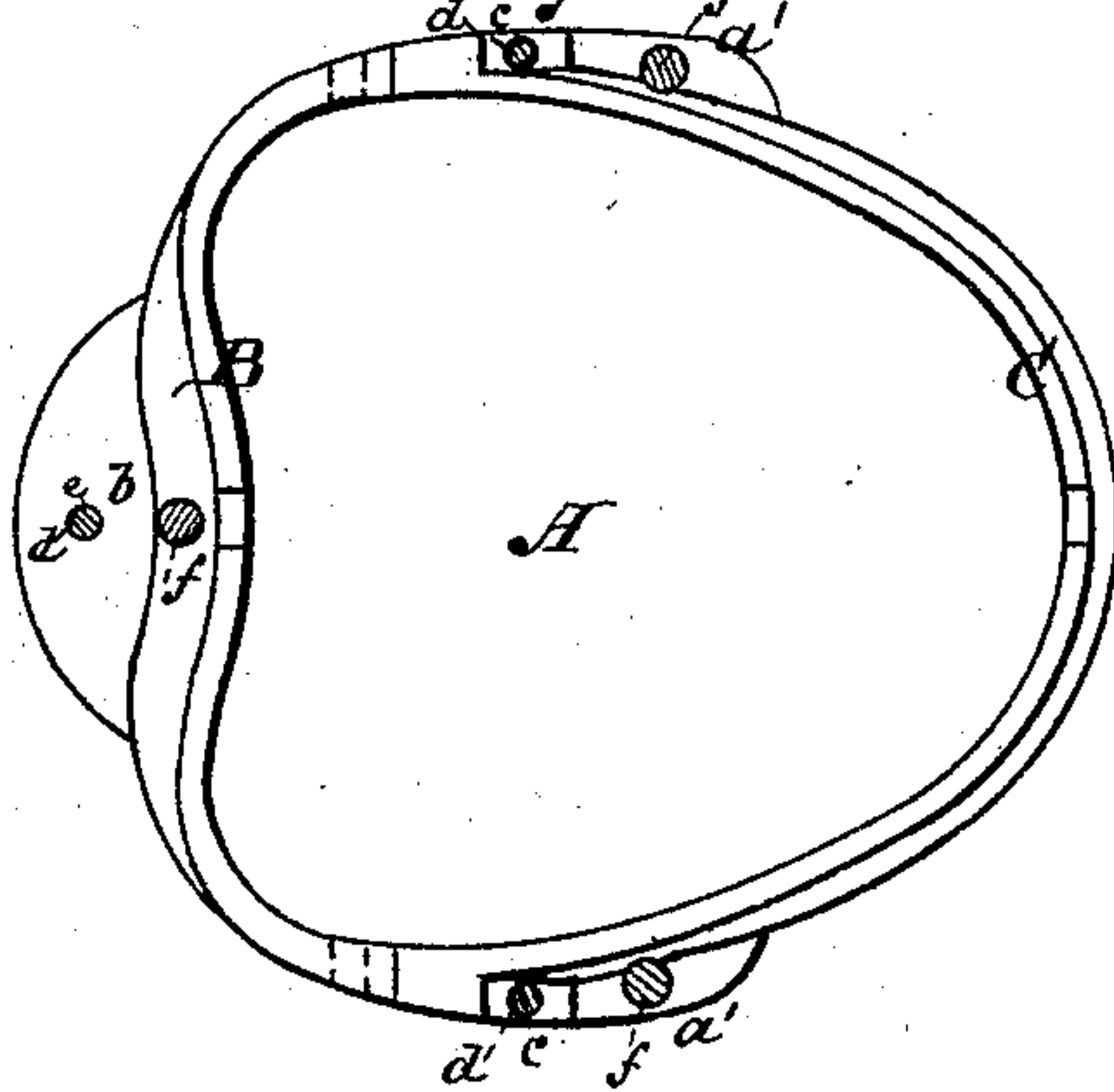


Fig. 4.

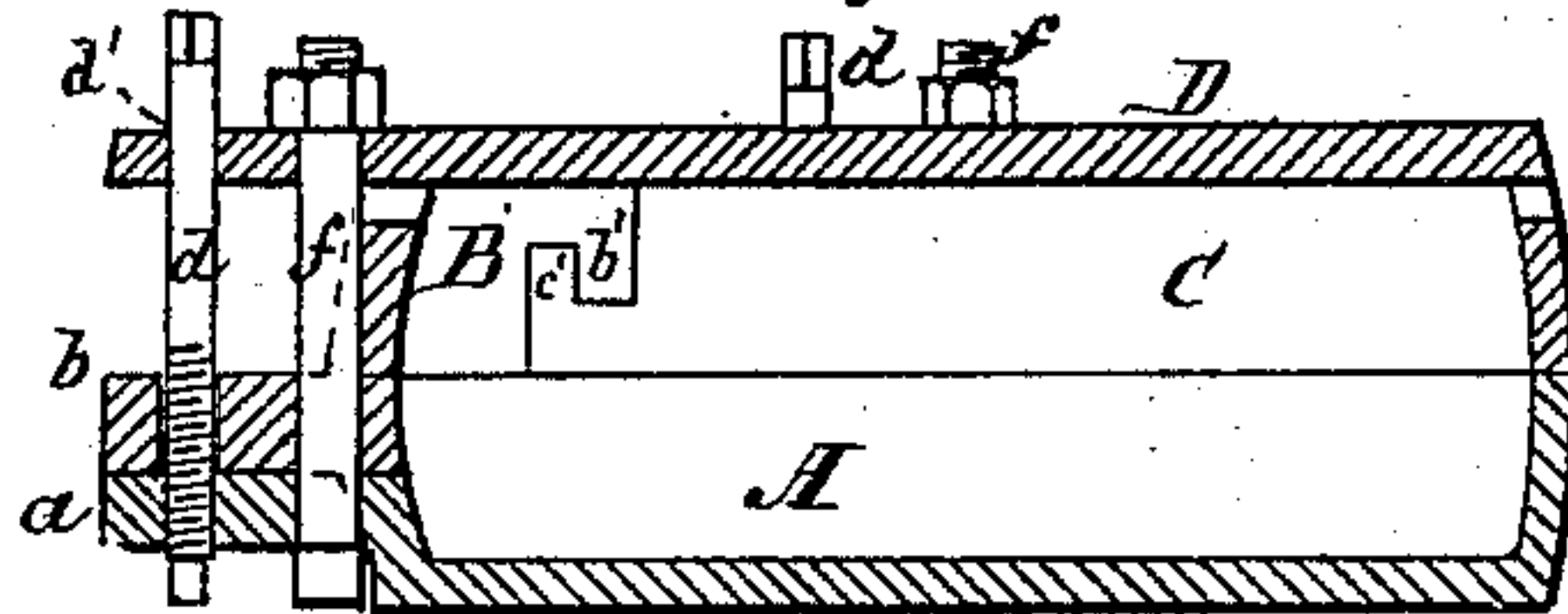


Fig. 5.

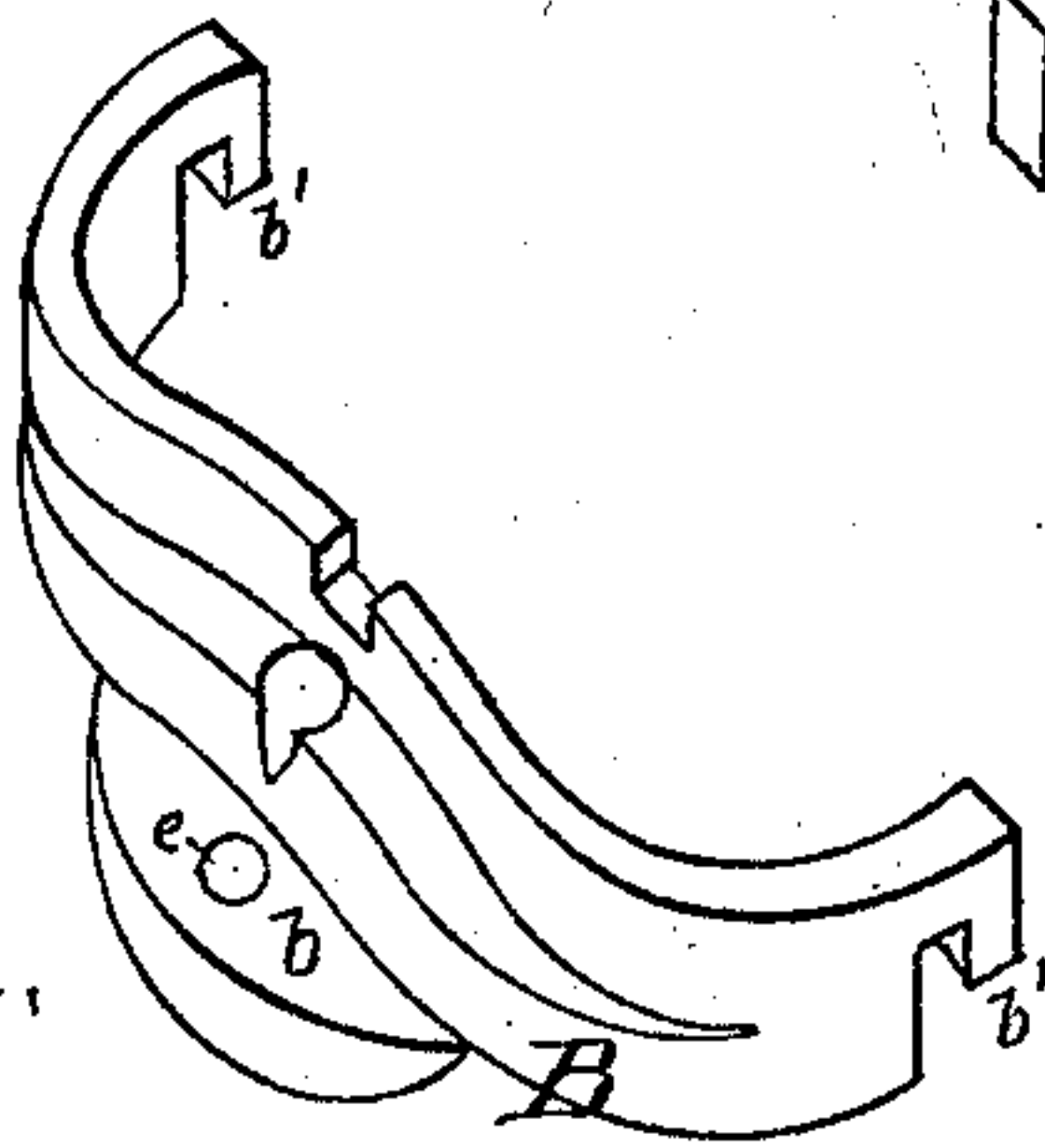
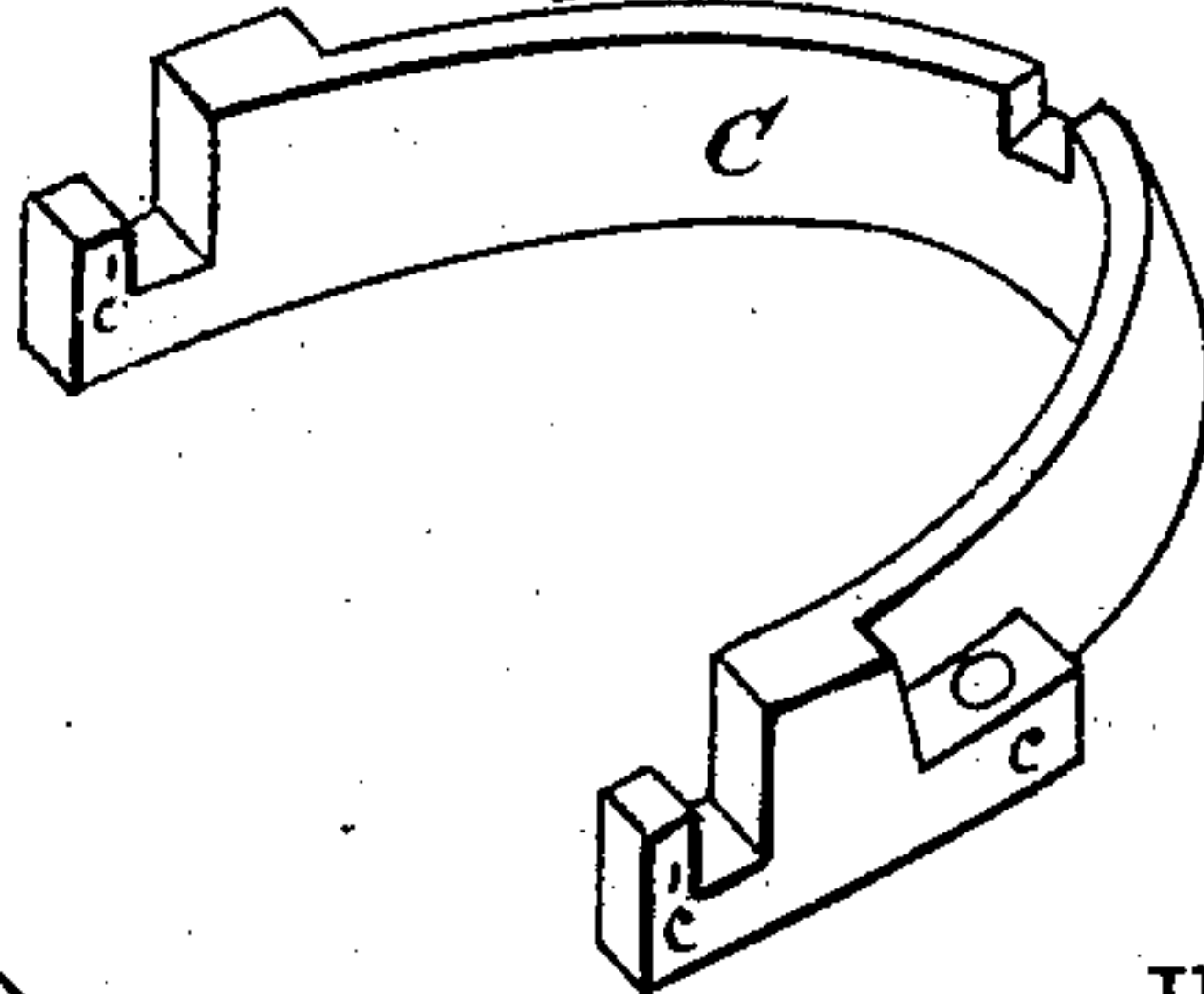


Fig. 6.



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DENTAL FLASK.

SPECIFICATION forming part of Letters Patent No. 256,879, dated April 25, 1882.

Application filed April 8, 1881. (No model.)

To all whom it may concern:

Be it known that I, MARVIN H. CARPENTER, a citizen of the United States, residing at Jersey City, in the county of Hudson and State of New Jersey, have invented a new and useful Dental Flask, of which the following is a specification.

My invention relates to improvements in dental flasks by which artificial dentures are constructed; and by these improvements I am enabled to construct a superior quality of artificial dentures out of either rubber, celluloid, or other suitable material, whereas in the present practice of the dental profession flasks of different construction are used for the different varieties of work, together with a saving of expense for material and labor in constructing the same. I attain these objects by the mechanism illustrated in the accompanying drawings.

Figure 1 is a front view of the apparatus. Fig. 2 is a side view of the apparatus. Fig. 3 is a top view of the apparatus with the cover off. Fig. 4 is a cross-section of the apparatus. Fig. 5 is a view in perspective of the part B. Fig. 6 is a view in perspective of the part C.

Similar letters refer to similar parts throughout the several views.

Section A is the base. This base is hollowed, and is formed with radial lugs $a' a' a'$, coincident in position with the lug b of section B and the lugs $c c$ of section C, having holes or sockets provided in them, as shown in Figs. 4, 5, and 6. Sections B and C, as shown in Figs. 5 and 6, have the hooks or slots $b' c'$, and thus interlock each other, as shown in Fig. 2, both sections having the lugs shown as b and $c c$. Section D is the cap or top piece, having an inner lug, h , Fig. 1, and the holes $d' d' d'$, as shown in Figs. 2 and 4. The screw-rods $d d d$ pass into and through the holes in the lugs $a b$, $c c$, $a' a'$, and the holes $d' d' d'$, as referred to hereinafter.

My improvement consists in certain adjustable and removable screw-rods acting as guide-pins, and, when necessary, locking the various sections of the apparatus together and retaining them in their required relation to each other, and also the removable front piece, B, Fig. 5, acting in combination, as hereinafter described, and also a novel combination of

parts whereby the flask as a whole is rendered capable of use for either rubber or celluloid work, as may be desired.

In section A, Fig. 1, plaster-of-paris or other suitable material is poured. In this the plaster cast of the mouth and the wax pattern representing the artificial denture to be made with the teeth therein are placed, the teeth projecting above the upper inside edge of A. The usual varnishing then takes place. Section C, Fig. 4, is then placed on A, Fig. 4, the screw-rods $d d$, passing through the holes in the lugs $c c$ and $a' a'$, being adjusted, guiding and locking the sections A and C into their proper position with reference to each other, the section C projecting above the teeth, with a space between the inner side of C and the teeth, in which space plaster-of-paris or other suitable material is then poured and left to harden, the teeth being thereby firmly embedded in the same. The wax denture is then removed, the opening between the hooks $c' c'$ permitting easy access thereto, leaving the upper ends of the teeth embedded and held in the plaster. Thin wax is then formed on the original plaster cast and affixed to the teeth, the opening between the hooks $c' c'$ permitting the operator to easily accomplish this, thereby obtaining an accurate impression of the part desired, with all the convolutions or rugæ clearly shown. Section B is then placed in its position, joining and interlocking with section C by means of the hooks $b' b'$ and $c' c'$, Fig. 2, the screw-rod d , passing through the hole e in the lug b , accurately adjusting it in its proper place and firmly holding and locking it in position, Fig. 4. Plaster-of-paris is then poured over the whole interior, the cap D accurately adjusted in its position by means of the screw-rods $d d d$, Fig. 2, passing through the holes $d' d' d'$, Fig. 2, causing the plaster to be uniformly and firmly compressed and a perfect impression taken in plaster of the reverse of the mouth or part desired. When the plaster contained in B and C has hardened the mold is completed. The screw-rods being removed, the sections B and C, together with the top D, all being held together by the plaster therein, can be severed laterally from section A, and any adherence of plaster around or about projecting or bulging parts of the cast can be easily

removed. The sections held together by the plaster being separated, as just described, the thin wax form or pattern is removed. The celluloid in the form and condition in which it is ordinarily sold to dentists is then placed where the thin wax pattern was, and, the screw-rods being adjusted and tightened as before, the flask is then placed in the usual apparatus, and when the celluloid has been duly softened the sections are brought together by means of the usual press, the screw-rods *d d d* being properly adjusted and lengthened, acting as guide-pins during this compression, until the soft mass is pressed into the mold made in the plaster by the wax pattern, as hereinbefore indicated, the overflow of the celluloid passing into apertures made in the plaster, as is usual, and when the desired compression is attained the flask is firmly locked by the screw-rods *d d d*, as hereinbefore described.

When the denture is to be of vulcanized rubber or other similar material the mold provided within the flask, as hereinbefore explained, is filled with rubber in the usual manner, and

the sections brought together by pressure, the means of pressure being either a suitable press or the screw-bolts *f f f*, passing through the holes, as shown in Figs. 3 and 4.

I am aware that prior to my invention artificial dentures have been made by dental flasks divided into separate sections operating in conjunction with guide-pins, and I hereby disclaim Letters Patent of the United States No. 217,253, of Albert M. White, July 8, 1879, and No. 180,193, William E. Buckman, of July 25, 1876. I therefore do not claim such a combination, broadly; but

What I do claim as my invention, and desire to secure by Letters Patent, is—

The combination, in a dental flask, of the removable front piece, B, with section C, both in conjunction with section A, the cap D, and the screw-rods *d d d*, the whole substantially as set forth, and for the purpose specified.

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Witnesses:

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