

(No Model.)

E. T. STARR.  
DENTIST'S VULCANIZING FLASK.

No. 246,234.

Patented Aug. 23, 1881.

Fig. 1,

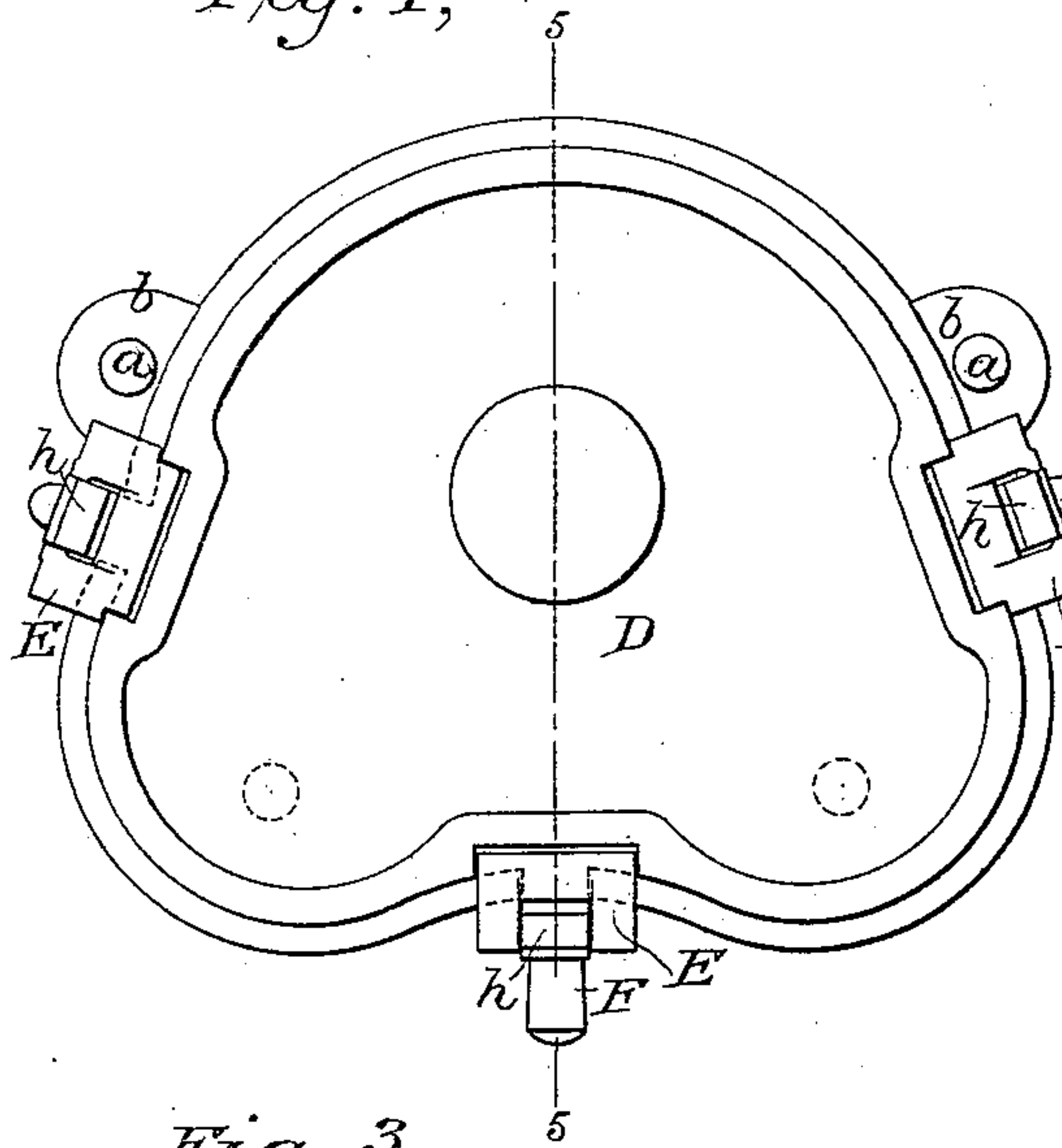


Fig. 2,

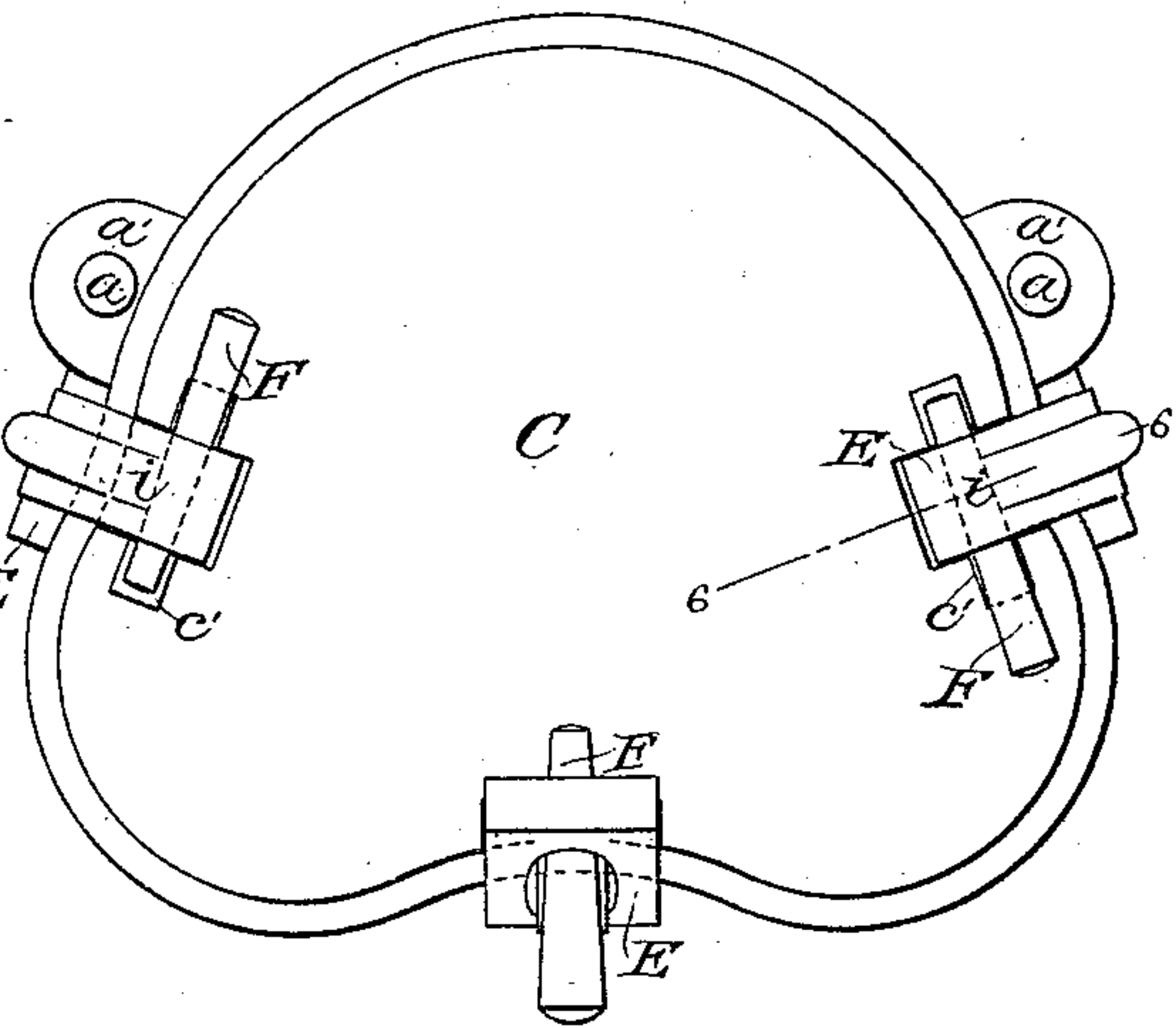


Fig. 3,

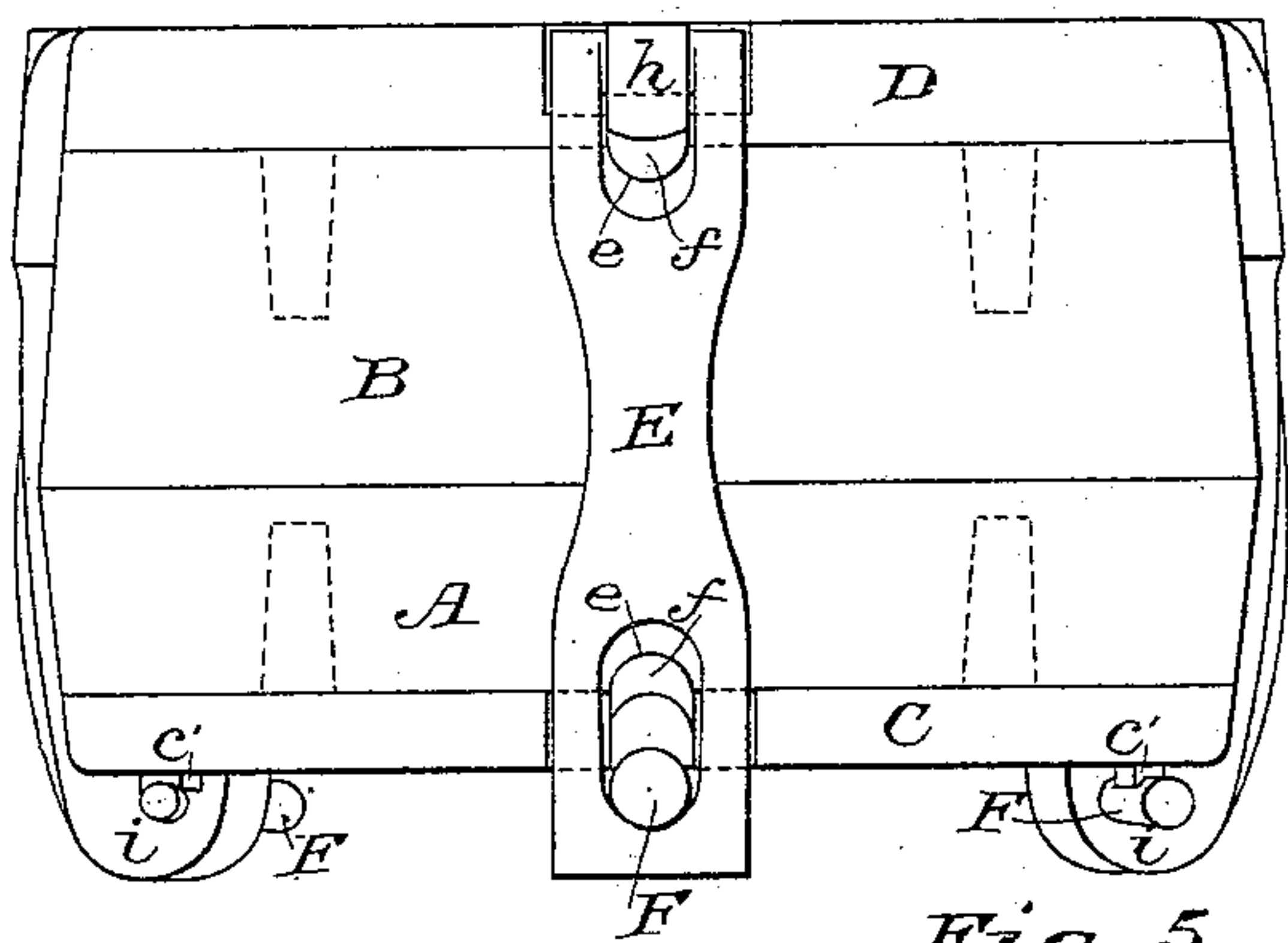


Fig. 4,

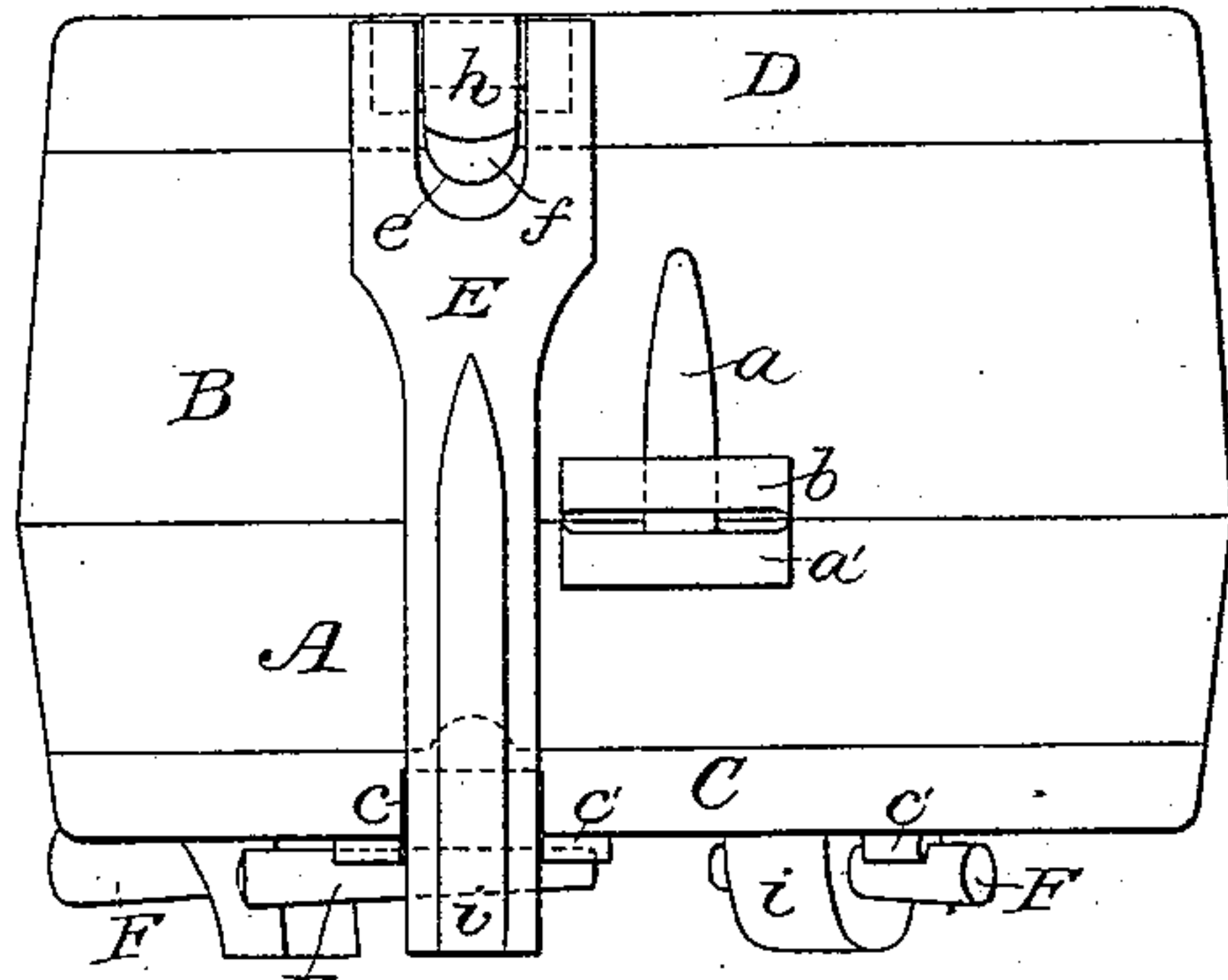


Fig. 5.

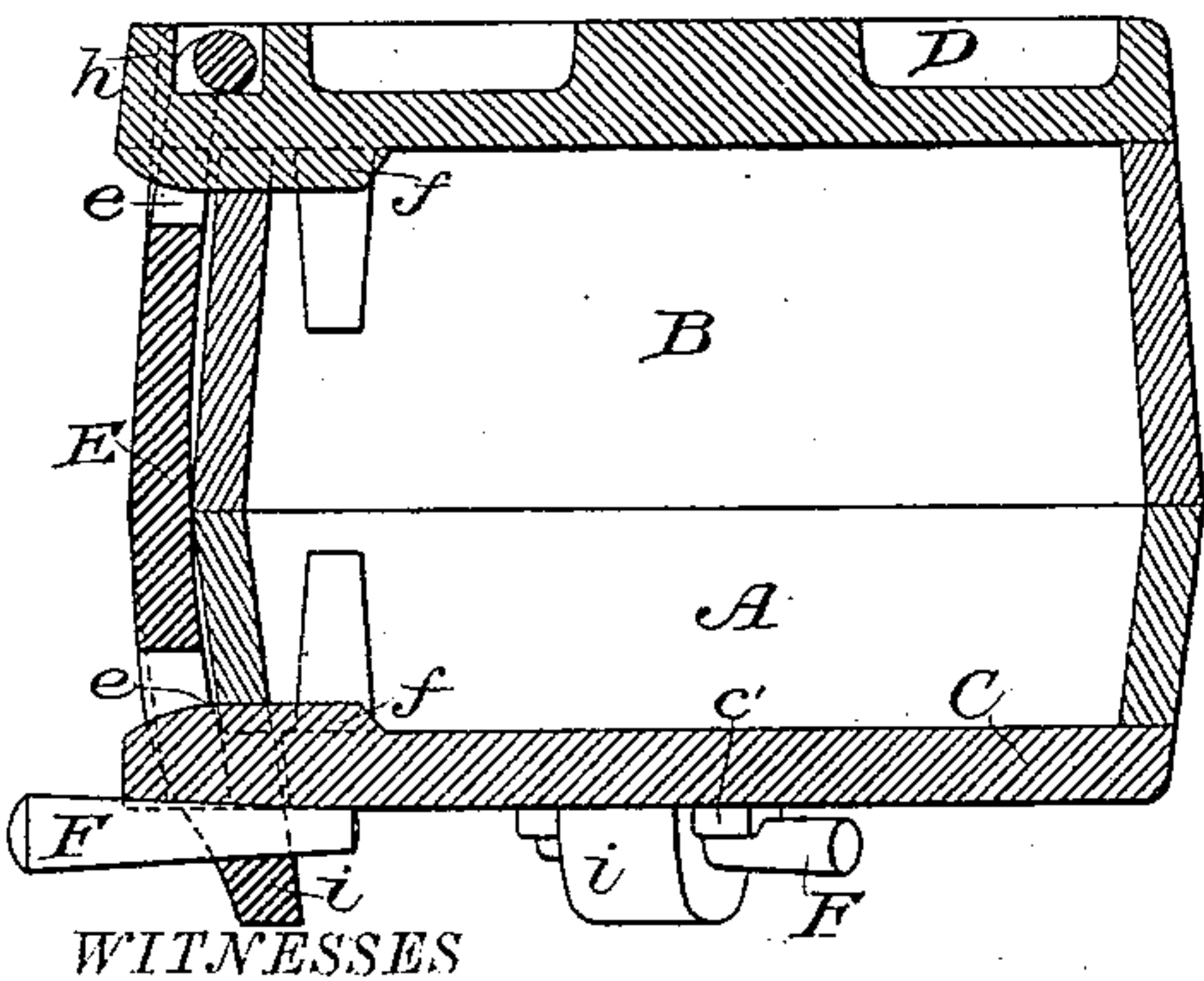
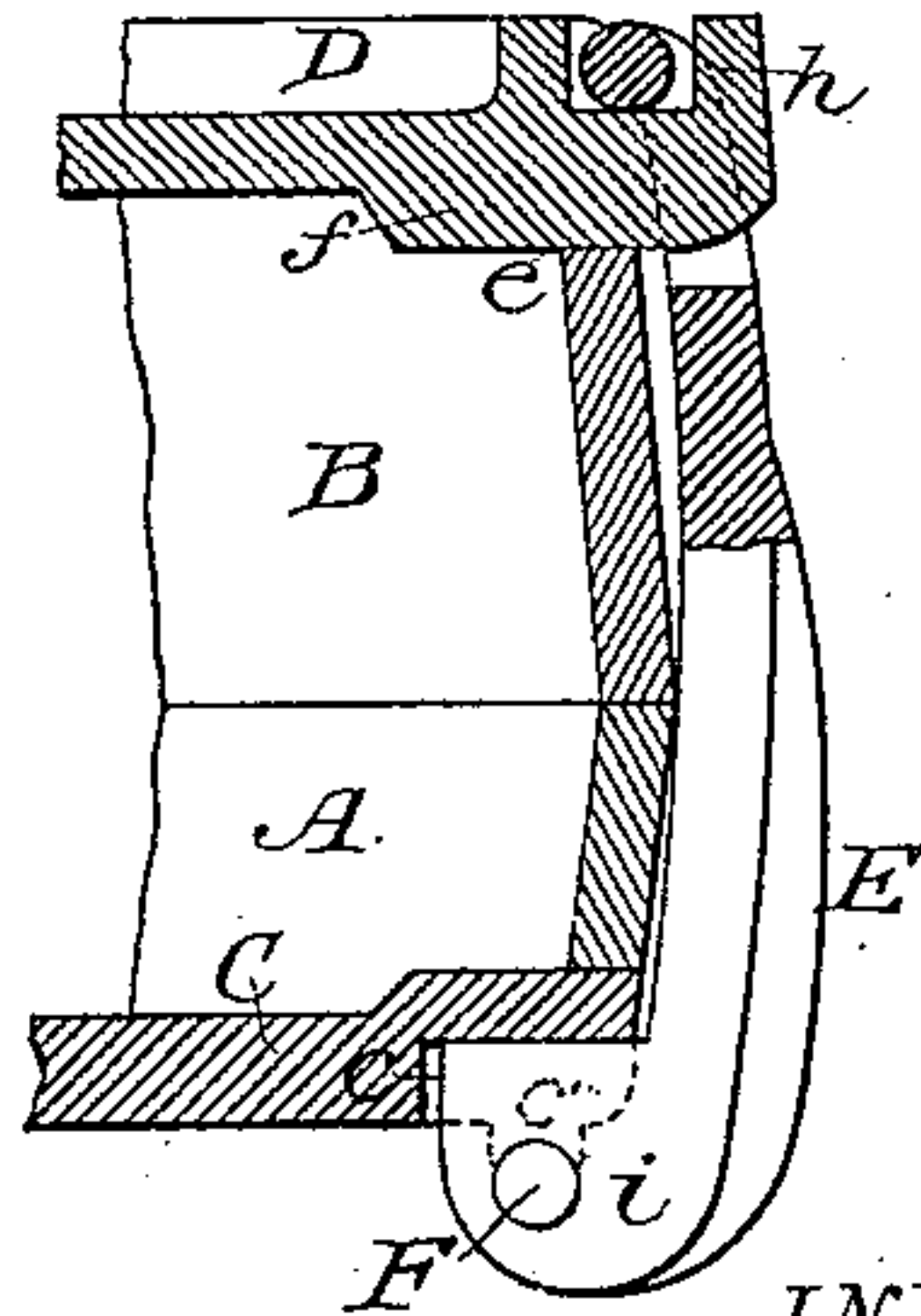


Fig. 6.



WITNESSES

INVENTOR

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# UNITED STATES PATENT OFFICE.

ELI T. STARR, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO JAMES W. WHITE, JAMES CLARENCE WHITE, AND H. M. LEWIS, TRUSTEES, ALL OF SAME PLACE.

## DENTIST'S VULCANIZING-FLASK.

SPECIFICATION forming part of Letters Patent No. 246,234, dated August 23, 1881.

Application filed July 6, 1881. (No model.)

*To all whom it may concern:*

Be it known that I, ELI T. STARR, of the city and county of Philadelphia, in the State of Pennsylvania, have invented certain new  
5 and useful Improvements in Dentists' Vulcanizing-Flasks, of which the following is a specification.

My invention relates to sectional flasks of the class used by dentists in vulcanizing and  
10 heating apparatus for the formation of artificial dentures; and it consists, first, of a flask composed of two open rings or sections detachably connected together at their adjacent edges, as usual, and fitted upon their opposite edges  
15 to receive detachable top and bottom plates to make a closed flask, said plates being interchangeable, so as to permit the flask-rings to be reversed or either ring or section of the flask to be made the top ring or section; and,  
20 secondly, of the combination of two open flask rings or sections having detachable interchangeable top and bottom plates to make a closed flask, with arms or links, each hinged or connected at one end to the lower plate, and  
25 fitted at their upper ends to overlap the top plate and receive keys or wedges to fasten all the parts of the flask together when closed, so that the flask may be freely handled without its sections or parts becoming detached.

30 In the accompanying drawings, Figure 1 is a bottom-plan view, and Fig. 2 a top-plan view, of my improved flask. Fig. 3 is a view of one side of the inverted flask, and Fig. 4 a view from another side of said flask, showing clearly  
35 one of the interlocking pin-connections of the open rings or flask-sections. Fig. 5 is a vertical central section through the inverted flask, on the line 5 5 of Fig. 1; and Fig. 6 is a section therethrough on the line 6 6 of Fig. 2.

40 It will be unnecessary to mention the manner of packing the rings or flask-sections with the impressions, models, or dies, which are to give shape to the material which is to form the plate to carry the teeth, as this is well understood by those skilled in the art.

45 The open flask rings or sections A B are two in number, as usual, and said rings are detachably connected together preferably by two interlocking lug and pin connections, one on

each side of the flask, as clearly shown in Figs. 50 1 and 2. The pins *a a* are tapered and rigidly connected at their base to lugs or ears *a' a'*, projecting from the side of the ring or section A, and said pins pass, when the two rings or sections A B of the flask are fitted together, 55 through eyes or openings in lugs or ears *b b* projecting from the ring or section B. (See Fig. 4.)

Top and bottom plates, C D, are fitted to the rings or sections A B of the flask, so as to make 60 a closed flask, and these plates are interchangeable—that is to say, the plates fit equally well to close the flask whichever ring or section thereof may be the top section, whereby the flask-sections are rendered reversible, and 65 either may be placed at the top or bottom. Each ring or section A B in this example is provided in its outer edge, or that upon which the plates fit, with three grooves, *e*, one at each side of the ring, and corresponding tongues or 70 ribs *f* on the inner sides or faces of the top and bottom plates, C D, fit these grooves when said plates are fitted closely upon said flask rings or sections. The result of this connection is that either plate may be applied to either ring 75 or section to close it, and they are thus rendered interchangeable.

In order to fasten the sections of the flask, including the top and bottom plates, securely together when closed by the press or by the clamp 80 or screw of the vulcanizer or heater, so as to permit the flask to be handled without danger of disconnecting its sections, I cast with, or otherwise form upon, the outer or bottom surface of the bottom plate, D, preferably three lugs or pro- 85 jections, *h h h*, of hook form, over which the lower ends of three arms or links, E, are fitted by means of eyes or openings formed in said arms. The upper ends of these arms or links are enlarged or provided with beaks *i*, so as to 90 overlap the top plate, C, of the flask, the said beaks fitting recesses *c*, formed in said plate. On each side of the said recesses *c* are grooved lugs *c'*, in which are seated cylindrical wedges or keys F, three in number, and one for each 95 arm or link E, and each wedge is passed through a lateral opening in the beak *i* of its arm or link E, so as to tightly draw the flask-sections

with their top and bottom plates together and securely fasten them to prevent their accidental separation during the handling of the flask.

Instead of the lugs or hook-projections *h* on  
5 one of the plates to fit the eyes or openings in the arms or links *E* and the recesses *c* in the other plate to receive the shouldered enlargements or beaks *i* of said arms or links, I may substitute seats in one of the plates for the  
10 cross-pins or T-shaped heads of round straight bolt-arms to fit said bolt-arms to swing or rock, and merely pass the wedges or tapered keys through openings in the opposite ends of the bolt-arms to act upon the opposite plate in or-  
15 der to lock the parts of the flask firmly together.

It will be obvious that by the three arms, bolts, or links—one for each side of the heart-shaped flask—the flask will be evenly and uniformly fastened or secured on all sides.

20 All that is necessary to separate the flask-sections is a simple removal of the wedges or keys, which operation permits the arms or links *E* to be rocked back on their hinge or hook

connection with the bottom plate of the flask or to be detached, and enables the flask-sec- 25 tions to be readily separated.

I claim as my invention—

1. A dentist's flask constructed, substantially as hereinbefore set forth, of open rings or sections detachably connected together, and with 30 detachable and interchangeable top and bottom plates, to make a closed flask.

2. The combination, substantially as hereinbefore set forth, of open flask rings or sections having interchangeable top and bottom plates, 35 with arms, bolts, or links, each connected at one end to one of said plates, and provided at the opposite end with an opening to receive a wedge or key acting upon the other of said plates.

In testimony whereof I have hereunto subscribed my name this 2d day of July, A.D. 1881.

ELI T. STARR.

Witnesses:

FRANK L. HISE,  
W. R. POTTER.