

No. 773,955.

PATENTED NOV. 1, 1904.

W. MARSHALL.
MOLDING FLASK.

APPLICATION FILED APR. 21, 1904.

NO MODEL.

FIG. 1.

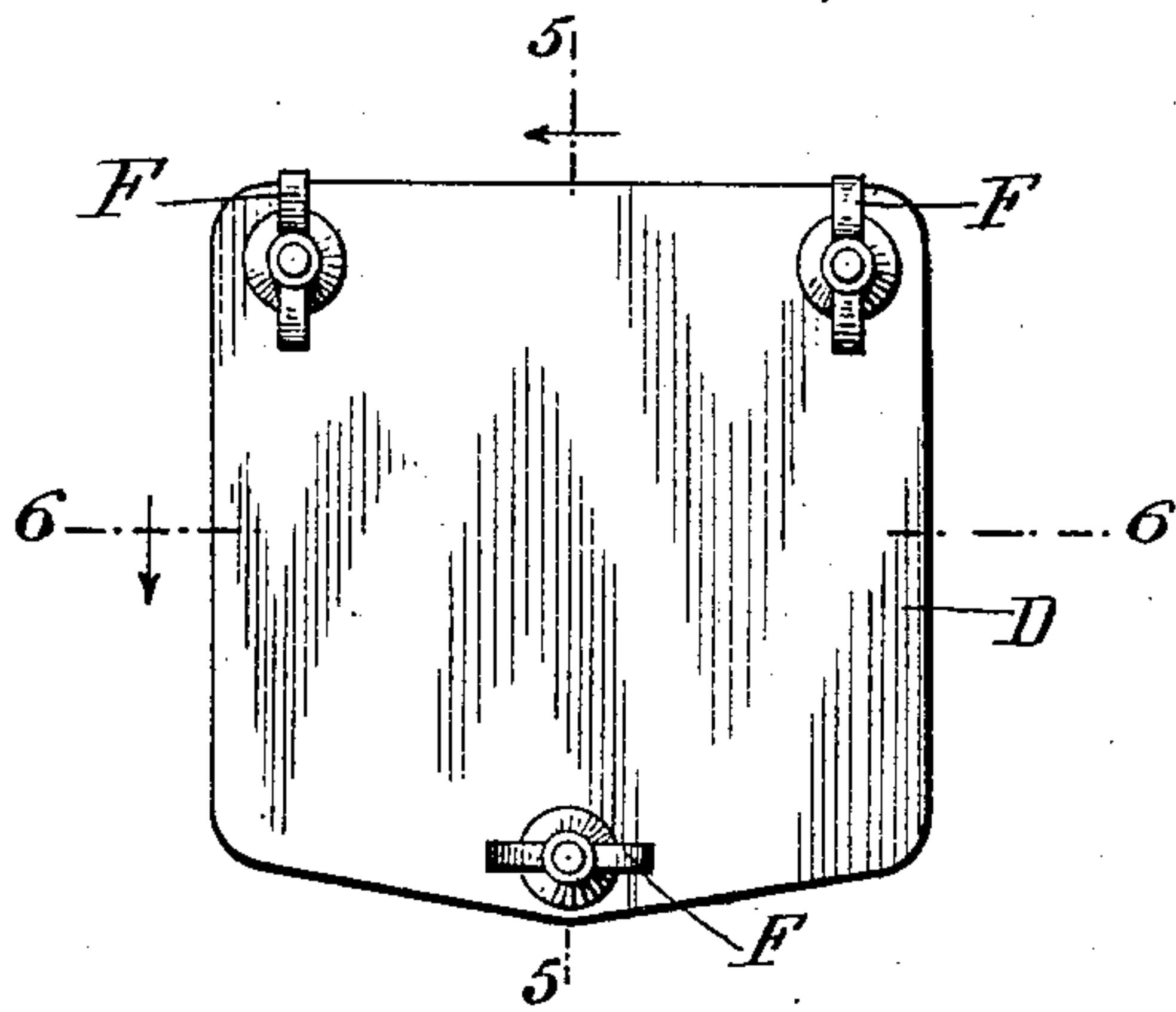


FIG. 2.

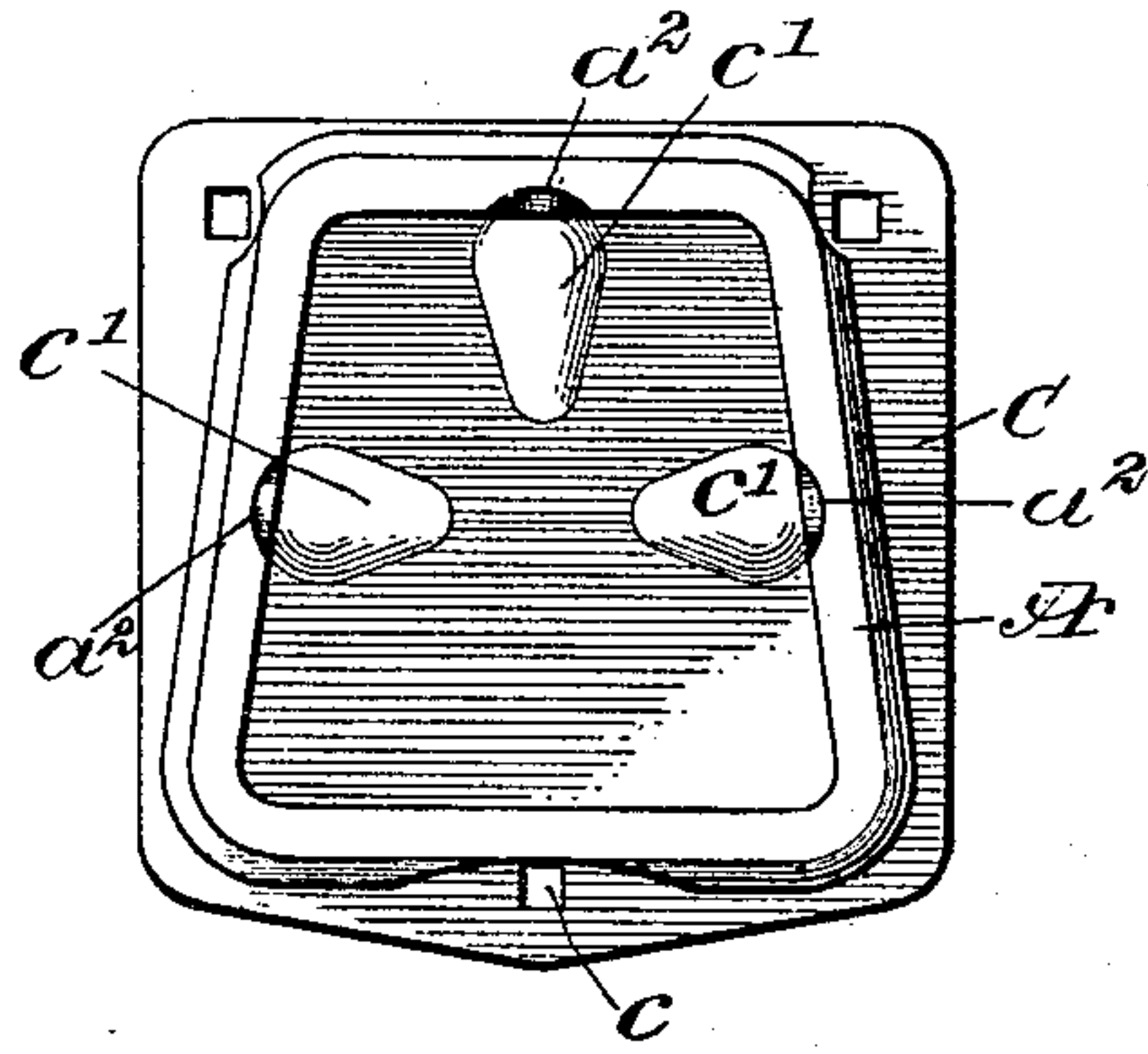


FIG. 3.

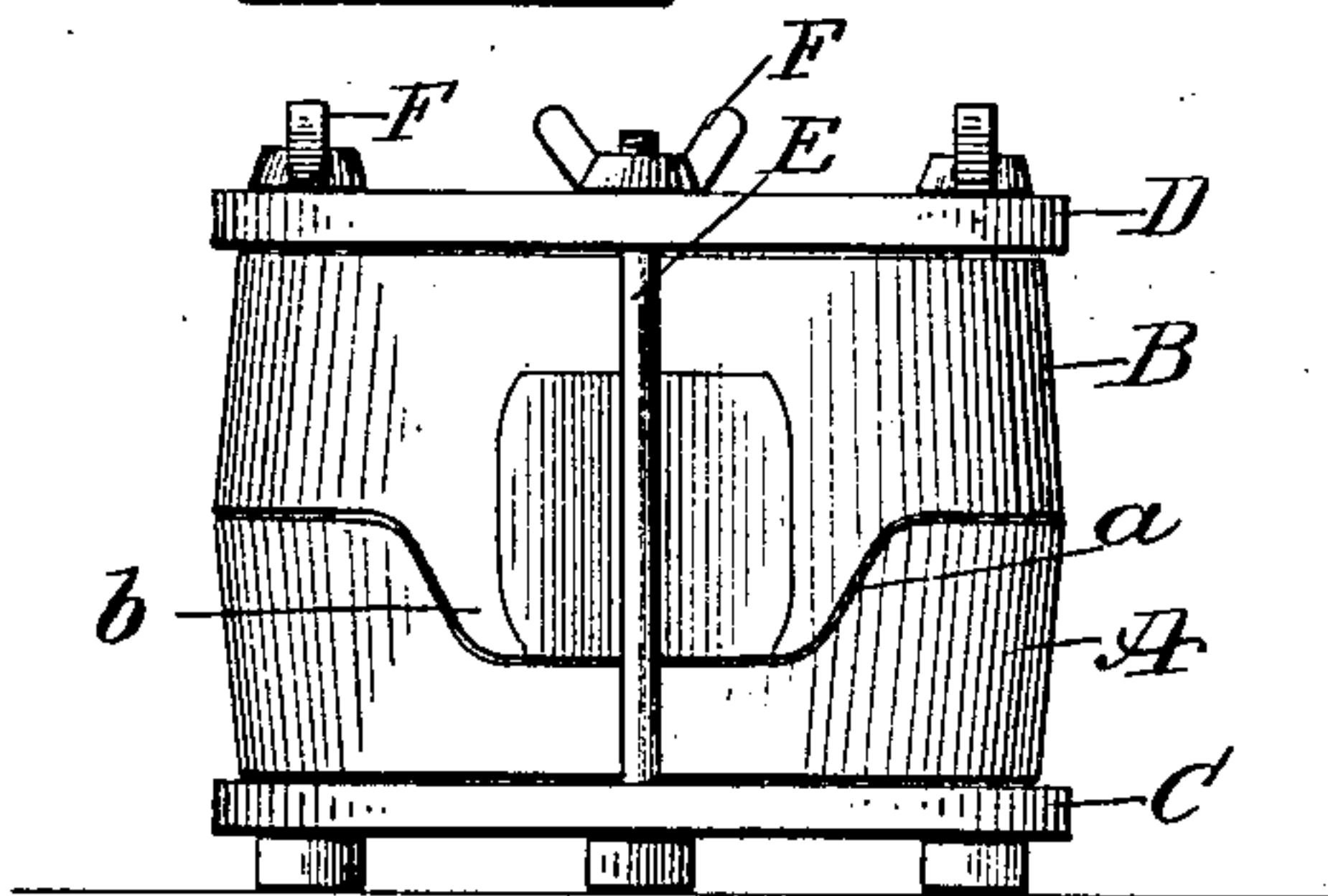


FIG. 4.

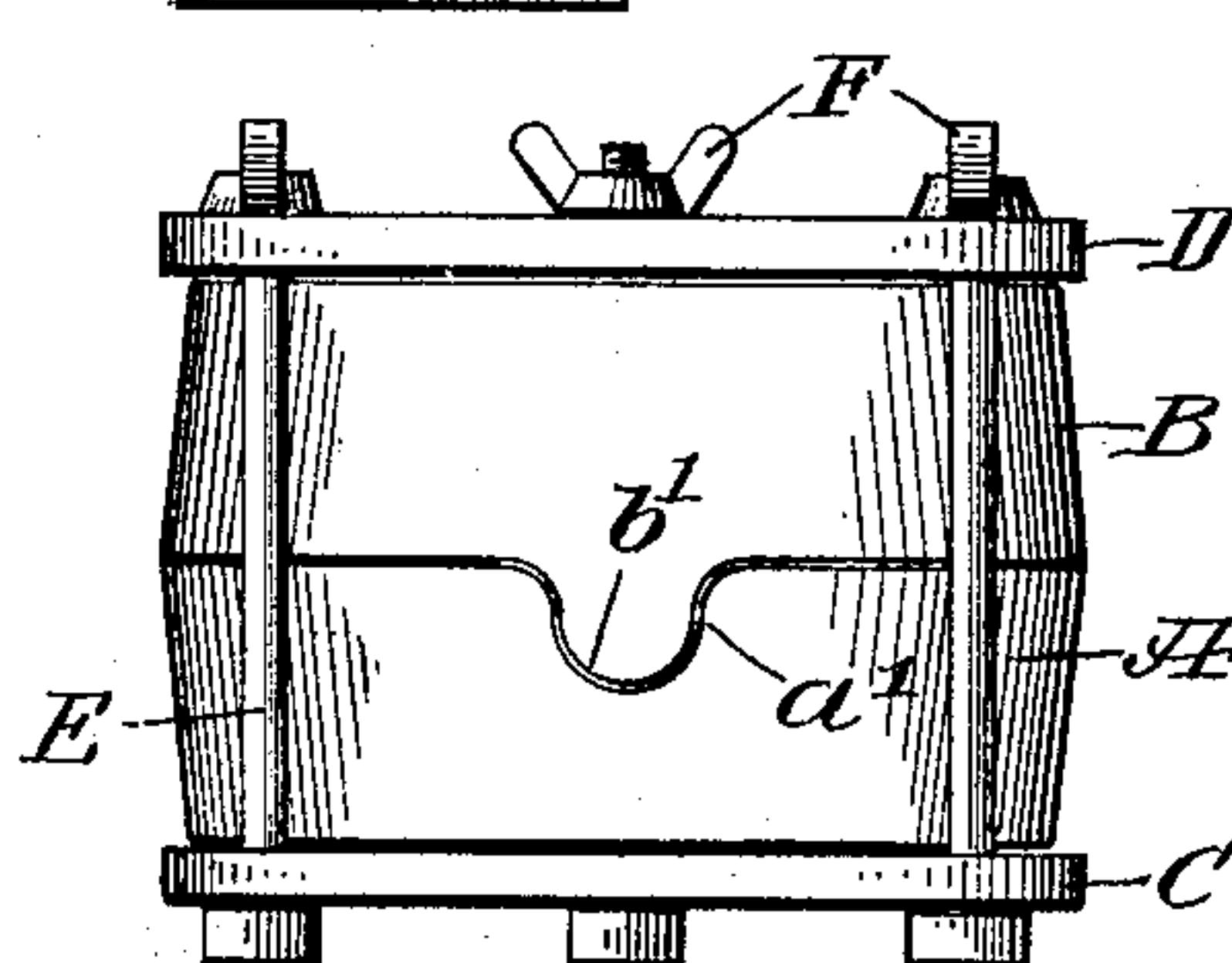


FIG. 5.

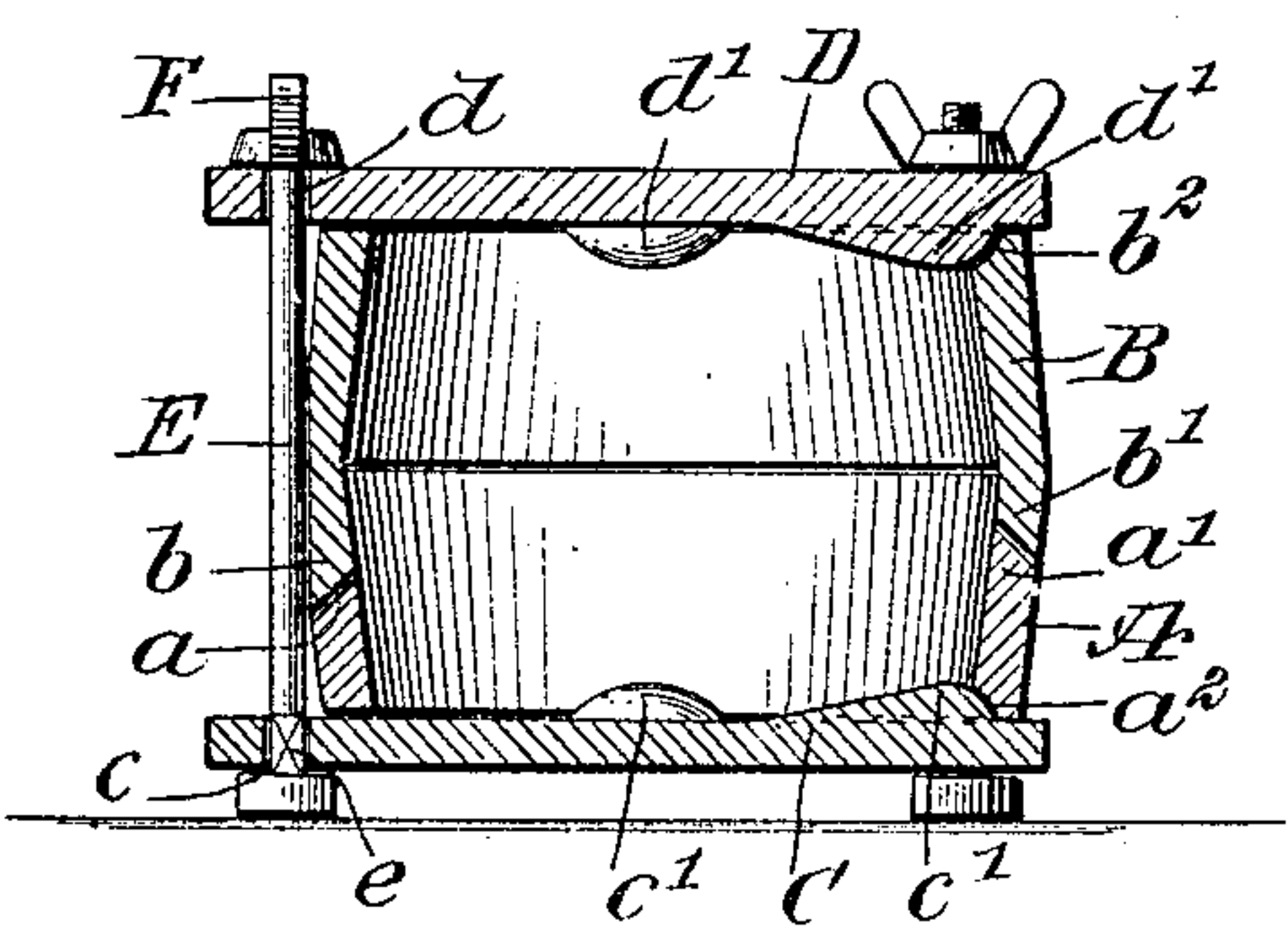
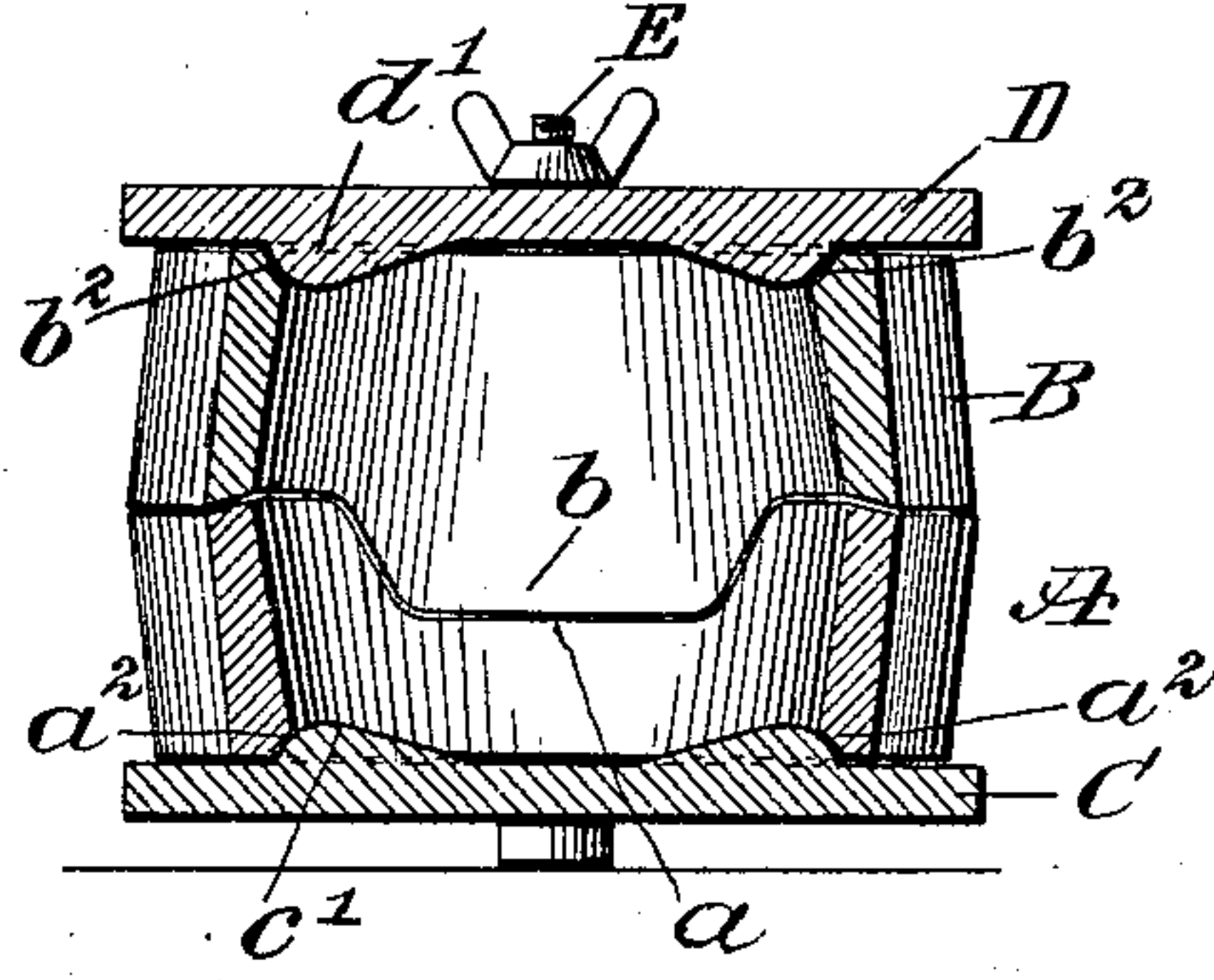


FIG. 6.



WITNESSES:

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WARREN MARSHALL, OF LYNDON, KANSAS.

MOLDING-FLASK.

SPECIFICATION forming part of Letters Patent No. 773,955, dated November 1, 1904.

Application filed April 21, 1904. Serial No. 204,195. (No model.)

To all whom it may concern:

Be it known that I, WARREN MARSHALL, a citizen of the United States, and a resident of Lyndon, in the county of Osage and State of Kansas, have invented a new and Improved Molding-Flask, of which the following is a full, clear, and exact description.

My invention relates to a molding-flask which, although capable of general use for molding plastic substances and casting metals, is especially applicable for the molding of rubber and composition dental plates.

The principal objects of the invention are to provide a flask of the character mentioned which can be readily taken apart, which will have no projections that can be easily broken, and which will provide a surface which will leave ample room to work on the teeth after they are invested.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a plan view of a preferred form of my invention. Fig. 2 is a plan view of the lower half thereof with the upper half and fastening devices removed. Fig. 3 is a rear view. Fig. 4 is a front view. Fig. 5 is a sectional view on the line 5 5 of Fig. 1, and Fig. 6 is a sectional view on the line 6 6 of Fig. 1.

In the drawings the two rings constituting the main part of the flask are represented by the letters A and B. The lower ring A is preferably slightly beveled throughout its top surface, as indicated in Fig. 6, and is provided with two depressions a and a' upon the front and rear thereof. The depression a is made wide for a purpose that will be mentioned later, and the depression a' is narrow and serves merely as a guide. The upper ring B is provided with two corresponding projections b and b' fitting the depressions a and a' . The surfaces of all these depressions are beveled in the manner clearly illustrated in Fig. 5 for the purpose of guiding the parts into position and holding them there while being clamped. Bottom and top plates C and D are provided with projections c' and d' , respectively, on their inner faces for the purpose of holding the rings in position with respect to the top

and bottom plates. The edges of the rings are also provided with depressions a^2 and b^2 , registering with the projections upon the top and bottom plates, so as to aid in their operation.

The parts of the flask are secured together by means of bolts E, which are provided with a square portion e upon their lower end, fitting a square hole e in the bottom plate C. The top plate D is provided with holes d through which the bolts pass in the manner indicated in the drawings. Thumb-nuts F are preferably provided for securing the parts in position.

Heretofore dental flasks have either been provided with long projections which were always being broken off in handling, thus ruining the flask, or with complicated guiding and fastening devices which rendered them expensive. It will be seen from the construction which I have illustrated and which represents my invention that a flask can be formed which can be easily taken apart and put together without the danger of breaking off any projections and which can be securely held in a position in which the two rings can be very easily guided into registration by means of the integral projection upon one and the depressions upon the other. It will also be seen that the wide depression a will allow plenty of room for the performance of the hand operations upon the teeth after they are invested, which operations are always necessary and cannot be conveniently performed with the flasks now in use. This beveling of the edges of the projections and depressions is a very important feature of my invention. It provides for the accurate closing of the parts together at all times and prevents the slipping of the parts upon each other before they are clamped and while being clamped. The large depression in the lower ring permits the model for an upper set of teeth to be let down into the flask out of the way, so it will separate more easily and so that the plaster can be trimmed around it, removing the danger of the rubber being covered with plaster. The model can be invested lower in the flask than in any device heretofore known, and after vulcanizing the contents are more easily

removed and with less danger of breaking the flask.

As stated above, my invention is applicable to various kinds of molding and casting processes; but it is especially valuable when used for the manufacture of rubber dental plates in the plaster investments.

While I have illustrated a particular embodiment of the invention, it will be understood that I do not wish to be limited to the exact construction thereof except as indicated in the appended claims.

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

15 1. A dental molding-flask, comprising a lower section having a wall of a shape corresponding to that of the dental plate and provided with a horizontal top surface upon all the sides thereof, and containing a wide depression upon one side and a relatively narrow depression on the opposite side, and an upper section of corresponding shape and having walls provided with a lower horizontal surface and with a wide and a narrow projection corresponding to and registering with
25 said depressions in the lower section and furnishing guides for aiding in assembling the two sections, said projections and depressions

being provided with beveled edges, said edges being higher upon the inner surfaces than upon the outer surfaces and registering with each other throughout the contiguous surfaces of the walls of the two sections. 30

2. A molding-flask, comprising a lower section having a wall with four sides and a horizontal top surface upon all of the sides, but provided with a wide depression in one side and a relatively narrow depression in the opposite side, and an upper section having four corresponding walls with a lower horizontal surface and with a wide and narrow projection corresponding to and registering with said depressions in the lower section, said projections and depressions in the upper and lower sections being provided with sharply-
45 beveled edges, said edges being higher upon the inner sides of the walls than upon the outer sides.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses. 50

WARREN MARSHALL.

Witnesses:

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J. D. IRVINE.