(No Model.)

2 Sheets--Sheet 1.

B. T. BABBITT.

Multiple Mold for Casting Gun Barrels.

No. 232,228.

Patented Sept. 14, 1880.

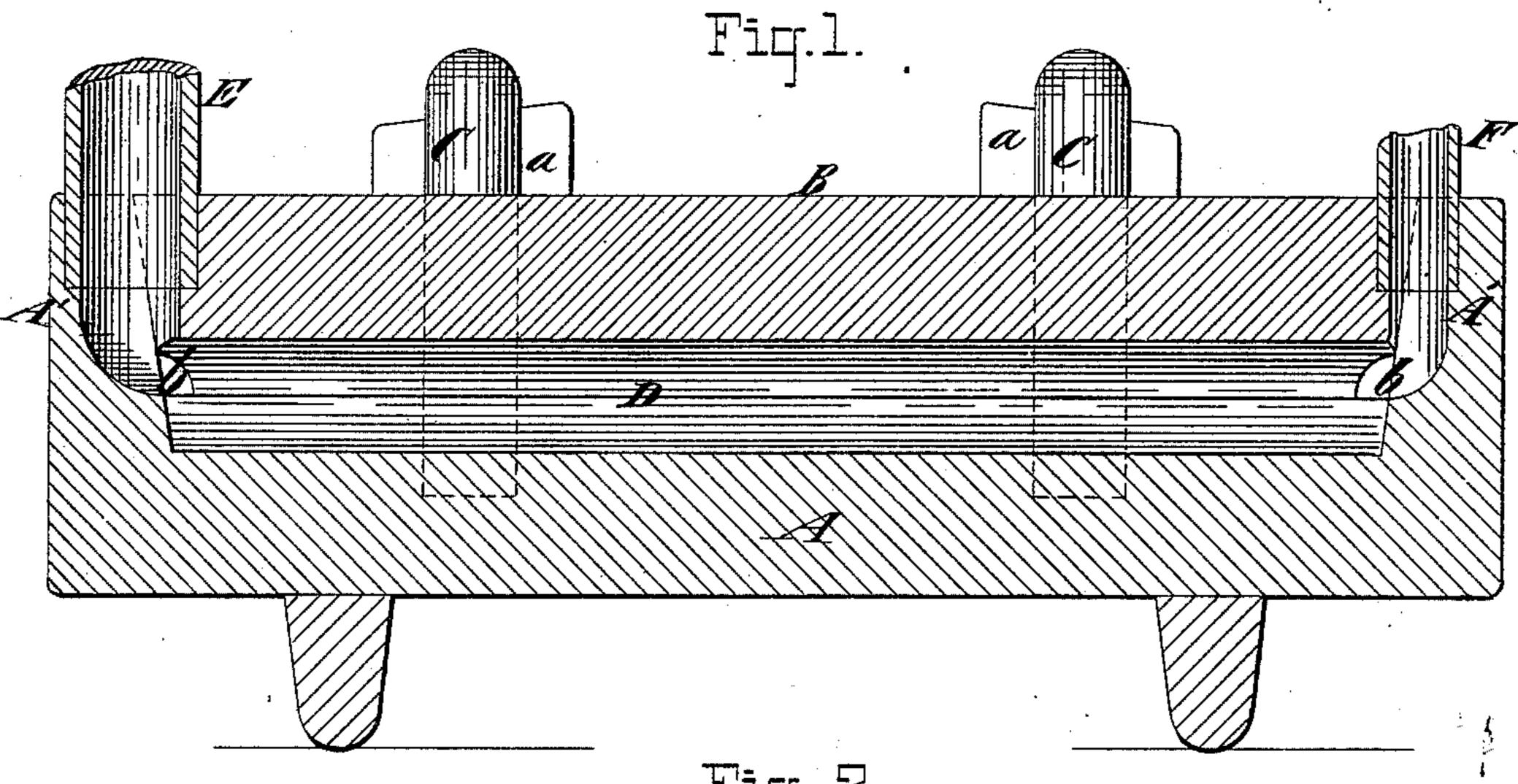
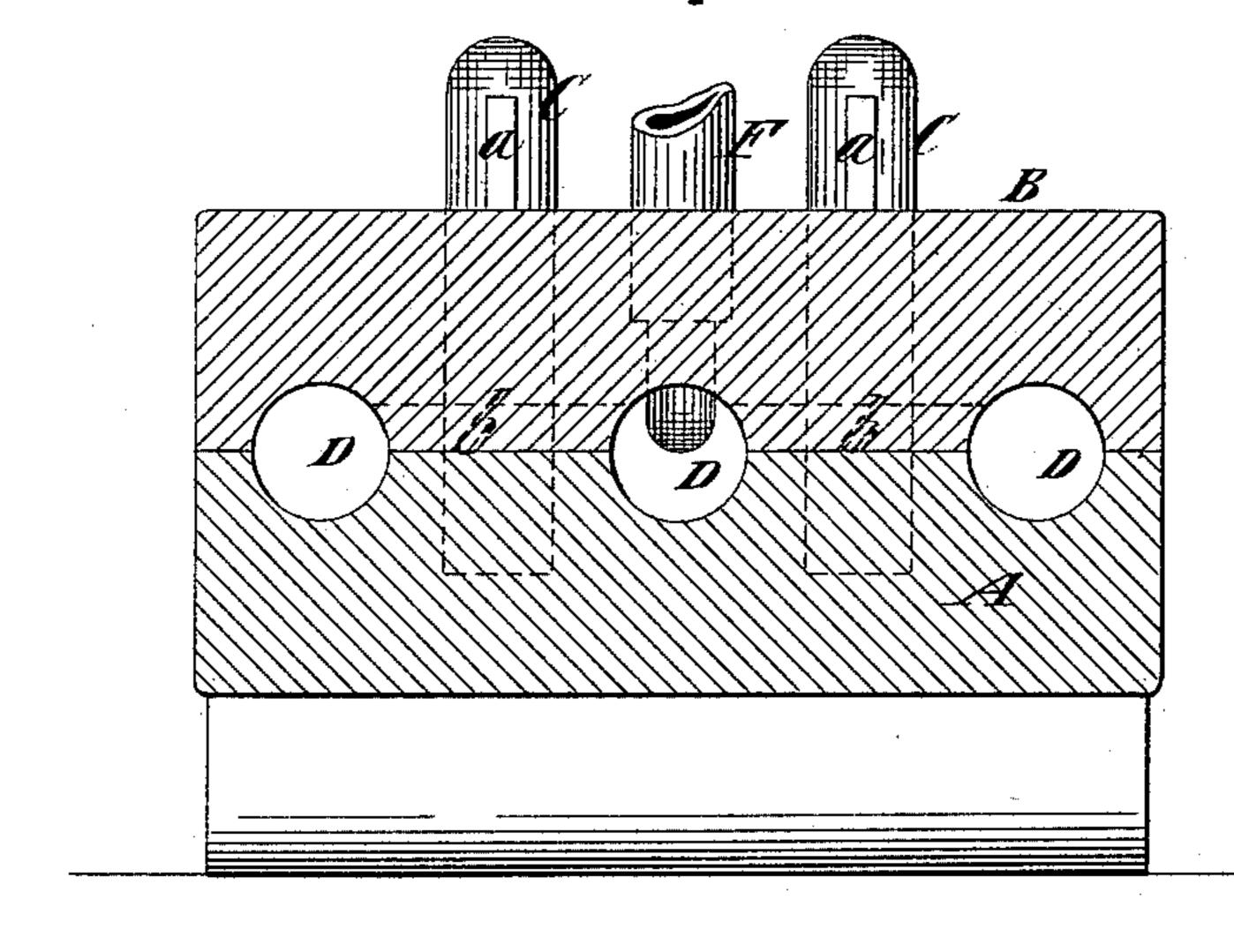


Fig. 2.



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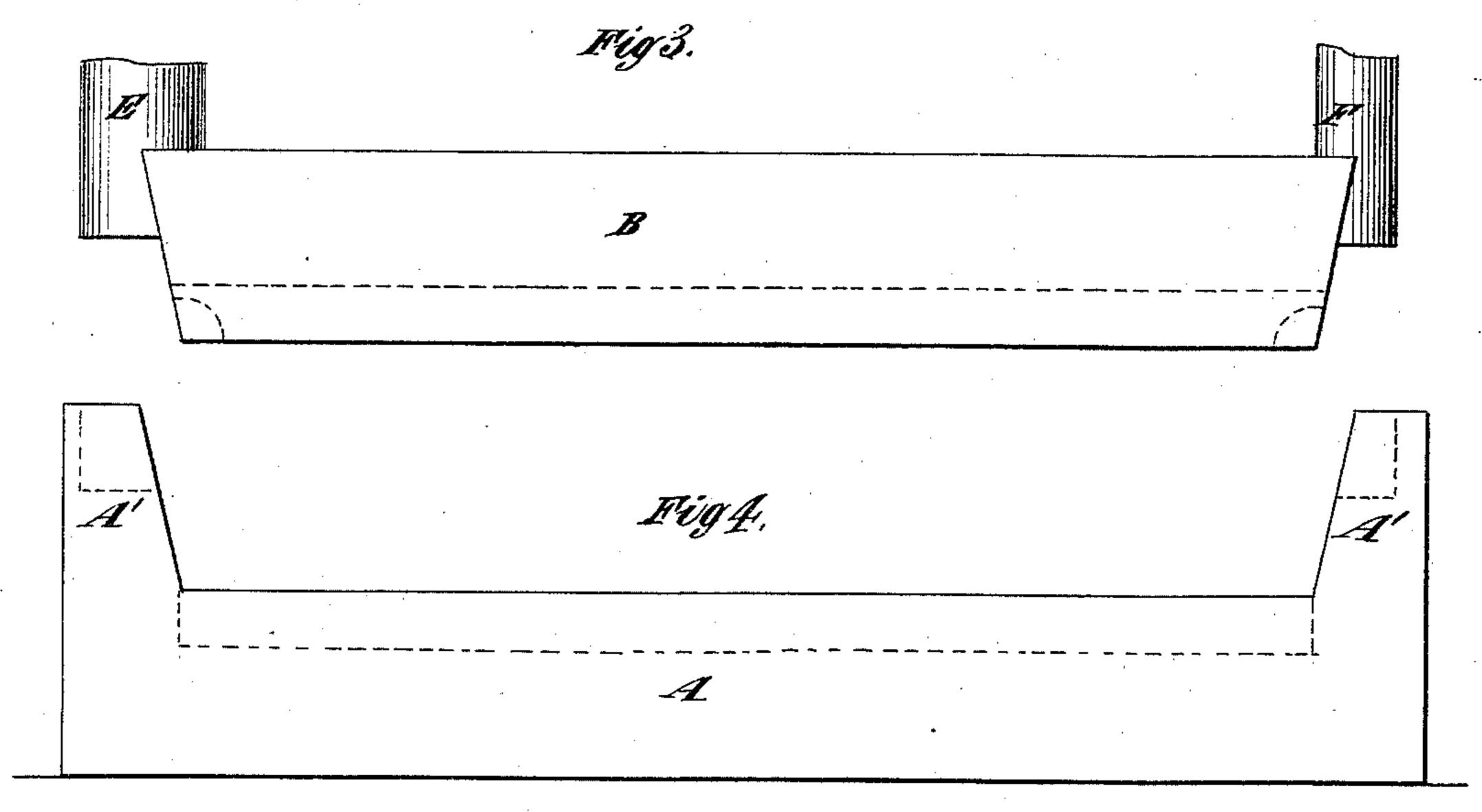
2 Sheets-Sheet 2.

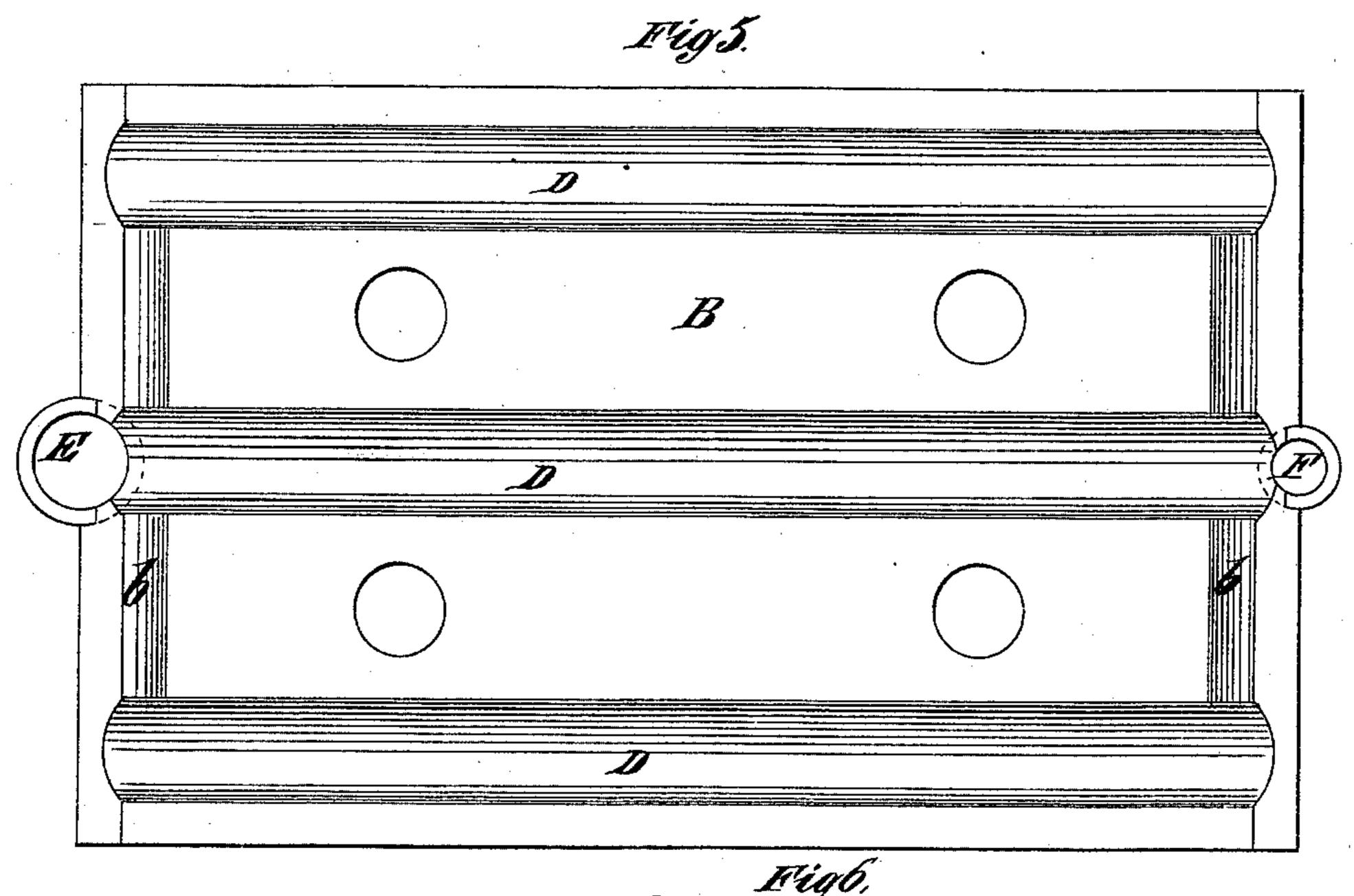
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Mitnesses; Thomas & Brich Trit Haynes Town Homey

United States Patent Office.

BENJAMIN T. BABBITT, OF NEW YORK, N. Y.

MULTIPLE MOLDS FOR CASTING GUN-BARRELS.

SPECIFICATION forming part of Letters Patent No. 232,228, dated September 14, 1880. Application filed April 20, 1880. (No model.)

To all whom it may concern:

Be it known that I, BENJAMIN T. BABBITT, of the city of New York, in the county and State of New York, have invented certain new 5 and useful Improvements in Multiple Molds for Casting Gun-Barrels, of which the following is a specification.

My invention relates to multiple molds or mold-boxes constructed with a series of molds 10 in which a number of gun-barrels may be cast

at one time.

The invention consists in a mold-box composed of two parts or sections, constructed with a series of molds for gun-barrels arranged side 15 by side, a pouring hole or gate at one end communicating with the several molds, and an exhaust-nozzle at the other end, also communicating with the several molds, to provide for exhausting the air from the molds.

In order to facilitate the construction of the mold-box and to insure the proper centering of the parts or sections one upon the other, the lower part or section is provided with upwardly-projecting flanges, between which the 25 upper part or section fits, and the molds extend, the entire length of the upper part or section, and the communication of the several molds with one pouring hole or gate and one exhaust-nozzle is conveniently effected by 30 grooves formed in the inner end corners of

said upper part or section. In the accompanying drawings, Figure 1 represents a longitudinal section through a mold-

box embodying my invention. Fig. 2 repre-35 sents a transverse section thereof. Fig. 3 represents a side view of what is in this instance the upper part of the mold-box. Fig. 4 represents a side view of the under side thereof. Fig. 5 represents an inverted plan of said up-40 per part; and Fig. 6 represents an end view

thereof.

Similar letters of reference designate corre-

sponding parts in both the figures.

45 the mold-box, and B the other part or section thereof. Any desirable means may be employed for holding or locking the two parts or sections together which will at the same time permit of their being readily separated.

The devices here employed for this purpose consist of pins or studs C, projecting from the lower part or section, A, and passing loosely through holes in the upper part or section, B, which is secured in place by the keys a.

In order to enable the mold-box to be cheaply 55 made, and to facilitate the proper centering of the parts or sections A and B one upon the other, the part or section A is constructed with upwardly-projecting flanges A' at each end, and the part or section B is of a length to fit 60 between said flanges, as clearly shown in Fig. 1. In this mold-box are formed any number of separate molds D, of which three are here shown, and E designates a pouring-hole for the entrance of the molten metal, which com- 65 municates with each of the molds D.

In order to render the cast barrels of uniform density and prevent blow-holes, it is desinable to exhaust the air from the molds; and to provide for this I employ an exhaust-nozzle, 70 F, at the other end of the mold-box from the pouring-hole, and in communication with the several molds D.

When the part or section A is constructed with the flanges A' the molds D should ex- 75 tend the full length of the part or section B, and when so constructed the communication of each mold with the pouring-hole and exhaust-nozzle may be conveniently effected by grooving the lower corner at each end of the 80 part or section B, forming passages b, (clearly shown in Fig. 1 and in dotted outline in Fig. 2,) so as to connect the ends of all the molds D.

By my invention I provide a mold which may be cheaply constructed and in which large 85 numbers of gun-barrels may be cast very quickly.

What I claim as my invention, and desire

to secure by Letters Patent, is—

1. A mold-box composed of two parts or sec- 90 tions constructed with a series of molds for gun-barrels arranged side by side, a pouring hole or gate at one end communicating with the several molds, and an exhaust - nozzle at the other end, also communicating with the 95 several molds, substantially as specified.

2. The mold-box composed of the part or A designates one of the parts or sections of | section A, provided with the flanges A', and the part or section B, fitting between the said flanges, the molds D, extending the entire 100 length of the part or section B, the pouringhole E, the exhaust-nozzle F, and the passages b, consisting of grooves in the inner ends of the part or section B, substantially as specified. B. T. BABBITT.

Witnesses:

HENRY T. BROWN, FREDK. HAYNES.