

(No Model.)

W. MORRISON.
FIRE EXTINGUISHER:

No. 259,037.

Patented June 6, 1882.

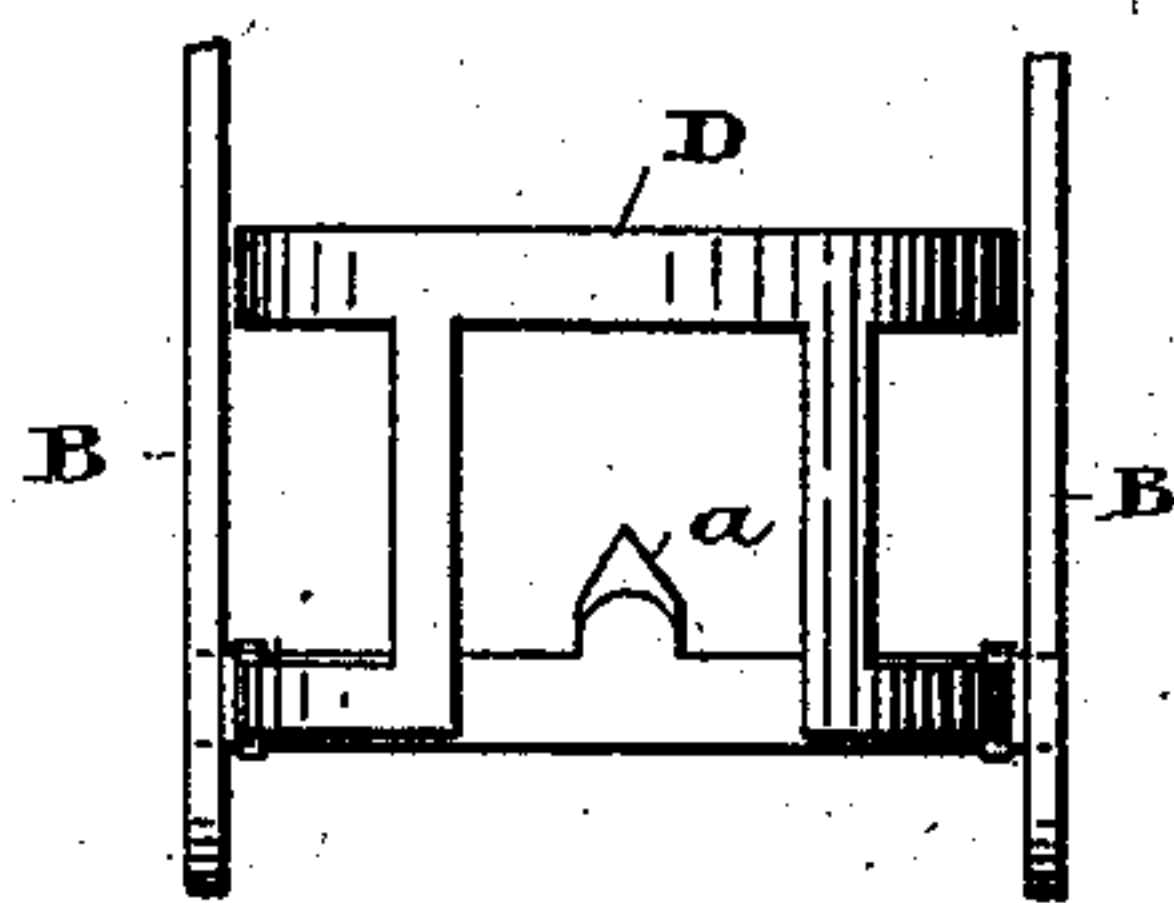


Fig. 4.

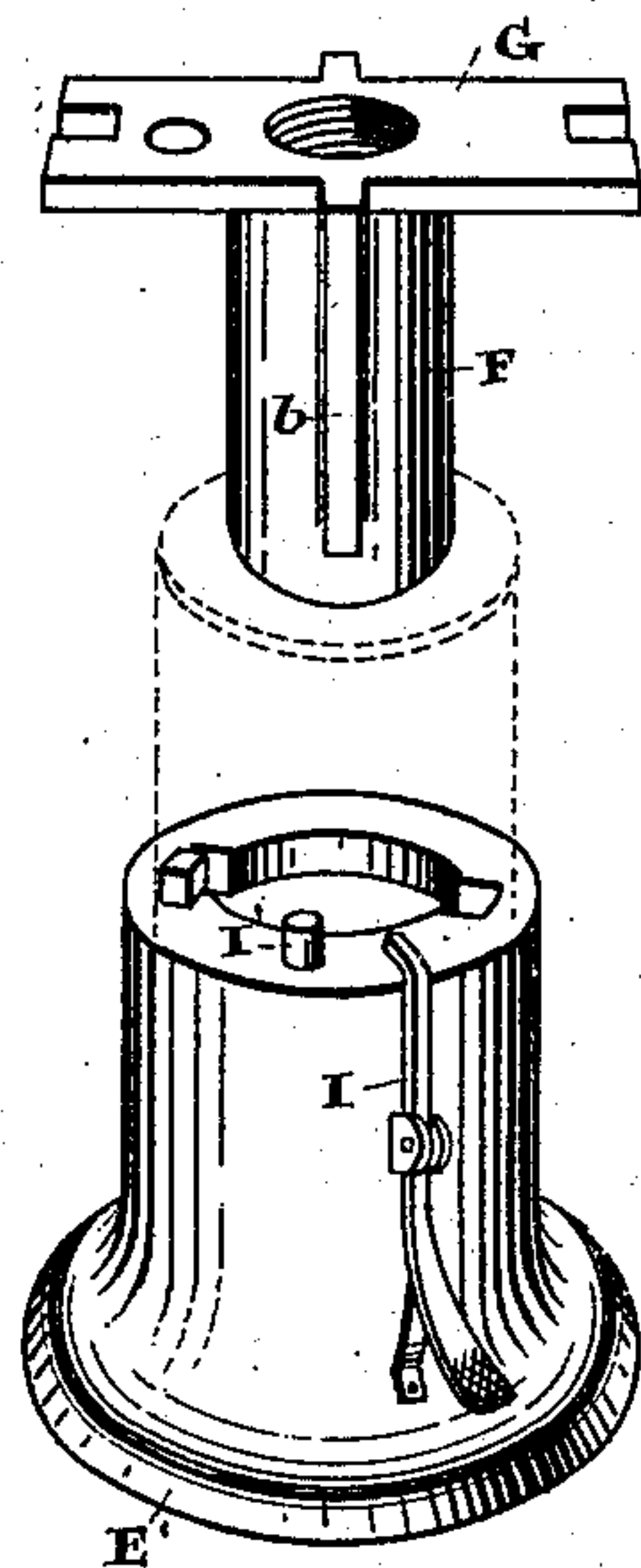


Fig. 3.

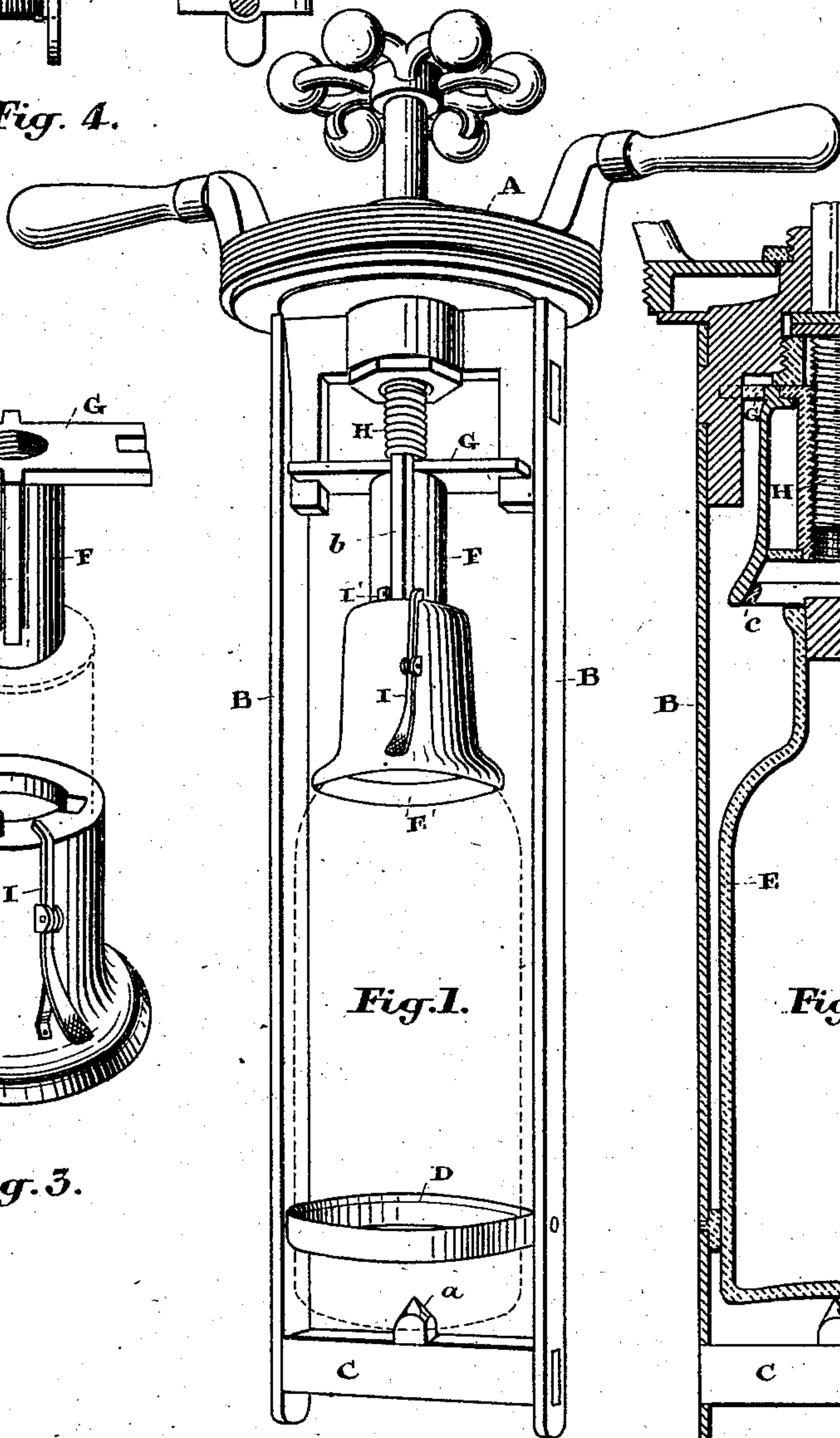


Fig. 1.

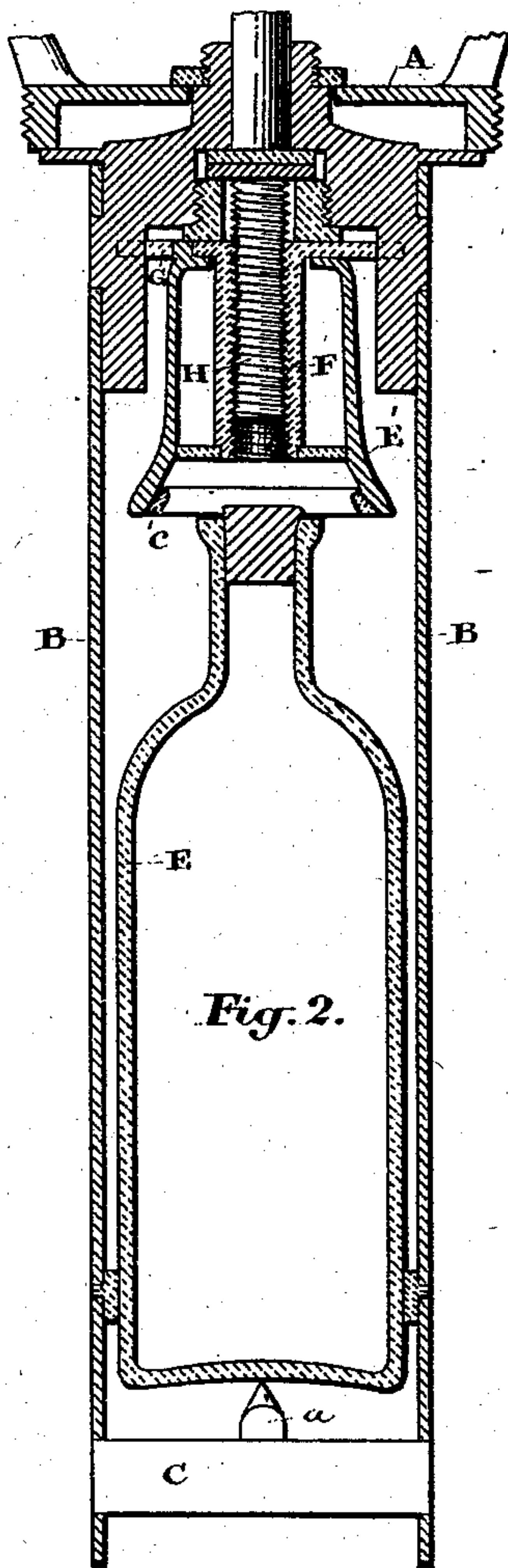


Fig. 2.

Witnesses.

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UNITED STATES PATENT OFFICE.

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FIRE-EXTINGUISHER.

SPECIFICATION forming part of Letters Patent No. 259,037, dated June 6, 1882.

Application filed January 16, 1882. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM MORRISON, a subject of the Queen of Great Britain, residing at the city of Toronto, in the county of York, in the Province of Ontario, Canada, have invented certain new and useful Improvements in Fire-Extinguishers, of which the following is a specification.

My invention relates to certain improvements in fire-extinguishers; and it has for its object to insure the total discharge of the acid into the cylinder or receptacle containing the fluid; and it consists of an arrangement of parts, hereinafter explained, by which an ordinary glass bottle containing the acid is suspended within the cylinder containing the fluid, a fracturing device being so arranged that by its adjustment the bottom of the bottle will be broken, and thereby the entire acid contained within it discharged into the cylinder, as hereinafter more particularly explained.

Figure 1 is a perspective view of my device for supporting and fracturing the bottle. Fig. 2 is a sectional elevation of the same, showing the adjustable cap elevated in order to permit the insertion of the bottle into position. Fig. 3 is a detail of the adjustable cap. Fig. 4 is a detail showing a plan for throwing out of the support-ring any portion of the bottle which might be accidentally retained by it.

In the drawings, like letters indicate corresponding parts in each figure.

A is the main plug of the extinguisher, which is screwed, as usual, into the hole in the top of the cylinder, through which the liquid is poured into the cylinder.

B are two rods rigidly secured to the main plug A. These rods are connected together at their lower end by a cross-piece, C, upon the center of which, on its upper side, an angular or pointed projection, *a*, is formed, as shown.

D is a ring, either pivoted to the rods B, as shown in Fig. 1, or pivoted upon the cross-piece C, as shown in Fig. 4. In either case this ring is of such a size as will encircle the body of the bottle. When it is simply pivoted, as shown in Fig. 1, it is so arranged merely for the purpose of permitting the insertion of the bottle E under the adjustable cap E'. This cap is pierced with a vertical hole arranged to fit over the neck F, which neck extends from and is sup-

ported by a cross-head, G, which is attached to the screw H, passing through a nut and stuffing-box formed in the main plug A, as indicated by the drawings. On the side of the neck F, I form one or more feather-keys, *b*, which are arranged to pass through slots made in the cap E'. When these slots are brought opposite to the keys *b* the cap E' may be slipped up on the neck F; but when the cap is down, as shown in Fig. 1, and turned so as to keep the slots clear of the feather-keys, one of which, as shown in the figure, is held between the spring-catch I and stop I', thus preventing the cap from turning. When it is desired to insert the bottle E in position the spring-catch is opened, and then the cap E' is slipped up on the neck F into the position shown in Fig. 2, when the bottle may be readily inserted in position. When so inserted the cap is brought down to the position shown in Fig. 1, so that it will rest on the shoulder of the bottle. It is then turned around so that the slots shall not be opposite to the keys. When the main plug A has been screwed in its proper position in the machine and it is desired to discharge the acid into the interior, the screw H is turned down so as to compress the cap against the bottle, which action forces the bottom of the bottle against the pointed projection *a*, immediately fracturing it and discharging the acid, as desired.

In order to insure the breaking of the bottle at its bottom instead of its top, I place a gasket, *c*, of rubber, leather, or other suitable soft material, on the bottom face of the cap E'.

What I claim as my invention is—

1. In a chemical fire-extinguisher, a frame extending from and rigid with the main plug, a shank, F, having feather-cleats *b*, and a sliding cap having recesses corresponding to said cleats, whereby the bottle may be inserted by sliding the cap upward and locked by partially rotating the cap after the cleats are out of engagement, as set forth.

2. In a chemical fire-annihilator, the frame B, rigid with the plug A, and having the cross-bar C, with point *a*, the shank F, having feather-cleats *b*, and the sliding cap E', having corresponding recesses, combined with the ring D, pivoted to the said cross-bar C, as specified.

3. In a chemical fire-extinguisher in which

the acid-bottle rests upon a stationary pointed
projection, an adjustable cross-head with a
downwardly-projecting neck having a feather-
key formed upon one side of it, in combination
5 with a cap arranged to fit over the top of the
bottle and onto the projecting neck, a slotted
passage-way being made in the cap to admit

the feather-key, and a spring arranged to hold
the cap in its proper relative position, as and
for the purpose specified.

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Witnesses:

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