

(No Model.)

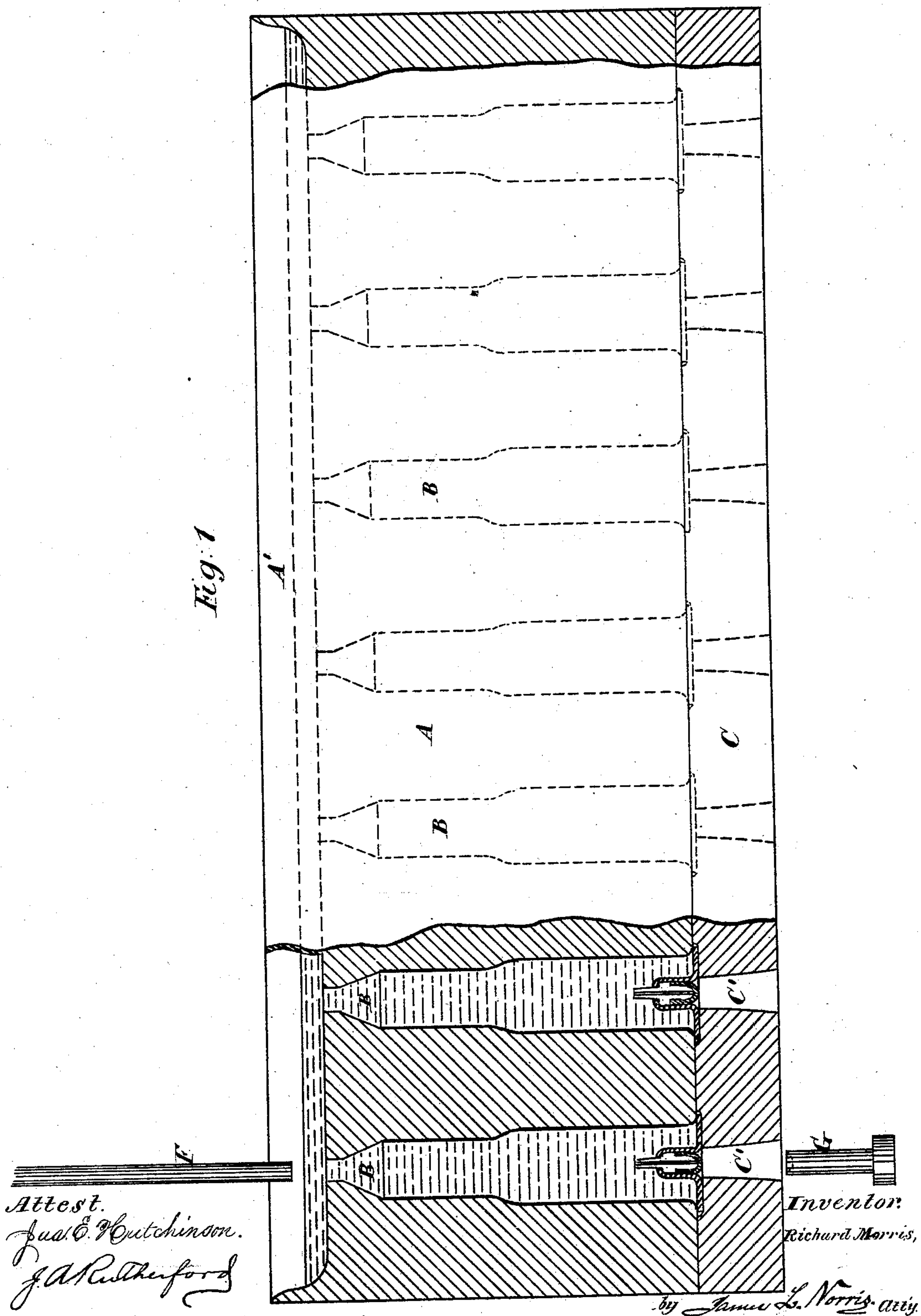
2 Sheets—Sheet 1.

R. MORRIS.

Apparatus for Resizing, Uncapping, and Capping
Cartridge Shells.

No. 236,611.

Patented Jan. 11, 1881.



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2 Sheets—Sheet 2.

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FIG. 2

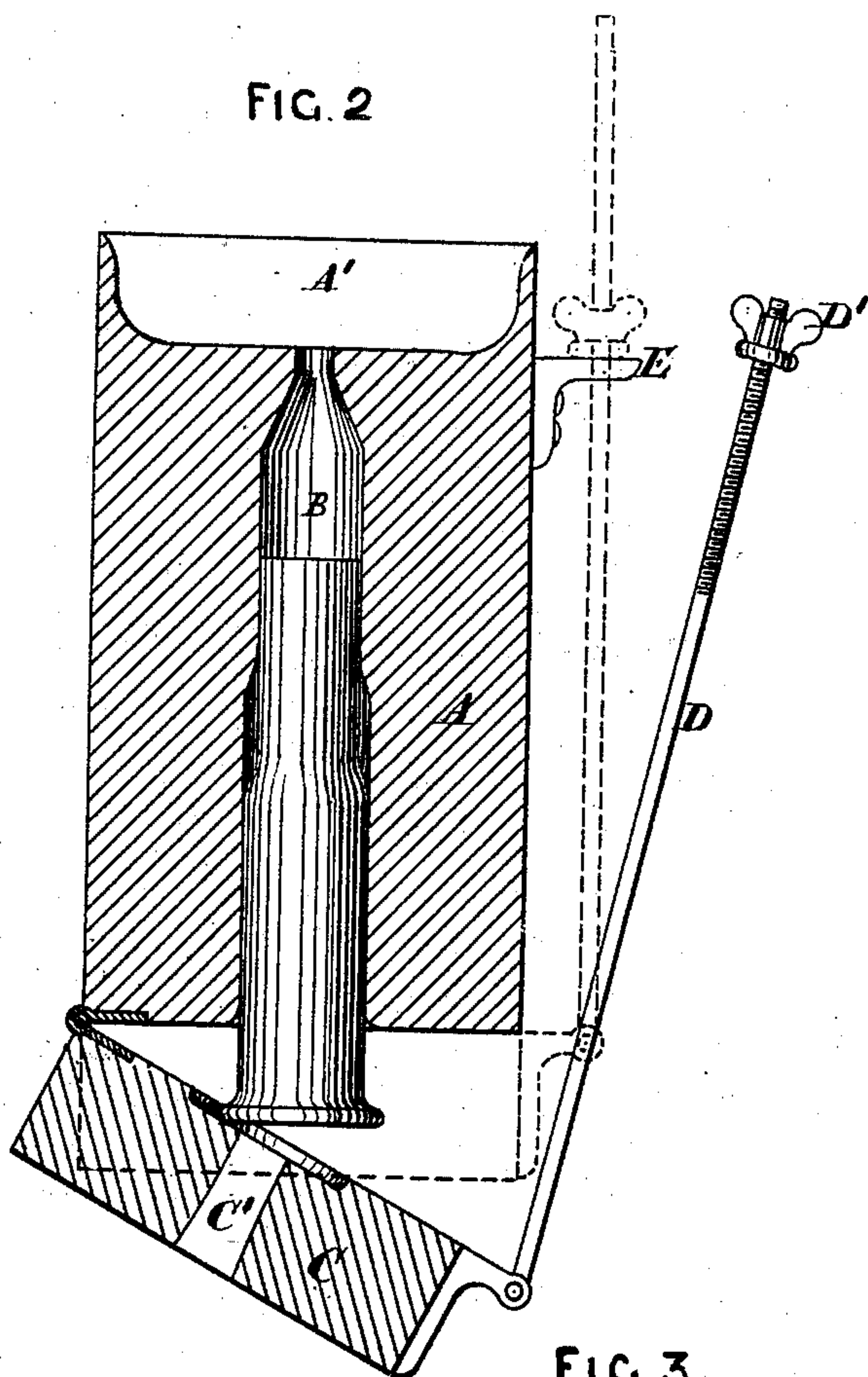
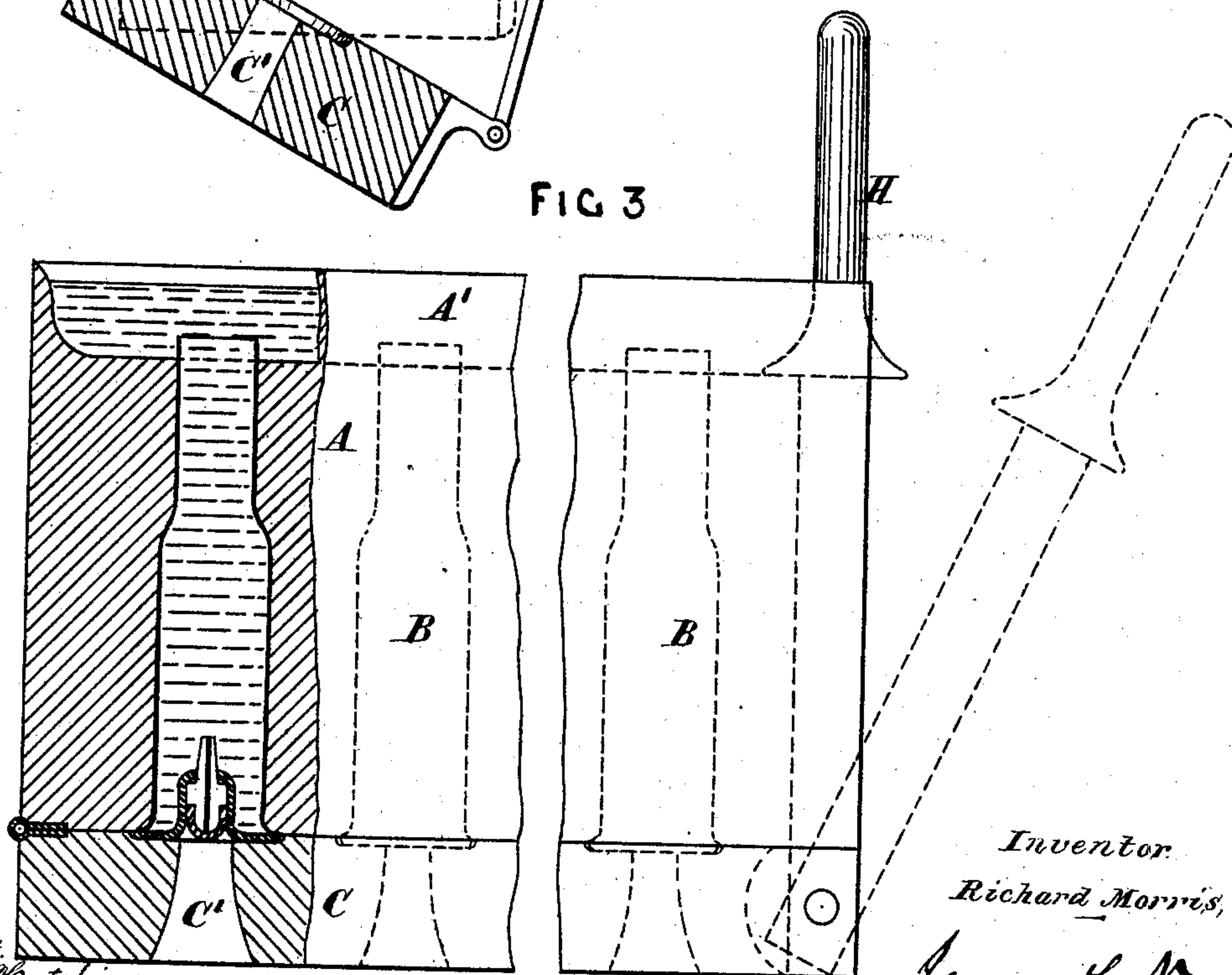


FIG. 3



Attest.
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Inventor.
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Atty

UNITED STATES PATENT OFFICE.

RICHARD MORRIS, OF BLACKHEATH, COUNTY OF KENT, ENGLAND.

APPARATUS FOR RESIZING, UNCAPPING, AND CAPPING CARTRIDGE-SHELLS.

SPECIFICATION forming part of Letters Patent No. 236,611, dated January 11, 1881.

Application filed December 1, 1880. (No model.) Patented in England June 26, 1880.

To all whom it may concern:

Be it known that I, RICHARD MORRIS, of Blackheath, in the county of Kent, England, have invented a new and useful Improved Ap-
paratus for Resizing, Uncapping, and Recap-
ping Cartridge-Cases, for which I have ob-
tained a patent in Great Britain, No. 2,602,
dated June 26, 1880, and of which the follow-
ing is a specification.

When a cartridge has been fired, the empty
case withdrawn from the fire-arm is somewhat
expanded or otherwise forced out of its proper
shape, and it has on it the case of the fired
percussion-cap.

My invention relates to a simple and port-
able apparatus which can be used by troops
in the field for rendering the cases of fired
cartridges available for repeated use, this ap-
paratus being arranged so that the cartridge-
case is by its use restored to its proper size
and shape, has its used cap removed from it,
and can be provided with a new cap, so as to be
ready for charging in order to be fired again.

The construction of and mode of operating
with the said apparatus will be readily under-
stood on reference to the accompanying draw-
ings, in which—

Figure 1 shows a part side view and part
longitudinal section of the apparatus, and Fig.
2 shows a cross-section of the same. Fig. 3 is
a view of a modification of my invention.

A is a block of hard wood or metal, having
formed in it any desired number of holes, B,
constituting dies, formed at the lower part of
the exact required configuration of the finished
cartridge-case. If preferred, the block may
contain only one such die. To the under side
of the block is hinged a cover, C, having one
or more screwed rods, D, pivoted to its free
side. This rod has a thumb-nut, D', which,
when the rod is brought inside a fork, E, pro-
vided at the top of the block, is screwed up
so as to bring the cover close up against the
block, as indicated by dotted lines. Thus,
the cover being open, the cartridge-cases re-
quiring to be resized are pushed by hand into
the dies as far as they will go, the cover is
brought up against them, as shown at Fig. 2, and
is forced home, as above described, thus forcing
the cartridge-cases into the die, and causing

them to assume the shape thereof. The upper
ends of the dies, beyond the ends of the car-
tridge-cases, are reduced in diameter, so as to
terminate in a hole at top of considerably less di-
ameter than the cartridge-case, and a plunger,
F, is provided which fits this hole. The top
of the block A is provided with a rim, A', so
as to form a shallow trough, into which, when
the cartridge-cases have been introduced as
described, water or other suitable liquid is
poured, so as to fill all the dies and cartridge-
cases. The plunger F is then successively
driven into the upper open end of each die
with a moderate blow from a hammer, which
blow is communicated through the water as a
considerable pressure, and such pressure, act-
ing on the cap in the cap-chamber, forces it
out through the hole C' in the cover C, with-
out thereby enlarging or deforming the hole of
the cap-chamber. At the same time the water
in escaping through the hole will effect the
washing out of the cartridge-case. When the
caps have all been removed by this means the
remaining water is poured off and the ap-
paratus is dried; after which it is turned up-
side down, and an anvil having been dropped
into the cap-chamber of each cartridge-case
through the hole C' of the cover, a fresh cap
is then dropped in through the hole, and is
driven home into the cap-chamber by means of
the capping-stud G, which is formed with a
head, so as to prevent the cap from being
driven in too far. The cover C is then opened,
and the resized and recapped cartridge-cases
are removed to be refilled for repeated use.
Where the cartridge-case is of such material
as might be damaged by the use of water,
another liquid, such as oil, may be used, or a
tube might be inserted into the case as a tem-
porary lining.

Although I prefer to construct the dies with
reduced upper ends, as described, as by this
means the plunger F in acting on only a small
area will produce considerable pressure with
only a moderate blow of the hammer, yet the
apparatus may also be arranged as shown at
Fig. 3, where the cartridge-cases extend to the
upper end of the dies, or project slightly through
them, and the plunger F is made of a diameter
to fit into the cartridge-case itself. In this

arrangement the cover C is hinged at one end, instead of at the side, and is secured by a pivoted catch, H.

5 Having thus described the nature of my invention, and in what manner the same is to be performed, I claim—

1. In an apparatus for resizing and uncapping cartridge-cases by liquid pressure, a block provided with a series of holes extending
10 through the same, the upper portions of the holes communicating with a water-trough common to all, and the lower portions of the holes constituting dies for resizing the cartridge-cases, in combination with a movable cover at
15 one side of the die-block for supporting the heads of the cartridge-cases while being acted upon by the liquid pressure, all substantially as and for the purpose described.

2. Apparatus for resizing and uncapping cartridge-cases, consisting of the block A, with
20 die B, cover C, screw-rod D, with nut D', and plunger F, all combined and operating as herein described.

3. Apparatus for resizing, uncapping, and recapping cartridge-cases, consisting of the
25 block A, with die B, cover C, screw-rod D, with nut D', plunger F, and recapping-stud G, all combined and operating as herein described.

In testimony whereof I, the said RICHARD MORRIS, have hereunto signed my name in the
30 presence of two subscribing witnesses.

RICHARD MORRIS.

Witnesses:

CHAS. D. ABEL,
OLIVER IMRAY.