

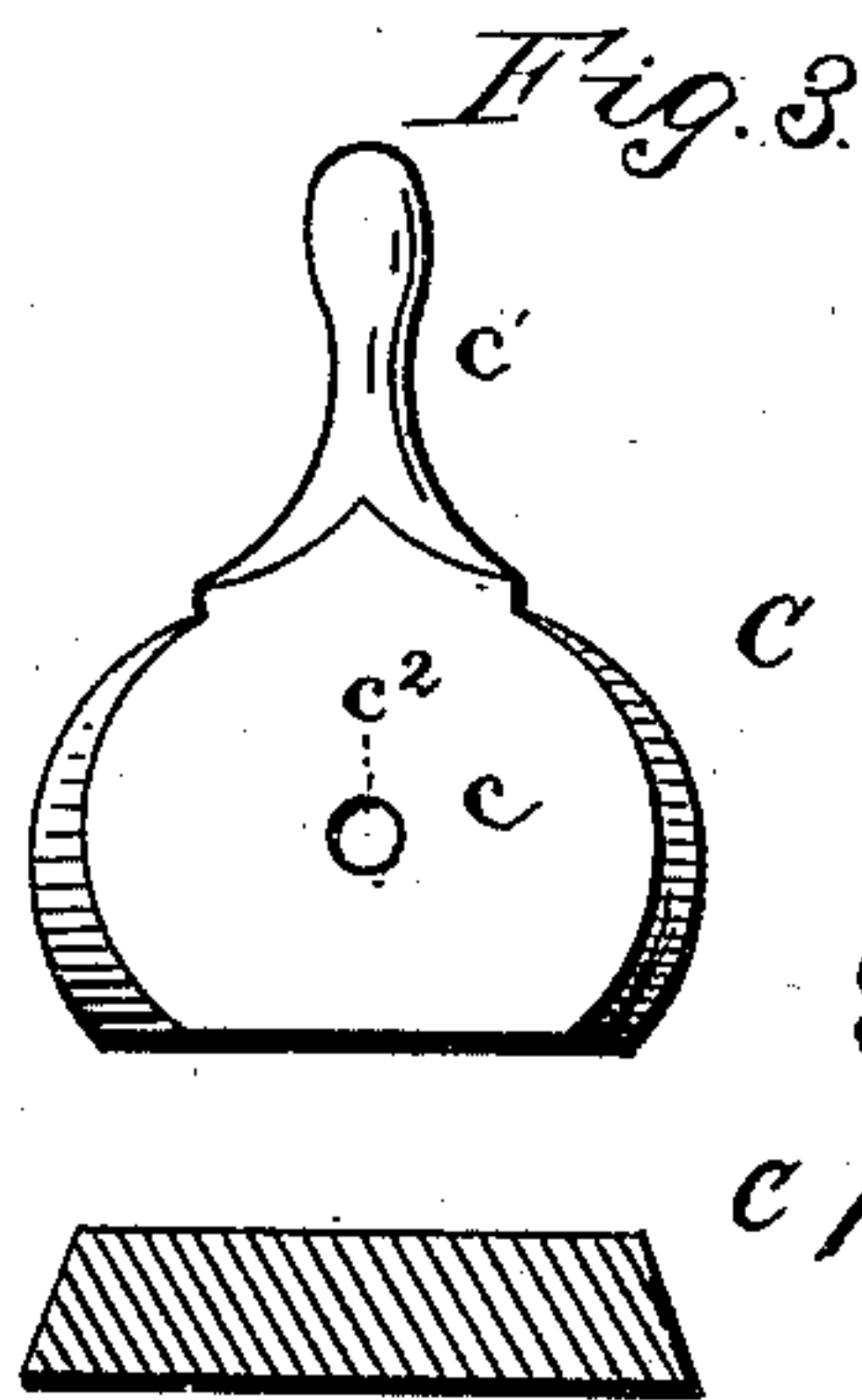
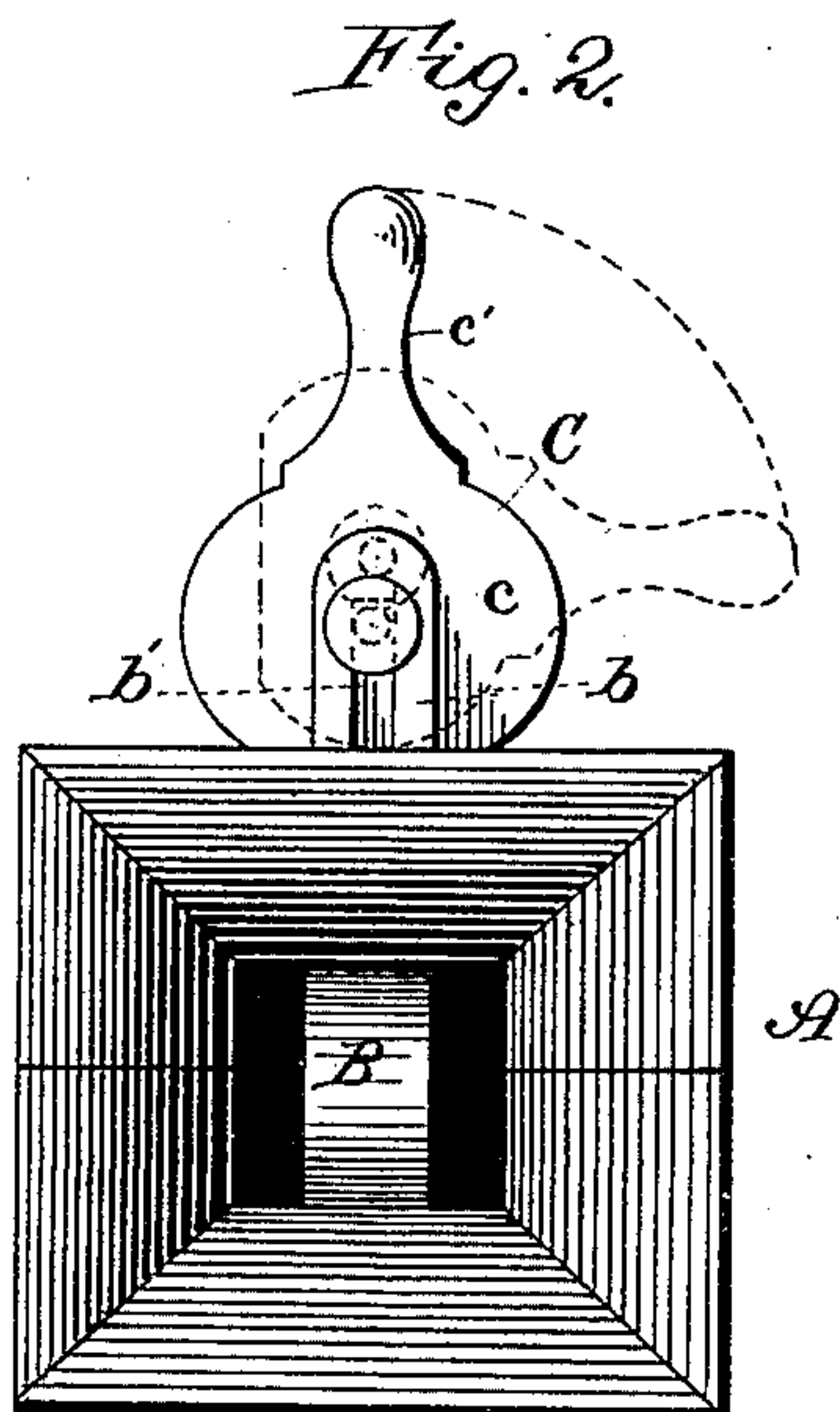
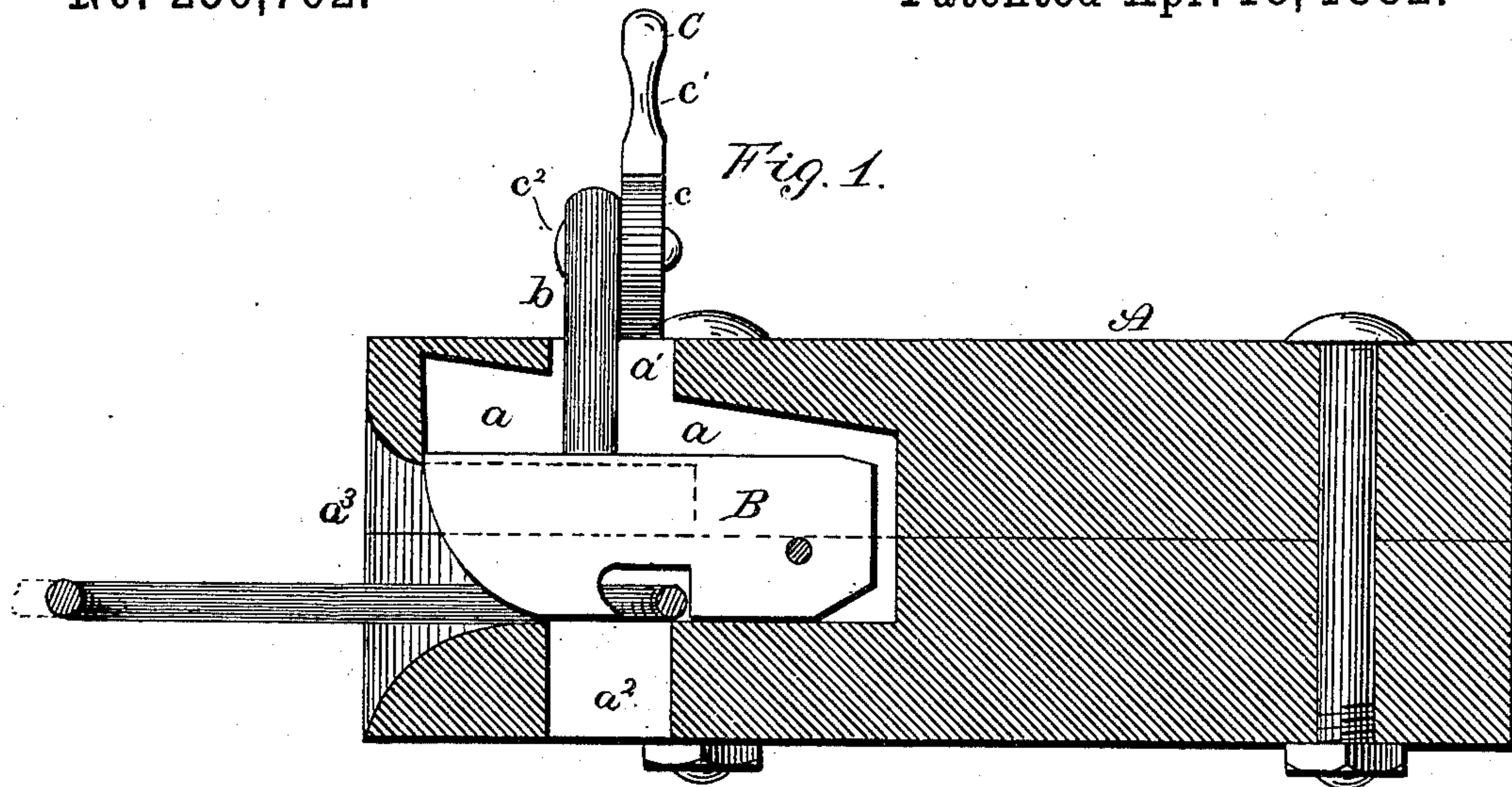
(No Model.)

S. & R. S. TAPPENDEN.

CAR COUPLING.

No. 256,762.

Patented Apr. 18, 1882.



Witnesses:

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UNITED STATES PATENT OFFICE.

STEPHEN TAPPENDEN AND RICHARD S. TAPPENDEN, OF NORTH AMHERST,
OHIO.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 256,762, dated April 18, 1882.

Application filed February 8, 1882. (No model.)

To all whom it may concern:

Be it known that we, STEPHEN TAPPENDEN and RICHARD S. TAPPENDEN, citizens of the United States, residing at North Amherst, in the county of Lorain and State of Ohio, have invented certain new and useful Improvements in Car-Couplings, of which the following is a specification, reference being had therein to the accompanying drawings.

10 Our invention relates to car-couplings; and it consists in the construction and arrangement of its several parts, as will be hereinafter fully set forth, and pointed out in the claims.

15 In the drawings, Figure 1 is a vertical longitudinal section of the draw-head, showing the coupling apparatus therein. Fig. 2 is a front view, and Fig. 3 is an elevation of the cam-lever. It is made in sections, upper and lower, as shown.

20 In the forward portion of the draw-head is a recess, *a*, which has openings *a'* in its upper side, *a²* in its lower side, and *a³*, into which the link passes. Pivoted in the rear portion of the recess is the clutch B. It extends forward, and its front end is curved from top to bottom inwardly, as shown. In the bottom of the clutch is a recess, *c*, in which the link is caught and held, as shown.

30 Projecting from the upper side of the clutch and passing through the opening *a'* is a pin, *b*, the upper portion of which is provided with a slot *b'*, as shown.

35 C is a cam-lever, of which *c* is the cam portion and *c'* the handle. Projecting at right angles from the center of the cam portion is a pin, *c²*, which passes through the slot *b'* of the pin *b*, as shown. The bottom portion of the lever is straight, as shown, and the periphery of the cam portion is beveled, as shown. This lever is pivoted to the rear side of the pin *b*, with the top of the bevel, or, in other words, the longest side of the lever, next to it. When the link is within the draw-head and held by the clutch, as shown in Fig. 1, the flat portion of the lever C rests against the top of the draw-head, as shown. When it is desired to raise

the pin and clutch to release the link, the handle of the lever is grasped and carried over to either side, as shown in dotted lines, Fig. 2, which will raise the pin *b*, because the distance from the pin *c²* to the side of the lever is greater than that from the pin to the top or straight portion upon which the lever rests when the clutch is down.

It will be understood that as the pin is raised by the lever it will incline backwardly, and the lever, by reason of the bevel upon the periphery of its cam portion, will always bear its full width upon the top of the draw-head. The draw-head will also act automatically by reason of the curved front of the clutch. The link striking the curved end will be deflected downwardly to the bottom of the opening *a³*, will then raise the clutch up, pass along the recess beneath it, and be caught in the notch, as shown.

What we claim is—

1. A draw-head formed in sections, upper and lower, and with a recess, *a*, and openings *a'* *a²* *a³*, substantially as shown and described.

2. In a draw-head, the clutch B, pivoted in the rear portion of the recess *a*, provided with a pin, *b*, having a slot, *b'*, and notch in its lower side, substantially as and for the purposes set forth.

3. In a draw-head, the cam-lever C, consisting of the cam portion *c*, handle *c'*, and pin *c²*, adapted to pass through the slot *b'* of the pin *b*, substantially as and for the purposes set forth.

4. In a draw-head, the combination of the clutch B and its slotted pin *b* with lever C, beveled as set forth, and draw-head A, substantially as shown and described.

In testimony whereof we hereby affix our signatures in presence of two witnesses.

STEPHEN TAPPENDEN.
RICHARD S. TAPPENDEN.

Witnesses:

H. ULTRE, Jr.,
THOMAS WILFORD.