(No Model.) 3 Sheets—Sheet 1.

L. M. FOSTER.

CANCELING AND REGISTERING BALLOT BOX.

No. 434,661. Patented Aug. 19, 1890.

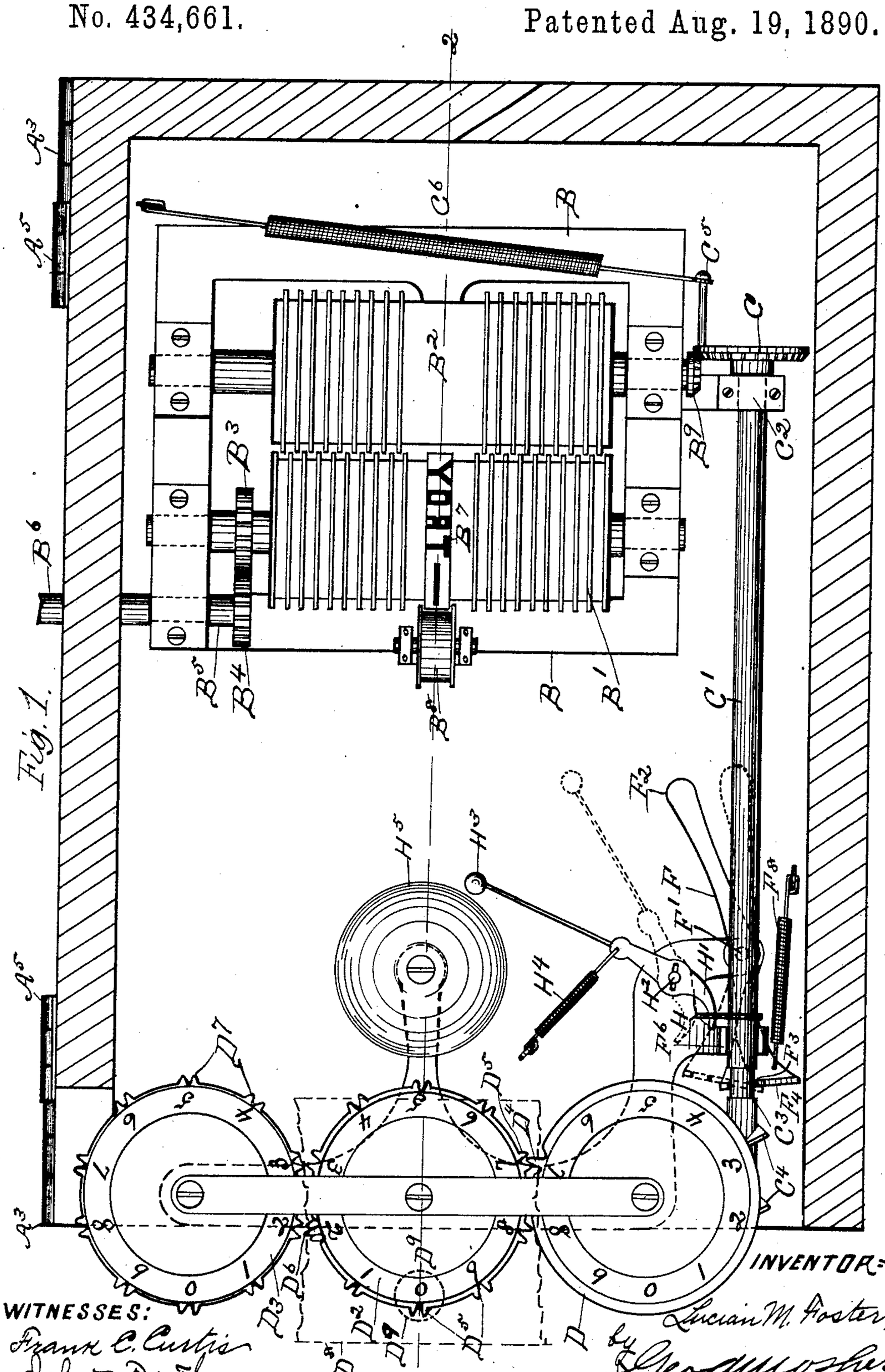


Fig. 1.

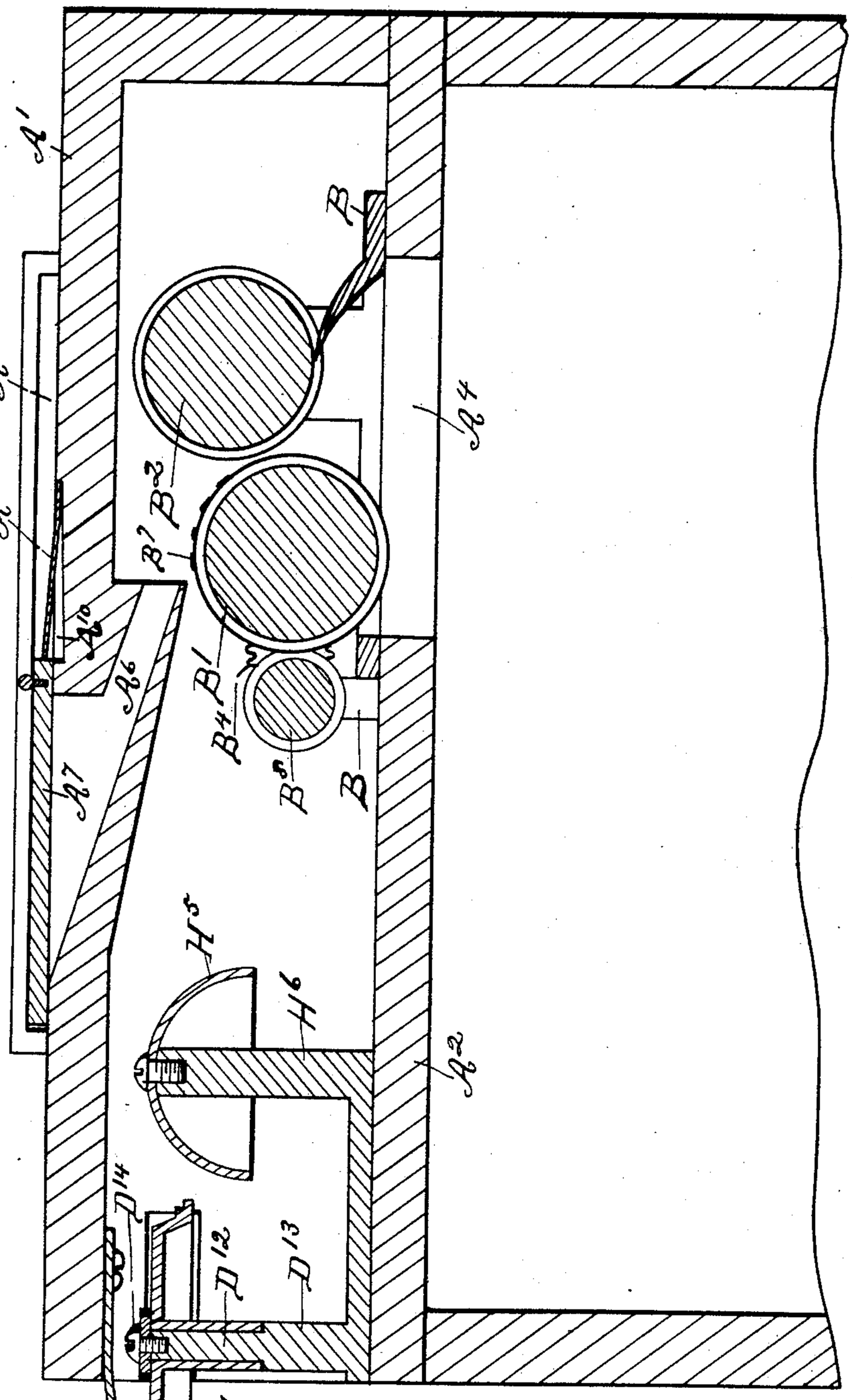
(No Model.) 3 Sheets—Sheet 2.

L. M. FOSTER.

CANCELING AND REGISTERING BALLOT BOX.

No. 434,661. Patented Aug. 19, 1890.

Fig. 2.



WITNESSES:
Frank C. Curtis.
John T. Booth

INVENTOR:
Lucian M. Foster.
by Geo. H. Strother
atty.

(No Model.) 3 Sheets—Sheet 3.

L. M. FOSTER.

CANCELING AND REGISTERING BALLOT BOX

No. 434,661. Patented Aug. 19, 1890.

Fig. 3.

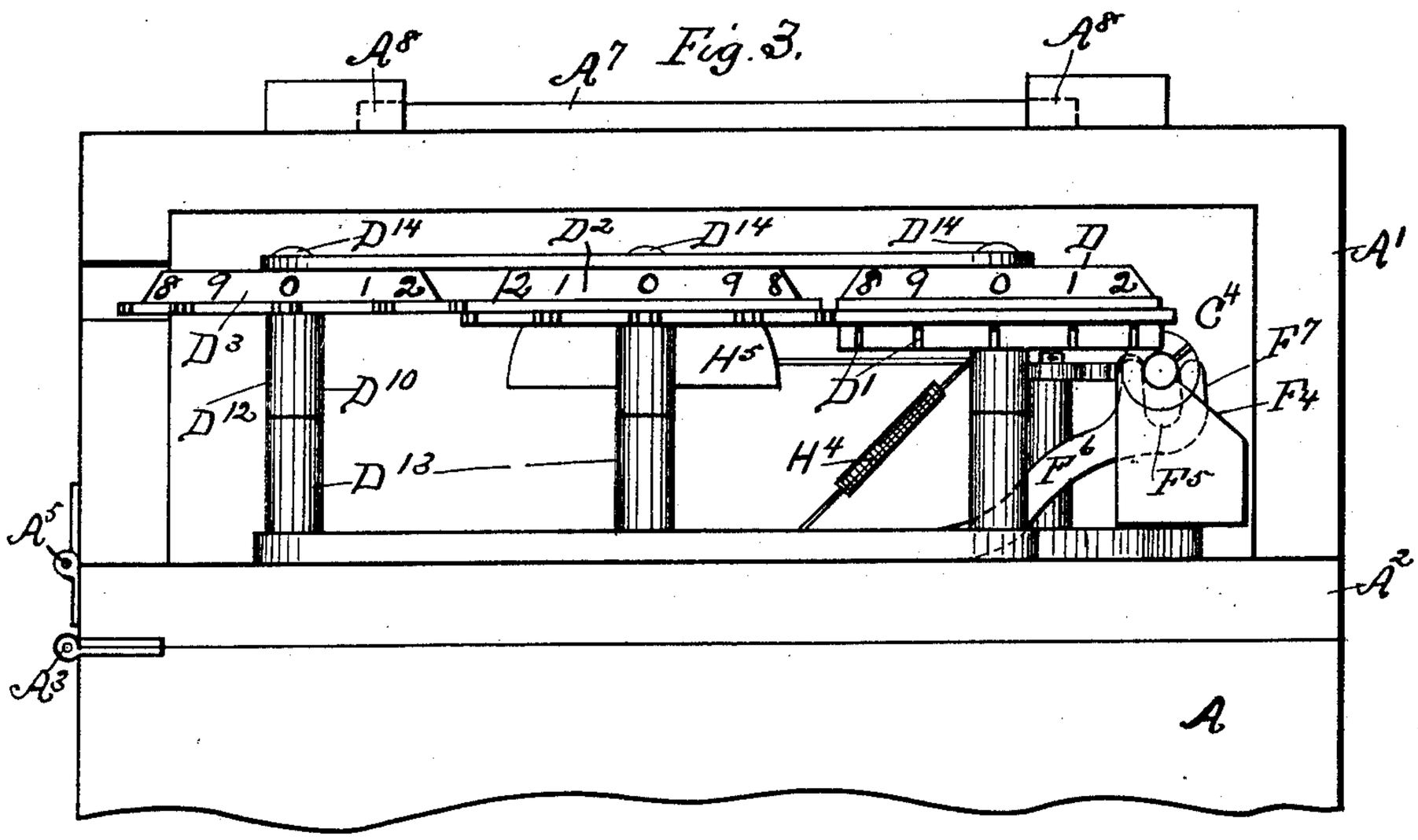


Fig. 4.

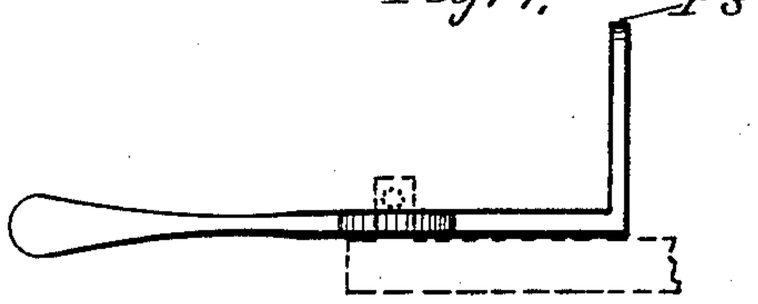


Fig. 5.

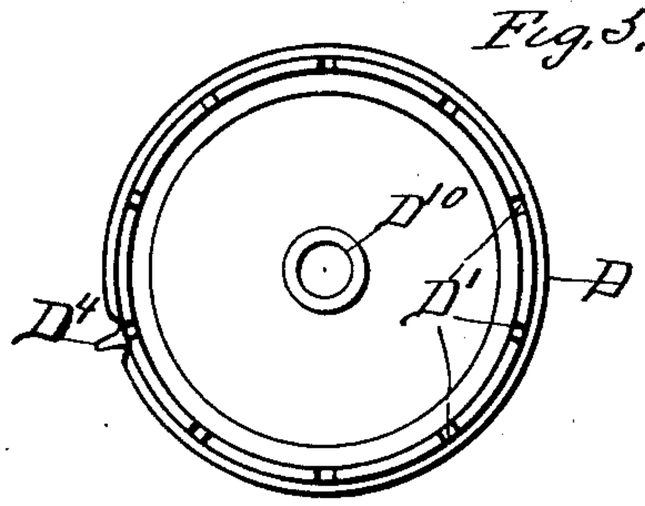
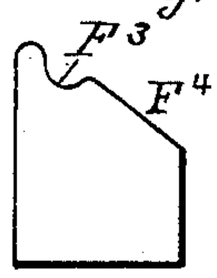


Fig. 6.



WITNESSES:
Frank C. Curtis.
John T. Booth

INVENTOR:
Lucian M. Foster,
by Geo. Gunnoshur
atty.

UNITED STATES PATENT OFFICE.

LUCIAN M. FOSTER, OF TROY, NEW YORK.

CANCELING AND REGISTERING BALLOT-BOX.

SPECIFICATION forming part of Letters Patent No. 434,661, dated August 19, 1890.

Application filed August 5, 1889. Serial No. 319,751. (No model.)

To all whom it may concern:

Be it known that I, LUCIAN M. FOSTER, a resident of Troy, in the county of Rensselaer and State of New York, have invented certain new and useful Improvements in Canceling and Registering Ballot-Boxes; and I do hereby declare that the following is a full, clear, and exact description of the invention, that will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

Similar letters refer to similar parts in the several figures herein.

My invention relates to improvements in registering and canceling ballot-boxes; and it consists of the novel construction and combination of parts, hereinafter described and subsequently claimed.

Figure 1 of the drawings is a top plan view of the registering and canceling mechanism within the top of the box, the cover being removed. Fig. 2 is a central vertical section of the box and mechanism shown in Fig. 1, taken on the broken line 2 2 in that figure, the bottom of the box being broken away. Fig. 3 is an end elevation of a portion of the box and registering mechanism, the end wall of the box and cover being removed to show the interior. Fig. 4 is a side elevation of the lever by which the registering device is thrown into and out of gear detached. Fig. 5 is a bottom plan view of a dial and gear wheel, forming a part of the registering mechanism detached. Fig. 6 is a view in end elevation of the lever shown in Fig. 4.

A is the ballot-box proper provided with a double cover A′ and A^2. The cover A^2 is shown hinged to the box proper by hinge A^3. This cover supports the canceling and registering mechanism and is provided with an opening A^4, Fig. 2, through which the ballots pass, after being canceled, into the box. The registering and canceling mechanism are protected by the upper cover A′, hinged at A^5. The upper cover is provided with a ballot-opening A^6, leading from the exterior to the feed-rolls within the cover. This ballot-opening passes angularly through the top cover and is protected by a slide-cover A^7, movable in a slideway formed by grooves A^8. The slide-cover is held closed by the spring A^9, secured to cover A′. To open the slide-cover it is only necessary to press the cover-engaging end of the spring down into the recess A^{10} and push the cover back from the opening A^6.

The under cover A^2 supports the metallic frame B, upon which are provided suitable bearings for the feed-rolls B′ and B^2. The roll B′ has fixed upon its supporting-shaft a gear-wheel B^3, which meshes with a similar wheel B^4 upon the actuating-shaft B^5, projecting exteriorly of the box, as shown at B^6, where it is broken away. This shaft may be actuated by a wrench, crank-handle, or other known appliance. The roll B′ is also provided with canceling-type B^7, adapted to engage with an inking-roller B^8, and with a ballot or paper passing between the rolls, the roll B^2 having a central smooth space, which serves as a platen for the type. The roll B^2 has fixed upon its supporting-shaft a pinion B^9, adapted to engage with a gear-wheel C, fixed upon one end of shaft C′, rotary in the bearing C^2 at such end and in an oscillatory bearing at the other end C^3, which end is provided with the worm-gear C^4, adapted to engage with the combined gear and dial wheel D, provided on the lower side with the peripheral notches or slots D′, adapted to receive the actuating-worm.

The dial-wheel has ten equidistant slots D′, and one revolution of the worm and shaft causes the periphery of the dial-wheel to travel over a space equal to the distance between two of such slots, and the gear-wheels B^9 and C are so proportioned that the passage of each ballot between the rolls B′ and B^2 will impart a single revolution to gear C and worm C^4, giving a one-tenth revolution to the dial-wheel D, which I term the "units-dial." The upper and outer beveled surface of this wheel is provided with the numerals from 0 to 9, both inclusive. Any desired number of dial-wheels, similarly marked with numerals to represent tens, hundreds, and the higher denominations, may be employed and adapted to engage with the units-dial and with each other in any known manner. I have shown a tens-dial D^2 and hundreds-dial D^3.

The units-dial is provided with a single tooth D^4, adapted to engage with the teeth

D^5 on the tens-dial at each revolution of the units-dial and revolve the tens-dial through one space equal to one-tenth of its periphery. The tens-dial is provided with a like tooth D^6, located on a plane just above that occupied by teeth D^5 and adapted to engage with the teeth D^7 on the hundreds-dial at each revolution of the tens-dial, whereby each revolution of the roll B^2 from 1 to 1,000 will be indicated by the three dials. The front portions of the dials, which project from the box, are covered by a plate D^8, as shown in Fig. 2, having openings D^9 for reading the dials. This plate is not shown in the other figures; but the relative position is indicated by dotted lines in Fig. 1.

The shaft C is provided with a crank C^5, which is connected by the coil-spring C^6 with some fixed object, as the opposite side of the box, which acts as a governor to complete the revolution of the worm-shaft C′ in case the ballot should not happen to be quite long enough to give the roll B^2 a complete revolution, also to restore the shaft to its normal position to act upon the registering-dials in case it should from any cause be disturbed in its position.

The lever F, fulcrumed upon the box at F′, (shown by dotted lines in Fig. 1,) is provided at one end with an operating-handle F^2 and at the other end with an open bearing-surface F^3 for the worm-shaft C′. Such bearing-surface is located at the upper end of an inclined edge F^4. When the lever is forced to the position shown by the dotted lines in Fig. 1, the bearing-surface of the lever is withdrawn from the shaft, and the latter falls to the bottom of the slot F^5 in the bracket-arm F^6, being guided by the slot-inclosing arms F^7. When this end of the shaft thus drops, the worm C^4 is withdrawn from engagement with the units-dial D and the dials can be turned to adjust or "set" them in any desired position independently of the canceling mechanism. When the dials have been adjusted in the desired position, the lever F is restored to the position shown by the solid lines, which causes the worm-shaft to slide up the inclined edge F^4 to its bearing-surface, which forces the worm into one of the slots D′ and holds it in position to successively engage with such slots. The spring F^8, secured at one end to one end of the lever and at the other end to the box, serves to keep the lever in the proper position to support the worm-shaft. The worm-shaft is also provided with a cam H, fixed thereon in a position to engage with one end of the lever H′, fulcrumed at H^2, and provided at the other end with a bell-hammer H^3. The lever is provided with an actuating-spring H^4, against the resilient force of which the cam forces the hammer H^3 back to the position shown by the dotted lines in Fig. 1, when the lever is released by the cam, and the spring H^4 causes the hammer to strike the bell or gong H^5, secured to the upright H^6, thereby sounding an alarm at each revolution of the worm-shaft. The dials are each provided with a sleeve D^{10}, revoluble on a pintle D^{12}, projecting vertically from the posts D^{13}, to which they are secured by a screw D^{14}. It should be observed that the feed-rolls B′ and B^2 do not quite touch each other, and that the roll B^2 is not affected by revolutions of the other roll unless a ballot has been inserted between them. The roll B^2 then helps to feed the ballot and at the same time is actuated by the ballot, which causes it to revolve and actuate the registering dials.

What I claim as new, and desire to secure by Letters Patent, is—

In a registering ballot-box and in combination, an actuating-shaft B^5, ballot-engaging rolls B′ and B^2, gears B^3 and B^4, gears B^9 and C, worm-shaft C′, oscillatory at one end, worm-gear C^4 on its oscillatory end, peripherally-slotted dial D, shaft-guides F^7, and lever F, fulcrumed upon a fixed support and provided with an operating-handle F^2, a bearing-surface F^3, and an inclined way F^4, substantially as described.

In testimony whereof I have hereunto set my hand this 22d day of July, 1889.

LUCIAN M. FOSTER.

Witnesses:
FRANK C. CURTIS,
CHAS. L. ALDEN.