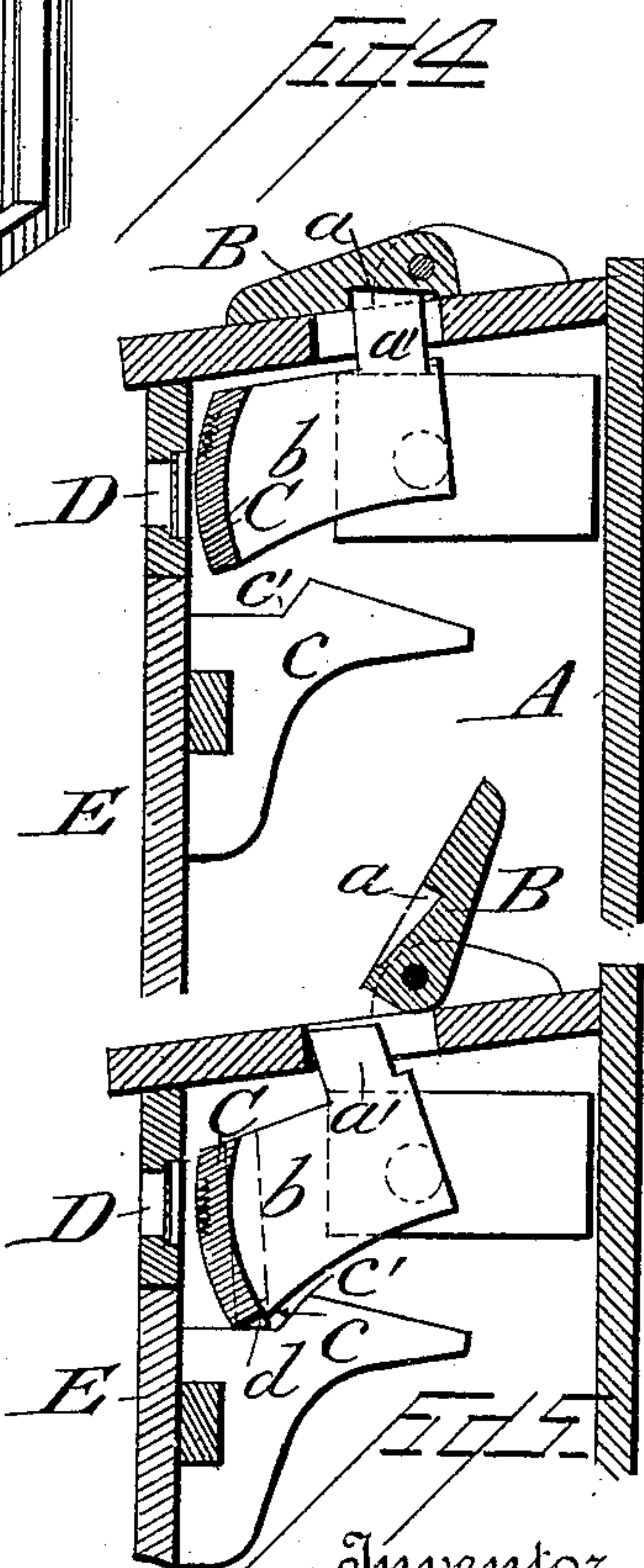
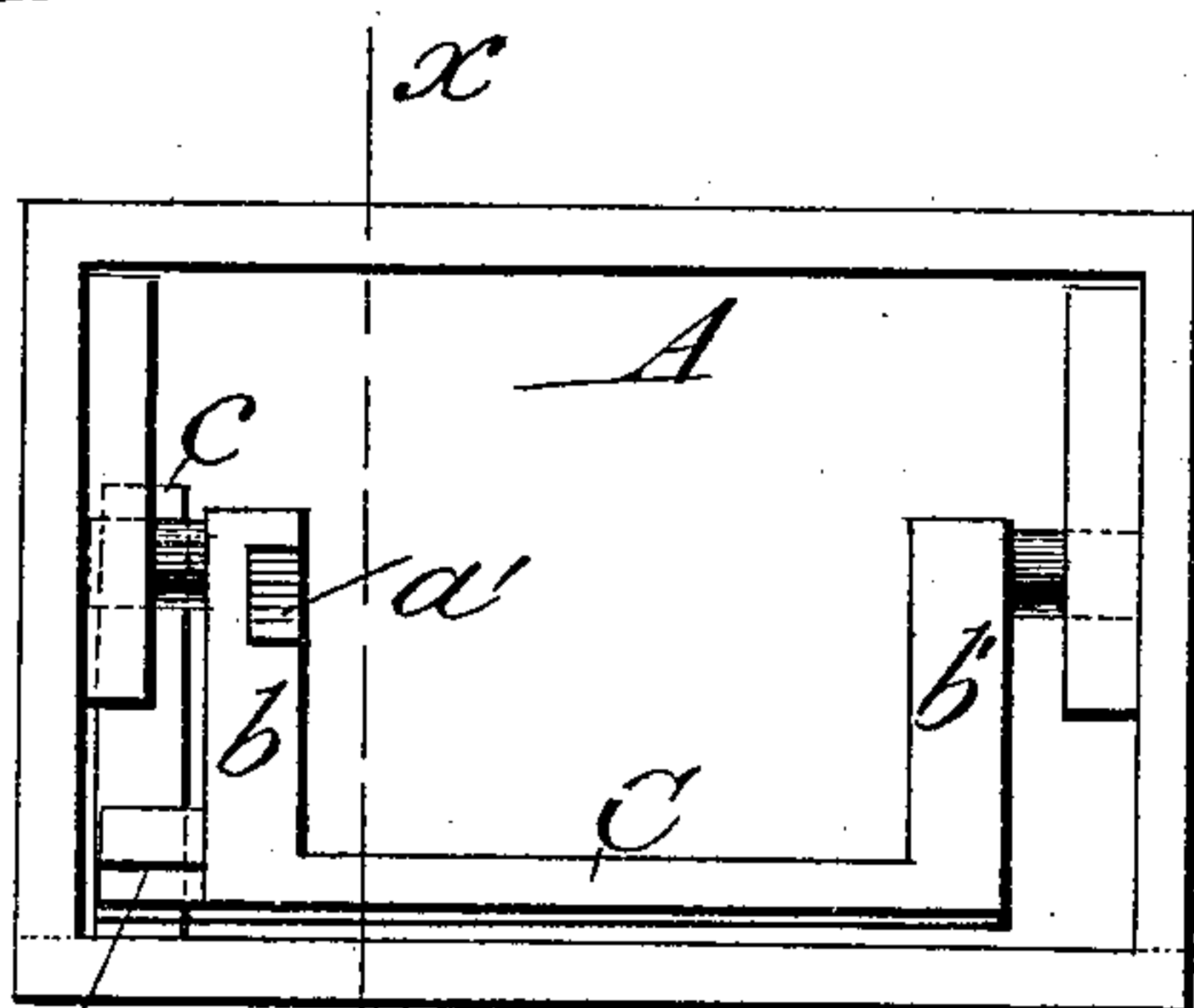
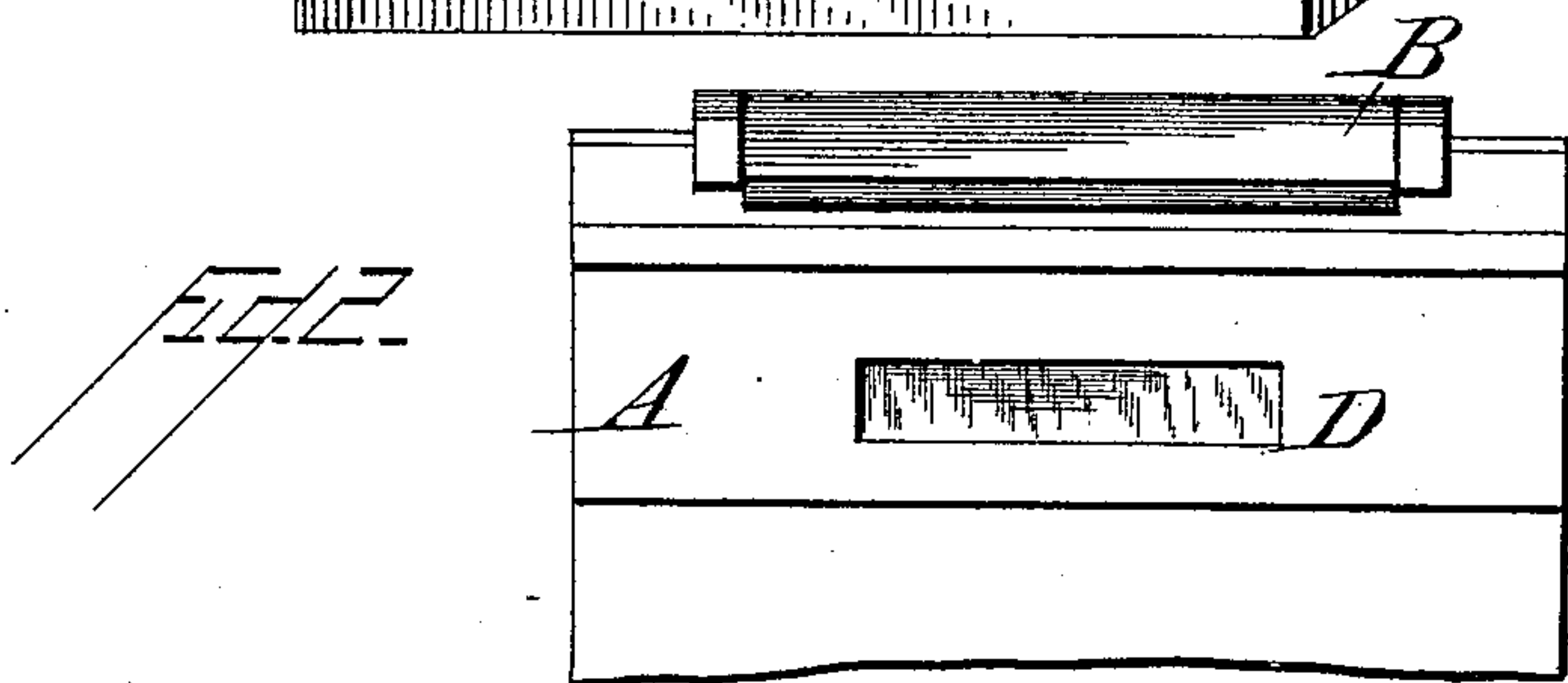
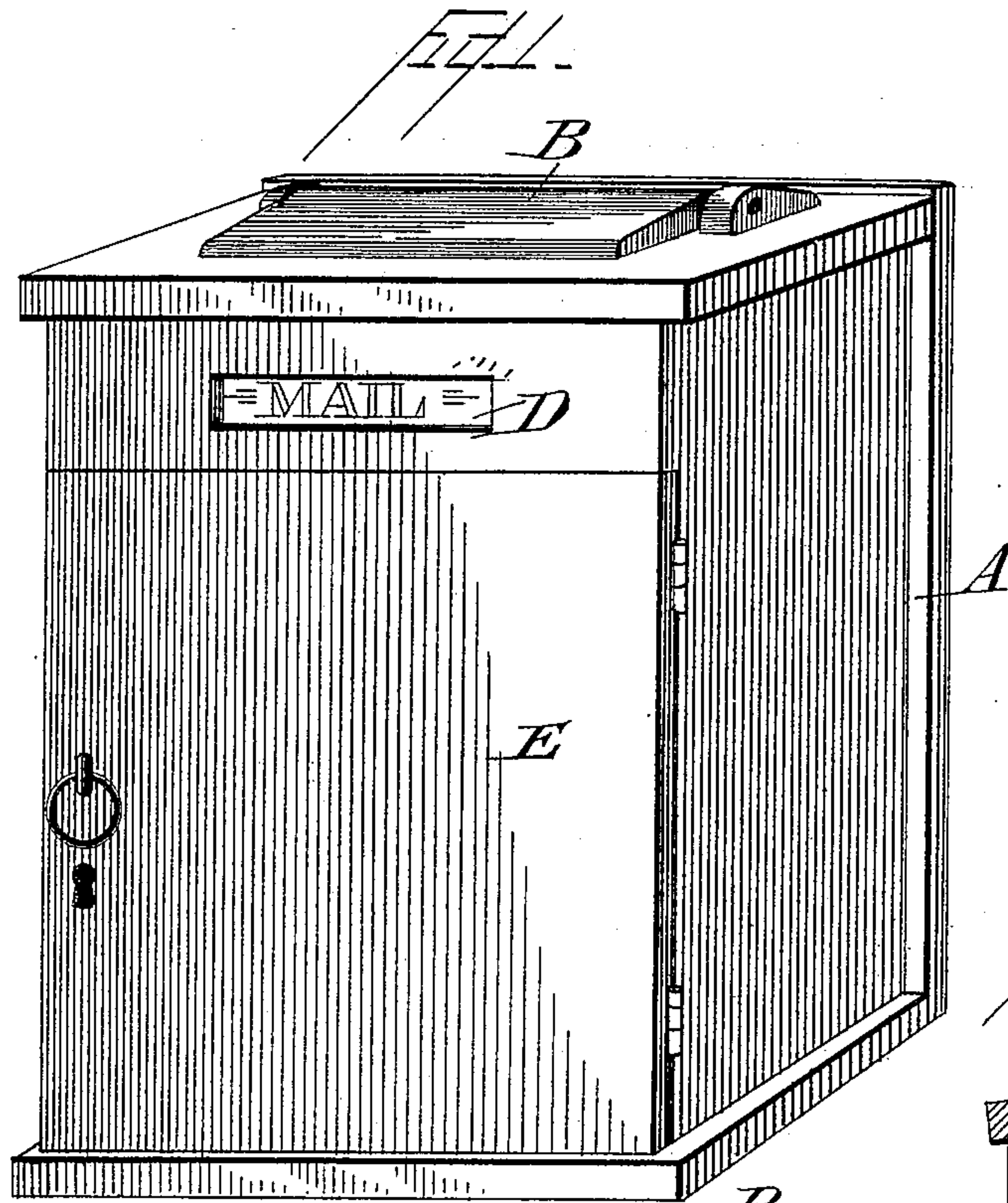


(No Model.)

D. I. ECKERSON.
LETTER BOX.

No. 390,072.

Patented Sept. 25, 1888.



Witnesses

*H. H. Schott &
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By *his* Attorney

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UNITED STATES PATENT OFFICE.

DAVID I. ECKERSON, OF WORCESTER, NEW YORK.

LETTER-BOX.

SPECIFICATION forming part of Letters Patent No. 390,072, dated September 25, 1888.

Application filed June 5, 1888. Serial No. 276,126. (No model.)

To all whom it may concern:

Be it known that I, DAVID I. ECKERSON, a citizen of the United States, residing at Worcester, in the county of Otsego and State of New York, have invented certain new and useful Improvements in Letter-Boxes; and I do declare the following to be a full, clear, and exact description of the invention, such as 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 and figures of reference marked thereon, which form a part of this specification.

This invention relates to improvements in letter-boxes, the object being to add to the ordinary house and street letter-boxes devices which shall enable the collector to determine whether any mail has been deposited therein since the last collection-visit of the carrier without unlocking the box, thus avoiding the loss of time incurred in opening the box when there is nothing in it to be removed. To accomplish this result, a recess is formed near the top of the box through its wall, of sufficient size to allow the word "mail," or other word indicating that there is mail matter in the box, to be read through it. This word is placed upon a swinging indicating-plate in such a position that when the plate is raised by the action of the door through which mail is removed only a blank shows through the recess, and in this position it is retained by suitable devices until the lid is raised to place a letter or other mail matter in the box, when the plate drops with the word indicating that there is mail to be removed opposite the recess, so that it may be readily seen through the same, and in this position the plate remains until it is raised through the action of devices connected with the door, when the latter is opened for the purpose of removing the mail which may have been deposited in the box. The devices for accomplishing this result work automatically in all respects, thus requiring no attention from the collector or from parties depositing mail matter in the box.

To fully understand the construction of the apparatus, it will be described in connection with the drawings which accompany this specification, and in which—

Figure 1 is a perspective view of the box

with the plate in the position it occupies to indicate that there is mail to be removed. Fig. 2 is a side elevation of the upper portion of the box with the plate in the position indicating that there is no mail to be removed. Fig. 3 is a plan of the box and indicating apparatus, the cover of the box having been removed. Fig. 4 is a vertical section on the line xx of Fig. 3, showing the device attached to the door and the manner in which it operates the swinging plate. Fig. 5 is a vertical section showing the lid open.

The box A is of ordinary construction, being commonly of cast-iron, of suitable thickness to give the desired strength, and may be of any desired form and dimensions. A lid, B, is hinged to this box, which lid covers the opening through which letters or other mail matter is deposited therein. On the under side of this lid is formed a recess, a , which acts as a catch for the arm a' , projecting upward from the pivoted arm b of the swinging plate C. This plate stands in a vertical position in rear of the opening or recess D formed in the side of the box, and which is closed by a pane of glass that allows the plate C to be easily seen through it.

The opposite ends of the plate C are provided with horizontal arms b and b' , which are pivoted to the box, so that said plate has a vertical swinging movement, restrained in one direction by the upper edge of the plate coming in contact with the under side of the top of the box, and in the opposite direction by the arm a' , projecting upward in the opening through which the letters are passed, the vertical movement of the plate being sufficient to allow the letters or words thereon to come into view through the glass-covered opening D when the plate is in its lowest position, but to be wholly hidden by the side of the box above the opening when it is raised.

To the inner side of the door E of the box (through which the mail matter is removed) is attached an inwardly-projecting cam, c , having a notch, c' , near its base or point of attachment to the door. When the door is closed after removing the mail, the inclined end of this cam comes beneath a projection, d , attached to one end of the plate C, and extending downwardly into the path of the cam when the plate is down, so as to expose the word

thereon at the glass-covered opening. As the door closes, the projection *d*, if the indicating-plate be down, rides up on the cam, carrying the plate with it, until the word is hid by passing above said glass-covered opening in the box. When in this position, the end of the arm *a* of the lid B and the plate C is upheld thereby until, upon raising the lid B to deposit a letter, the arm *a'* is released and the plate falls, the projection *d*, attached thereto, entering the recess *c'* at the base of the cam, thus placing the plate in position to indicate that there is mail in the box. When the parts are in this condition, the lid B may be raised any number of times to introduce more mail matter without disturbing in any way the mechanism by which the indicating-plate is operated; but when the door E is opened the cam strikes the lower end of the projection *d* and raises the plate to the position indicating that there is no mail in the box, so that the collector, finding it in this position, does not stop to open the box, but passes on to the next.

It will be apparent that the details of construction of this apparatus may be changed to suit the different styles of letter-boxes in use—as, for instance, to fit a box in which the opening for the deposit of letters, as well as their removal, is in one end instead of the top and side of the box, as in the figures shown in the drawings.

Having thus described my invention, I claim as new and desire to secure by Letters Patent the following:

1. As an improvement in letter-boxes, the box provided with the side opening, D, in combination with a vertically-moving indicating-plate operated by a cam placed upon the door to cause the catch of the indicating-plate to engage with the lid B, as and for the purpose specified.

2. As an improvement in letter-boxes, the box A, provided with a side opening, D, in combination with the indicating-plate C, hinged to the box, the arm *a'*, and the recessed lid B, arranged to hold the indicating-plate in position to denote the absence of mail in the box, as set forth.

3. In a letter-box, the combination of devices for indicating the presence or absence of mail, consisting of the indicating plate C and arm *a'*, recessed lid B, projection *d*, attached to said plate, and door E, provided with cam *c*, all constructed and operating substantially as and for the purpose specified.

In testimony whereof I affix my signature in presence of two witnesses.

DAVID I. ECKERSON.

Witnesses:

CHARLES GOODELL,
LE VERN KELLEY.