

H. R. ROBBINS.
Letter-Box.

No. 217,820.

Patented July 22, 1879.

Fig. 2.

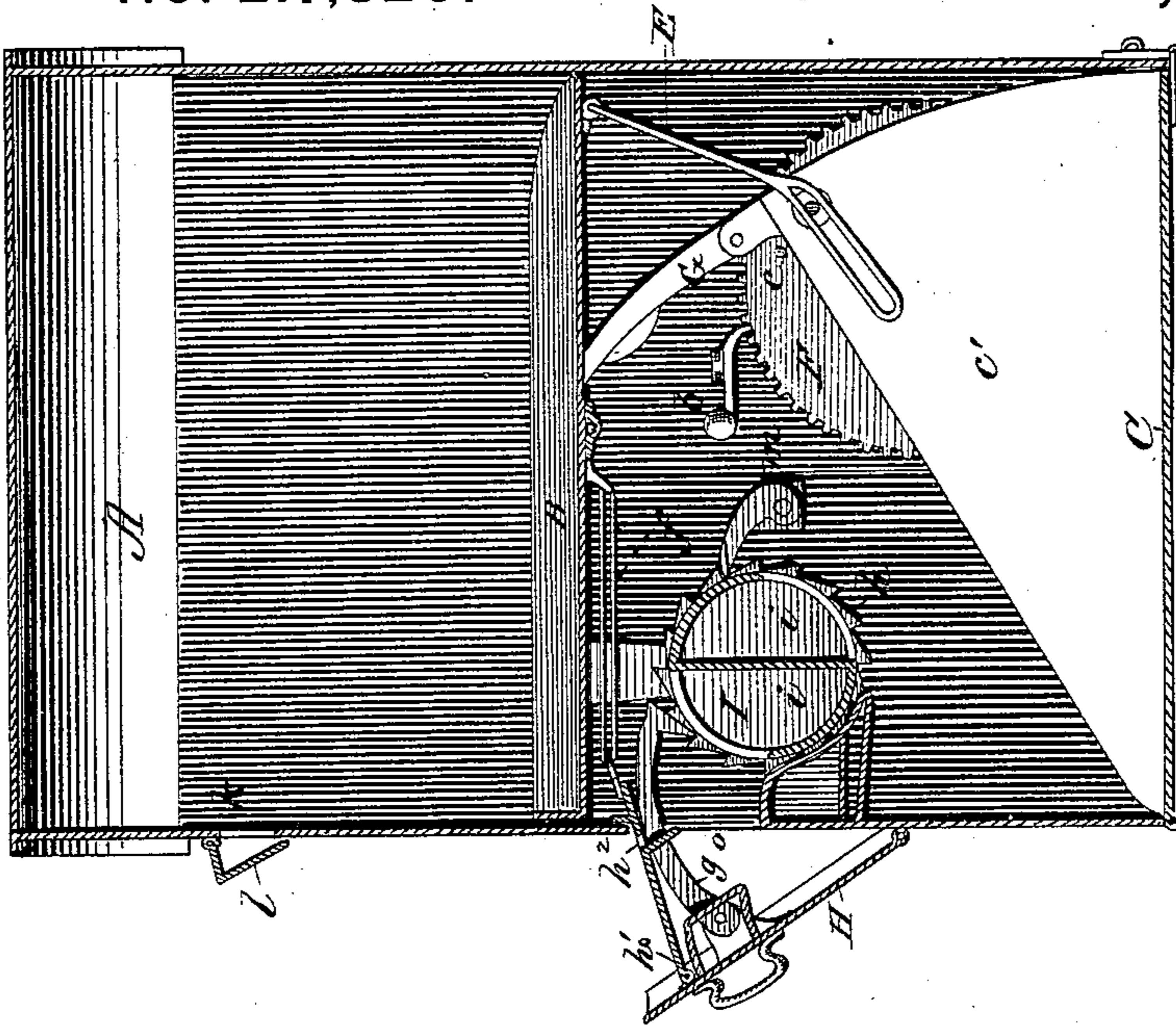
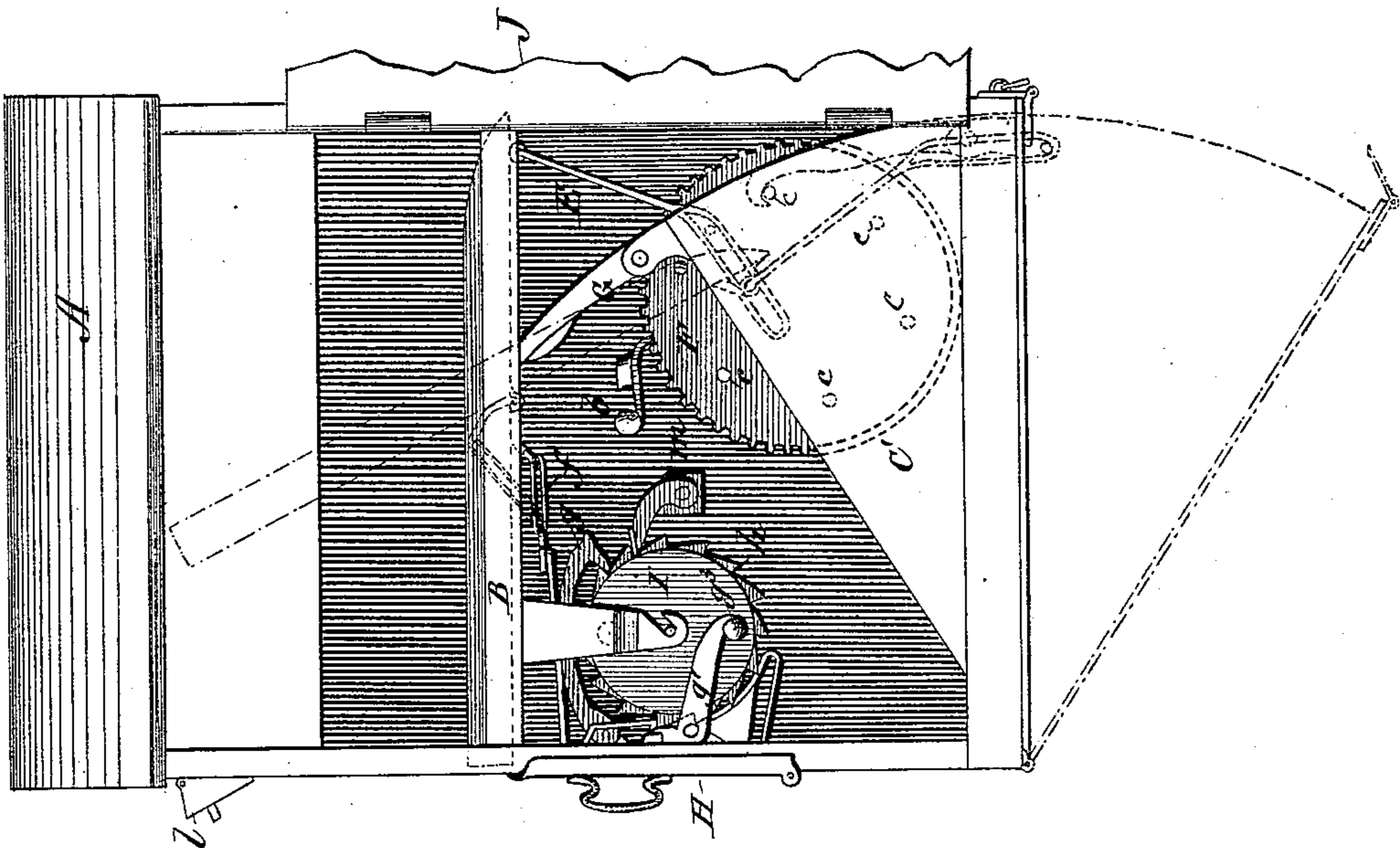


Fig. 1.



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Fig. 3.

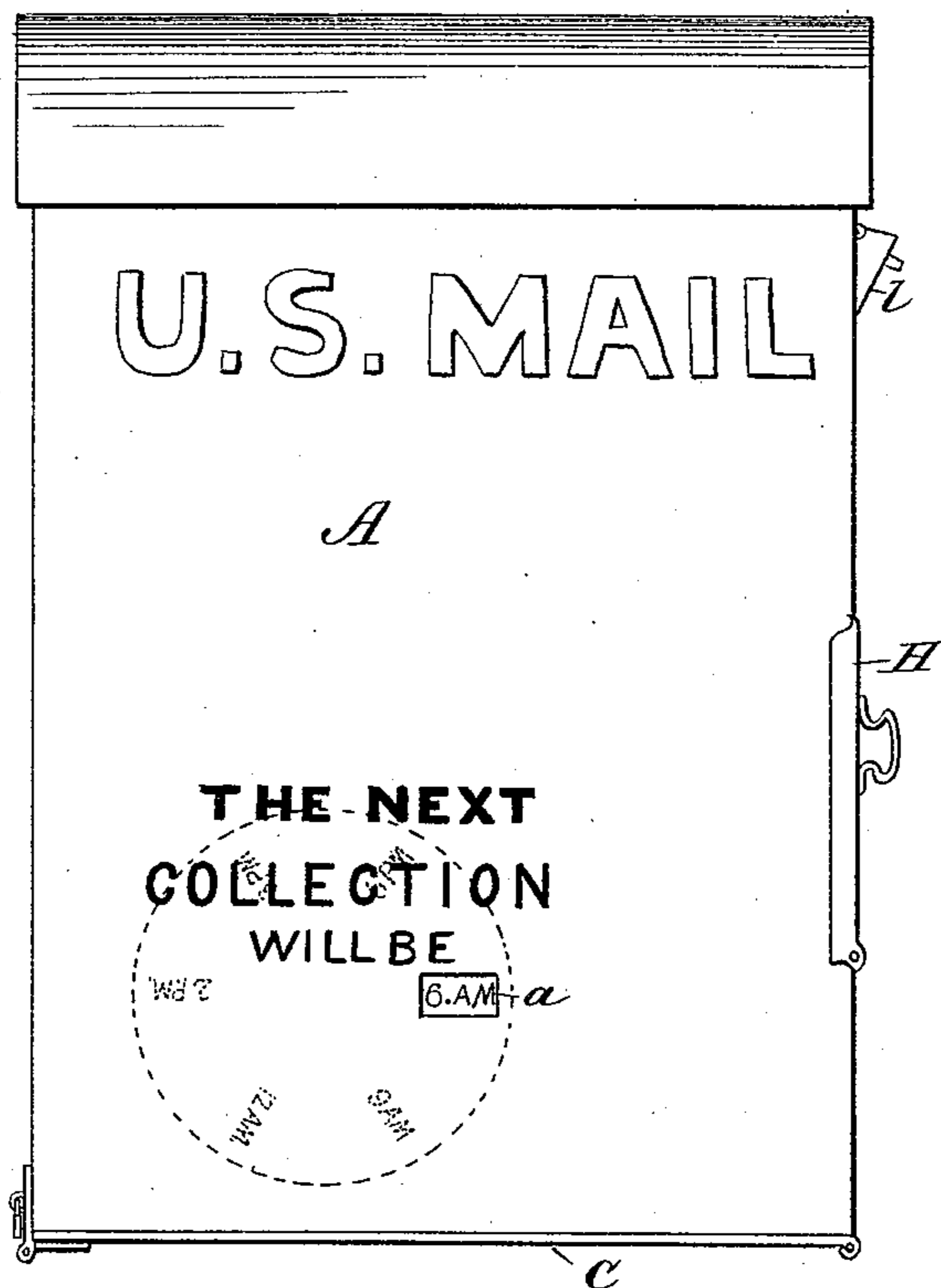
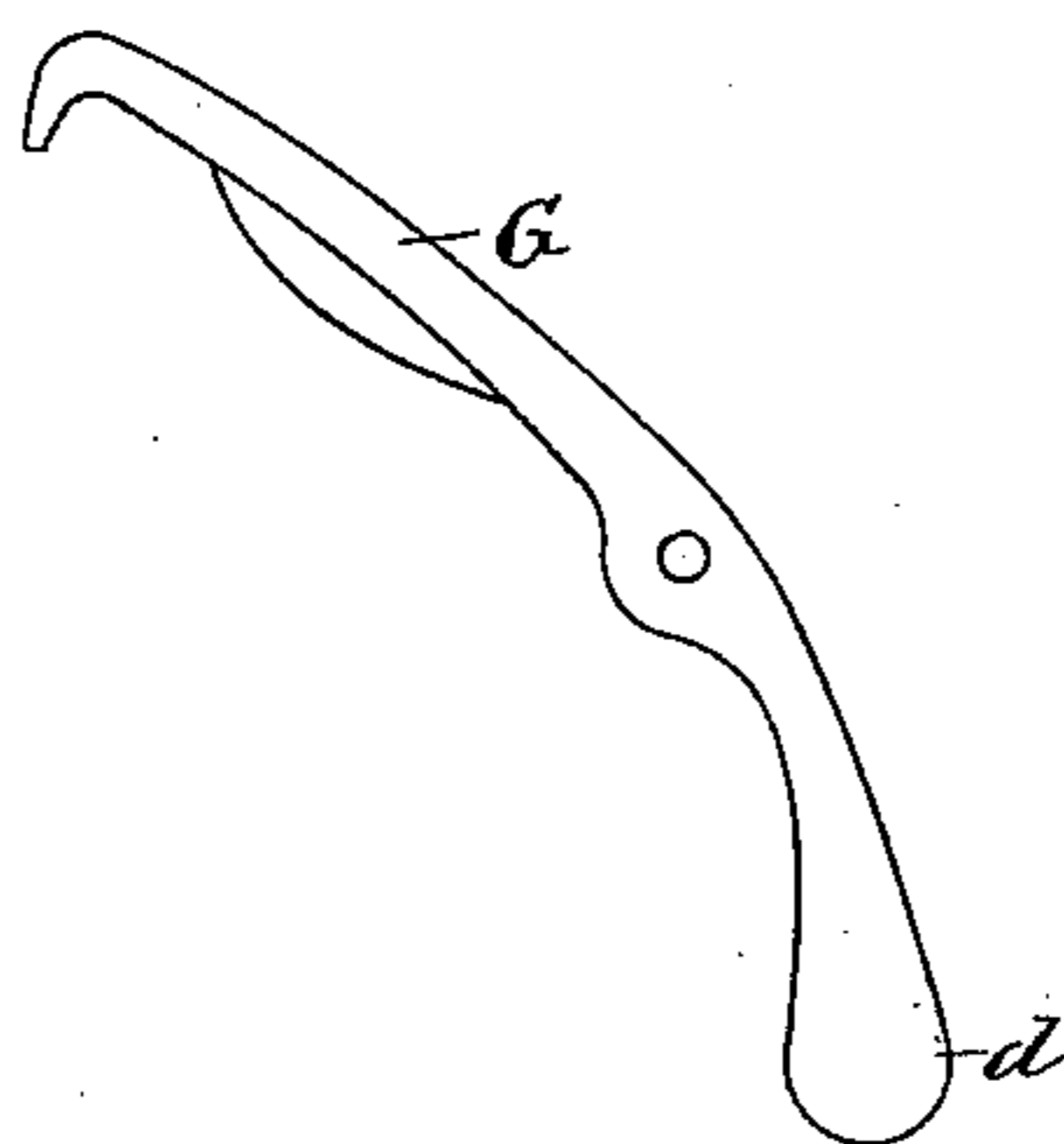


Fig. 4.



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UNITED STATES PATENT OFFICE.

HENRY R. ROBBINS, OF BALTIMORE, MARYLAND, ASSIGNOR TO HIMSELF
AND BARTLETT, ROBBINS & CO., OF SAME PLACE.

IMPROVEMENT IN LETTER-BOXES.

Specification forming part of Letters Patent No. **217,820**, dated July 22, 1879; application filed
May 2, 1879.

To all whom it may concern:

Be it known that I, HENRY R. ROBBINS, of Baltimore city, State of Maryland, have invented a new and Improved Letter-Box; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side view of the letter-box with the back door opened and broken away, and showing the opened position of the bottom door in dotted lines. Fig. 2 is a vertical section of the letter-box, showing the door for the insertion of the letters pulled open. Fig. 3 is a front view of the letter-box. Fig. 4 is a detail.

The object of my invention is to provide an improved letter-box of the kind ordinarily located upon lamp-posts or other supports in different parts of the city for the reception of the United States mail, which improved letter-box shall indicate the time of the collection of the mails throughout the day, shall provide an increased security for the letters, and shall keep the letters and papers separate from each other.

The invention consists in the peculiar construction and arrangement of devices for transferring letters to the interior and preventing the abstraction of the same through the opening through which they were inserted.

The invention also further consists in making the box with a horizontal tilting partition, forming two compartments, one for the letters and the other for the papers, and combining therewith a door, by which the carrier has access to said compartments, the said door being so constructed that the opening of the same tilts the partition and discharges the contents of both compartments at once, and at the same time adjusts a dial-face, which shows through a window and indicates the time of the next collection, all as hereinafter more fully described.

In the drawings, A represents the box, which may be made of any form and material consistent with the safe keeping of its contents. As shown, it is of a rectangular shape with an arched roof. This box is divided by a hori-

zontal tilting partition, B, into two compartments, the upper one of which is designed to be the receptacle for newspapers, and the lower and larger one for letters, the inlets to which receptacles are thus plainly marked.

To give the carrier or person whose business it is to collect the mail access to these compartments, I make the bottom of the box in the form of a falling door, C, having side plates, C' C', which side plates form a channel or trough, through which the letters are discharged into the carrier's bag.

In the front side of the box is formed a small window, *a*, and upon the inside of the box covering this window is a circular dial, F, whose face next to the wall of the box is marked in circular series with the times of the several collections of the mail through the day. The edge of this dial is made notched, and a detent, *b*, held by a weight, as shown, or by a spring, serves, by engaging with the notches, to permit the dial to be moved in one direction, but prevents its motion in the opposite direction, the said detent partaking also, to some extent, of the character of a brake to prevent too free movement. On the rear side of the dial are a series of studs or pins, *c c c*, corresponding to the number of collections made.

G is a hooked pull-bar pivoted on one of the plates C' of the carrier's door, which pull-bar is held to a given position by a weight, *d*, Fig. 4, or a spring, which is its equivalent. Now it will be seen that when the carrier's door C is unlocked and opened by him for the removal of the mail the hooked end of the pull-bar strikes in its descent a pin or stud on the dial, and forces the dial around the distance of one pin, bringing the next set of figures on the face of the dial into view through the window, which figures indicate to the public the time of the next collection of the mail. At the same time that the door C drops down for the discharge of the letters the pivoted bottom of the newspaper-compartment is also tilted, as shown in dotted lines in Fig. 1, through a connecting-rod, E, and the newspapers are simultaneously dumped into the carrier's bag with the letters.

With respect to the feature of my invention

just described, I am aware that a dial in a letter-box has been connected to the door and operated by the opening of the same by the carrier, so as to adjust the dial to indicate the times of collection. I do not, therefore, claim this broadly.

To permit the insertion of the letters without risk of removal through the same orifice through which they were inserted, I form at the top of the lower compartment an opening, *o*, and covering this opening and extending down below the same is a door, *H*, pivoted at the bottom. This door is connected to the partition *B* by a spring, *f*, whose tension holds said door closed over the orifice *o*. Upon one side of this door is pivoted a weighted or spring-actuated pull-bar, *g*, whose end extends into the lower compartment and engages with ratchet-teeth *h* on the end of a cylindrical drum, *I*, while a weighted push-bar, *g*¹, is pivoted upon the opposite side of the door, and is arranged to engage with pins *g*³ on the other end of the cylindrical drum. This cylindrical drum is divided into two or more compartments, *i*, by a longitudinal partition, which compartments open upon the periphery of the drum in the shape of longitudinal slots, that register as the drum is rotated with the letter-hole *o*.

To the upper part of the door is hinged an apron, *h*¹, which connects the spring to the door and extends through the opening *o* into the letter-box. This apron has a slit, *h*², through the same, which, when the door is pulled open, is pulled outside of the box, and constitutes the channel through which the letters are inserted, the latter being guided by a pendent lip into one of the compartments of the drum.

Now, when the door *H* is pulled back, the pull-bar *g* partially rotates the drum, bringing one of its openings into registration, and a letter being inserted through slit *h*², said letter slides into one of the compartments of the drum; then, as the door is allowed to close from the tension of the spring *f*, the push-bar *g*¹ rotates the drum the distance of one pin, turning the compartment in the drum containing the letters out of registration with the opening *o*; then, when the next letter is inserted, the letter previously inserted is dropped into the lower compartment.

It will thus be seen that while the drum transfers the letters to the interior of the letter-compartment, it acts as a barrier to the removal of any letters from the interior through the letter-hole.

When the carrier makes his collection it is

necessary for him to give the drum a revolution, for there may be one or more letters in the drum which were posted in time for collection, but may not have been discharged from the drum.

To prevent any looseness or too great movement of the drum a brake may be employed, while a detent, *m*, engaging with the ratchet on the drum prevents any backward movement.

I am aware that it is not new to arrange a rotary device upon the inside of the letter-hole to transfer the letters to the interior without risk of subsequent abstraction, and with respect to this feature I only claim my peculiar construction and arrangement of these devices.

In the front of the letter-box there is a compartment reserved from the space of the newspaper-receptacle to give room for the pull-bar *G* of the lower door in its upward movement.

For convenience in arranging the operating parts of the device, and for adjusting from time to time the dial-pins to correspond with changes in time of collection, a large door, *J*, upon the rear side is provided, which is habitually locked and the key kept in the custody of the city post office.

For the insertion of newspapers a slot, *k*, is formed in the end wall of the upper compartment, which is covered by a pivoted and inclined rain-shed, *l*. As newspapers have not a sufficient value to induce any tampering with this compartment, the simple means provided will insure adequate security.

Having thus described my invention, what I claim as new is—

1. The drum *I*, having compartments and provided with ratchet-teeth *h* and pins *g*³, in combination with the door *H*, having pull-bar *g* and push-bar *g*¹, the slitted apron *h*¹, and a spring for retracting the door, substantially as described.

2. The combination of a dial bearing numbers indicating the times of the collections, a door giving access to the interior of the box, and a tilting partition, the whole being connected for simultaneous operation, substantially as described.

3. The combination, with the letter-box having a horizontal tilting partition, of a door opening into the bottom compartment and connected with said tilting partition for simultaneous movement, substantially as described.

HENRY R. ROBBINS.

Witnesses:

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EDWD. G. STARR.