

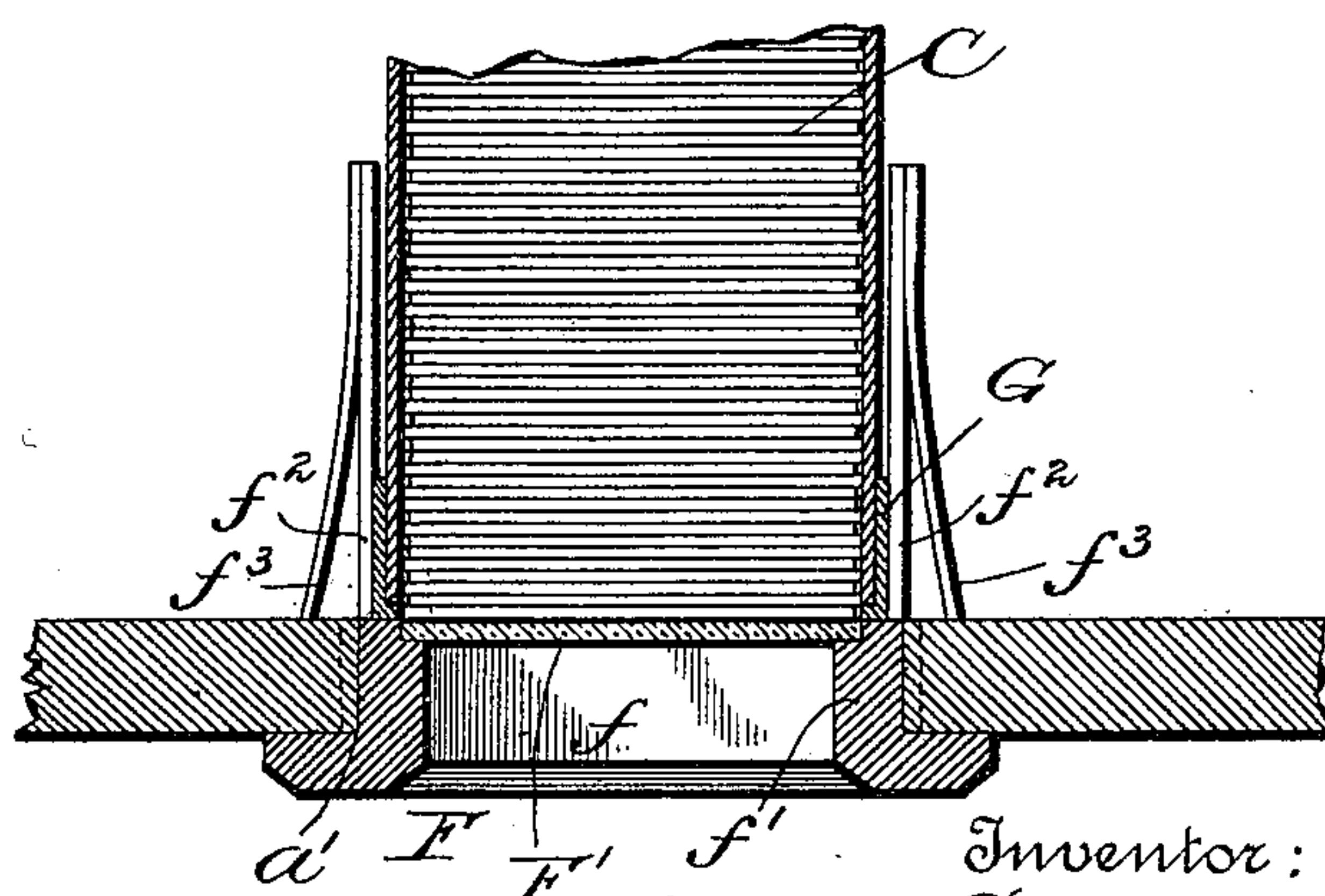
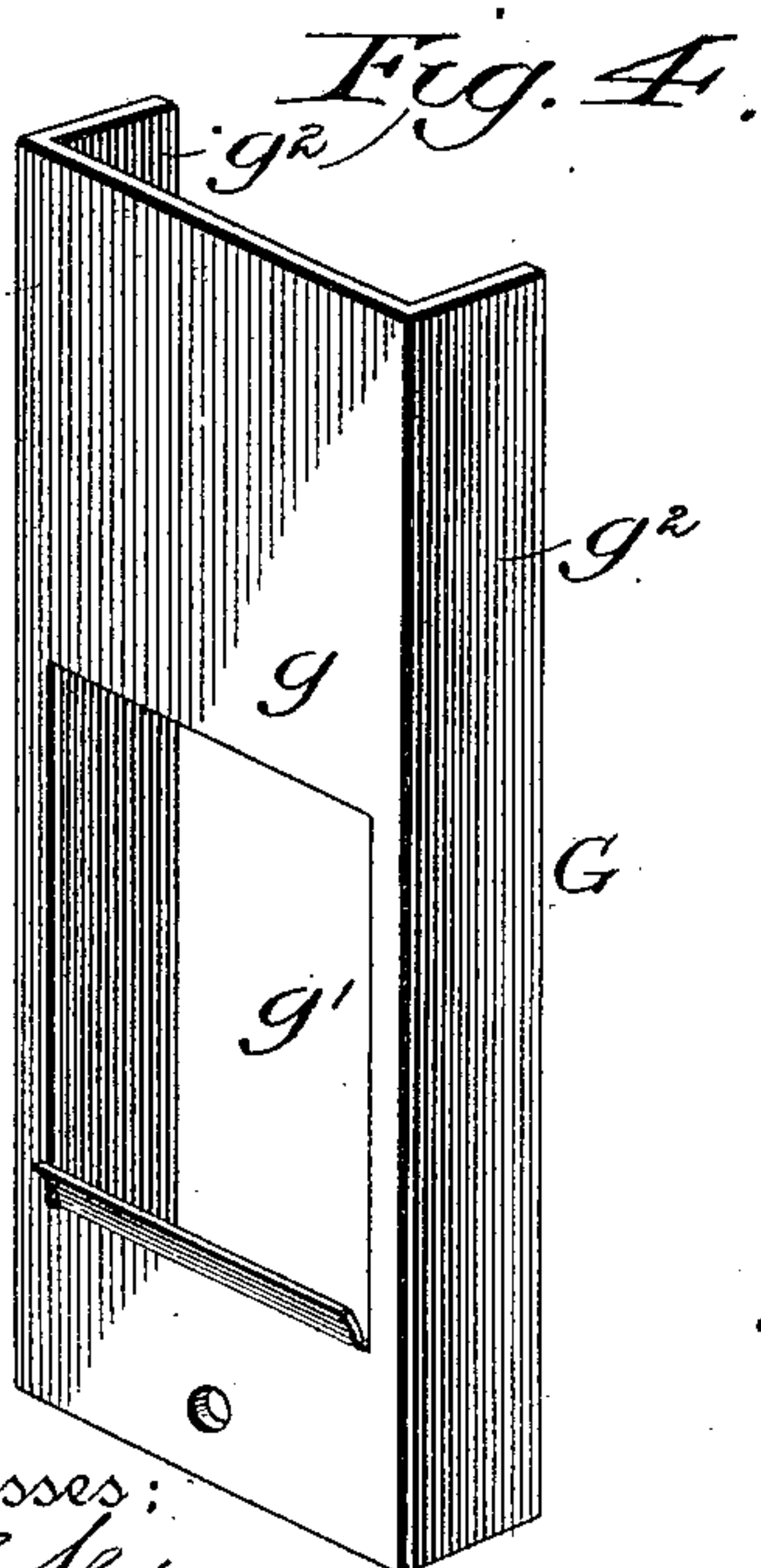
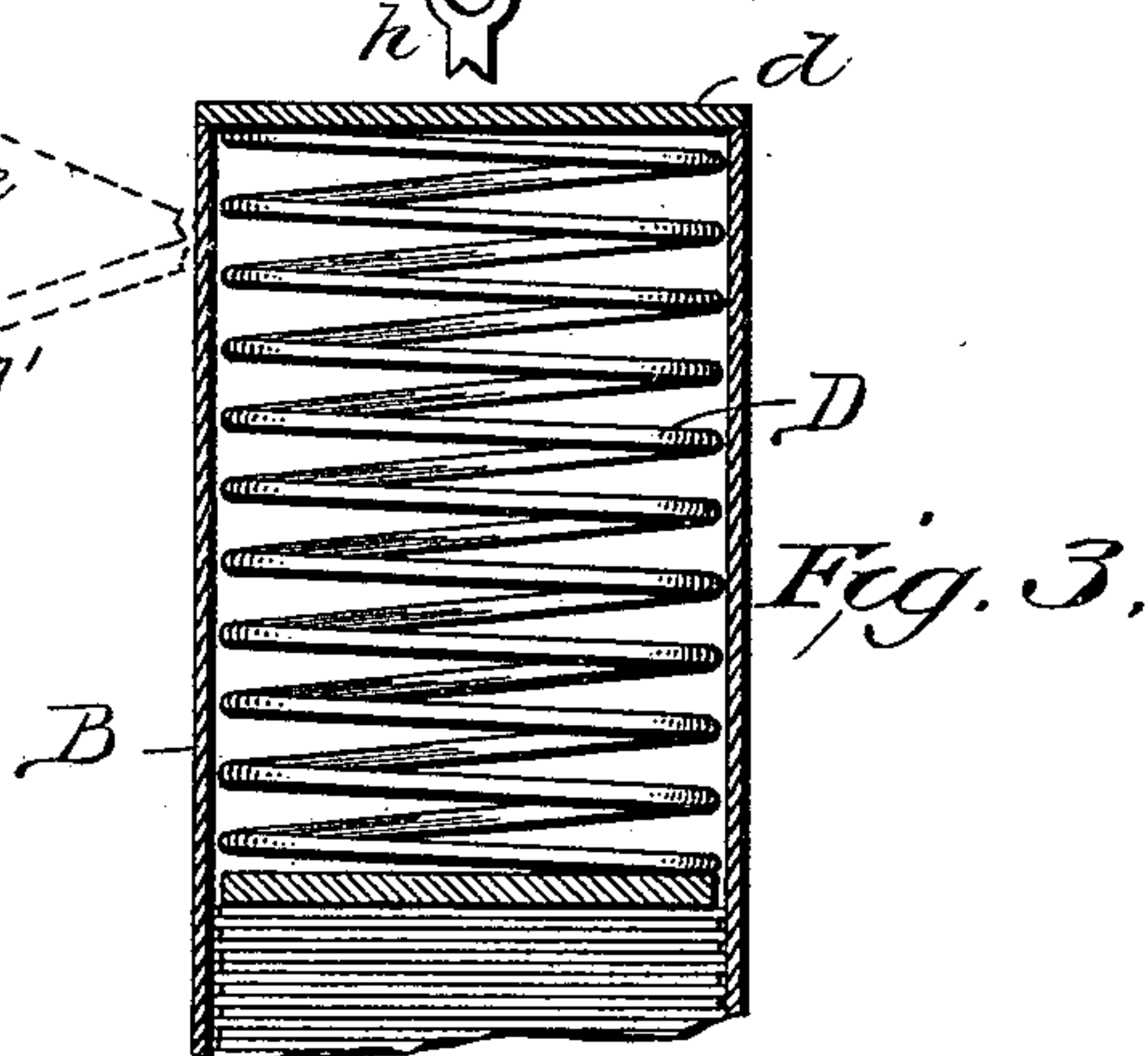
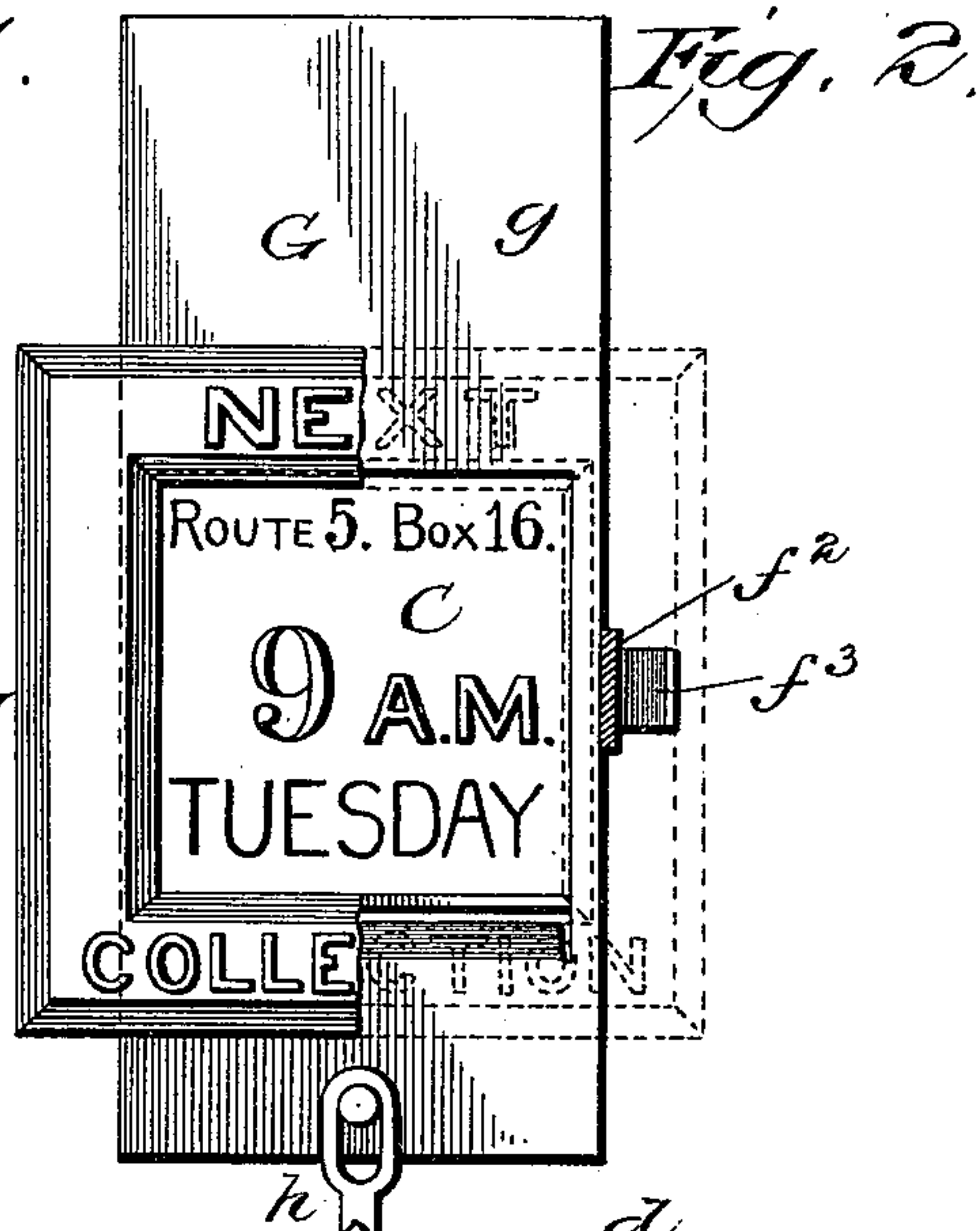
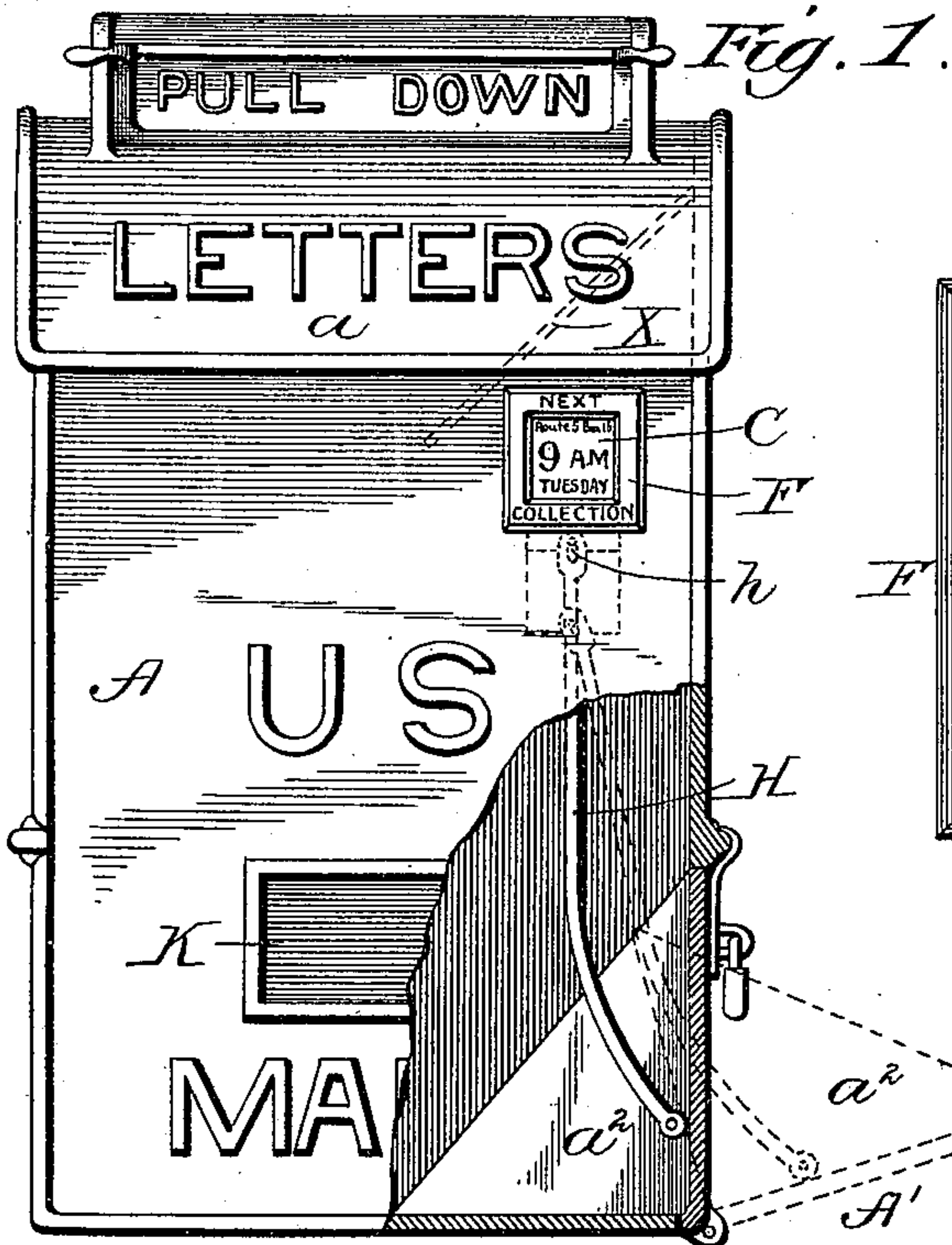
No. 622,265.

Patented Apr. 4, 1899.

F. C. RIELY.
LETTER BOX.

(Application filed Jan. 28, 1899.)

(No Model.)



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UNITED STATES PATENT OFFICE.

FRANK C. RIELY, OF WASHINGTON, DISTRICT OF COLUMBIA.

LETTER-BOX.

SPECIFICATION forming part of Letters Patent No. 622,265, dated April 4, 1899.

Application filed January 28, 1899. Serial No. 703,697. (No model.)

To all whom it may concern:

Be it known that I, FRANK C. RIELY, a citizen of the United States, residing at Washington, in the District of Columbia, have invented certain new and useful Improvements in Letter-Boxes, of which the following is a specification.

The primary object of my invention is to provide improved indicating devices for letter-boxes so constructed, operated, and arranged as to, first, indicate to the public the time when the mail in the box will be next collected; second, to inform the post-office authorities of the proper performance of the duties of the collector or his failure to perform them; third, to provide evidence in favor of an honest collector should he be wrongfully charged with failure to make proper collections, and, fourth, to inform the collector of the unauthorized opening of the box between his regular trips and to enable him to so report.

In carrying out my invention I attach to any ordinary letter-box, such as a street letter-box, a receptacle filled with checks or cards on which are printed or inscribed characters designating the hours of collection, the location of the box, and such other information as is necessary or desirable. The front of the card-receptacle is open, and a window is provided in the front of the box in line with the open end of the card-receptacle. A spring bears against the pack of cards and presses them forward toward the window, so as to expose the front card in the pack to full view of the public. The cards are all differently printed, so far as the time of collection is concerned, and are arranged in the receptacle in the order of collection, the card indicating the next collection being always at the front of the pack and exposed to view while the other cards are concealed. When a collection is made, the act of opening the door causes a slide to be operated which engages the front card, withdraws it from the pack in front of the window, and allows it to drop in the letter-box, from which it is removed by the collector with the mail which the box contains. As soon as a card is removed from the pack the pack of cards is moved forward by the spring and the front card therein will indicate the next collection.

In the accompanying drawings I have shown the best way now known to me of carrying out my invention. The mechanism which I have illustrated is extremely simple in construction. It may be readily applied to any letter-box at small cost and is absolutely reliable in operation.

Figure 1 is a front elevation of an ordinary letter-box with my improvements applied. Some of the parts are broken away to expose other parts and some of the mechanism is shown by dotted lines. Fig. 2 is a detail view, on an enlarged scale, partly in front elevation and partly in section, of the front frame of the indicator, an indicator-card, and the slide which removes it from view and deposits it in the box. Fig. 3 is a detail view, on an enlarged scale and in longitudinal central section, showing particularly the pack of cards, their receptacle, and the manner of securing the front frame to the front of the letter-box. Fig. 4 is an enlarged perspective view of the slide or card-depositor.

The letter-box A may be of any approved design or construction. The swinging door shown is of the kind now almost universally used in street letter-boxes, and I have shown appropriate devices for connecting this door with the slide which deposits the cards. I preferably locate the card-receptacle B at the right-hand side, near the top of the box, just under the curved cover *a*. The cards C may be made of any suitable material—such as cardboard, celluloid, metal, &c.—and are preferably rectangular in shape. The receptacle B is of a cross-section corresponding with the shape of the cards, which fit loosely therein, so as to slide freely forward. They are held erect and pressed forward by a spiral spring D, arranged in the rear end of the receptacle and pressing at one end against the back *d* of the receptacle or against the back of the letter-box, as the back *d* may be dispensed with. The receptacle B may be secured permanently to the letter-box in any desired way.

The front frame preferably has cast on its front face the words "Next collection," and it is formed with a central rectangular opening *f*, around the inner edge of which is formed a rearwardly-projecting rectangular frame *f'*, which extends through an opening

a' in the letter-box. The rear edge of the flange f' is flush with the inner surface of the front of the box. The flange f' is formed with rearwardly-projecting arms f^2 , which
 5 are in turn provided with spring-fingers f^3 , secured to the arms at their rear ends and free at their front ends.

Fig. 3 shows the spring-fingers expanded and locking the frame E in place on the box,
 10 but the fingers may be readily collapsed or bent inward, and then the frame and the parts connected therewith may be removed. In like manner the frame and the parts it supports may be readily inserted into the open-
 15 ing a' in the box, no bending of the fingers by the operator being necessary, as the fingers will automatically collapse when the frame is pushed inward through the opening, and when the frame is in place the fingers will
 20 spring outward to the position shown in Fig. 3, so as to lock the frame in the box, and it will be impossible to remove the frame without first unlocking the door A' , so that the collector or some other authorized person may
 25 reach into the box and collapse the fingers f^3 . The front card may rest against a shoulder on the flange f' or it may rest against a plate of glass F' , as shown in Fig. 3.

The front end of the receptacle B is arranged between the arms f^2 , but is not supported by these arms. G indicates the depositing-slide, which may be called the "card-changer." The front g of this slide is formed with a rectangular opening g' , and it has two
 35 rearwardly-projecting parallel flanges g^2 , arranged at right angles with the front. The lower edge of the opening g' is turned forward and inclined, so that the front card will not balance on this edge when removed from
 40 the pack of cards and while being lowered into the box. The slide G is arranged between the arms f^2 of the frame F in rear of the flange f' . It moves vertically in front of the front edge of the receptacle B, and its
 45 flanges g^2 are guided by the front portion of this receptacle, as shown in Fig. 3. The lower end of the slide is connected by a slot-and-pin connection h with a link H, the lower end of which is pivotally connected with one of
 50 the sides a^2 of the swinging door A' . The link H is curved or bent in its lower portion in order to give the proper leverage, and it extends down from the slide close to the inside of the front of the box and between the
 55 flange a^2 and the box, thus preventing any liability of mail-matter being caught by the link or any interference on the part of the link with the removal of mail-matter from the box.

60 A card indicating the next collection is always exposed to view for the benefit of the public. The public is assured that the collection indicated on the card has not been made, and therefore can determine whether
 65 it is best to deposit a letter or to carry it to the post-office. When the collector opens the

box, the parts of the mechanism will be moved to the position shown by dotted lines in Fig. 1, the slide G being depressed and carrying with it the front card of the pack, which was
 70 pressed against the glass F.

It will be understood that the front card normally rests against the glass F' and is located within the opening g' of the slide, so that when the slide moves downward the
 75 upper edge of the opening g' bears against the top of the card, and thus carries it down.

As soon as the slide G moves downwardly far enough to cause the upper end of the slot g' to descend below the bottom of the recep-
 80 tacle B the card which it carries will drop into the letter-box and may be collected and carried away by the collector and delivered at the post-office to indicate that he has made a
 85 collection at the proper time at the box indicated on the card.

In the act of closing the door A' the slide G will be raised, and as soon as the opening g' comes into line with the opening in the recep-
 90 tacle the pack of cards will be pressed forward by the spring D, and the front card, which rests against the glass F' , will be within the opening g' , the upper edge of the card being in line with the upper edge of this open-
 95 ing. The card remains in this position until the door is next opened at the next collection, when it will be deposited in the box and collected when the box is next opened.

A large number of cards may be placed in the receptacle and arranged in order to in-
 100 dicate successively the several collections for successive days. Each card should be inscribed in some way to indicate the location of the box and the time of the next collec-
 105 tion. Care should be taken to arrange the cards in proper order. When the supply of cards is exhausted, the collector or some other authorized person may open the box, compress the springs f^3 , and remove the front
 110 frame F and the parts connected therewith. This will expose the front of the receptacle B, and a pack of cards may be inserted and pushed back against the force of the spring D. The frame F may then be quickly forced
 115 inward and locked and the indicator is then ready for continuous automatic operation without further attention until the supply of cards is exhausted.

It will be observed that the mechanism is extremely simple. It is not liable to get out
 120 of order. It is entirely automatic, being operated every time that the collector performs the necessary operation of opening the door of the box. It cannot possibly be operated by unauthorized persons, and furnishes com-
 125 plete evidence of the manner in which the collector performs his duties, thus doing away largely with the employment of special agents or detectives to inspect letter-boxes.

The letter-box which I have shown indi-
 130 cates at K a receptacle for the usual card indicating the hours of collection; but by my

improvements I can dispense entirely with this frame and with the cards. Heretofore this has been a matter of considerable expense. The precise manner of delivering the cards from their receptacle is not of vital importance. If my indicator should be applied to another kind of box having a different kind of door, the connections between the door and the card-changer or card-deliverer would of course be modified.

The receptacle B does not interfere with the fall of mail-matter from the opening to the bottom of the box; but to provide against any possible objection on this account I may arrange an inclined guide or shield X in the box over the receptacle, as indicated in Fig. 1 by dotted lines.

So far as I am aware no one has ever heretofore produced a letter-box indicator in which a card to be collected by the collector is deposited each time that a box is opened, and therefore while I consider the mechanism which I have illustrated simple, efficient, and novel, and wish to claim it in detail, I wish also to claim, broadly, mechanism for depositing a card in the box to be collected by the collector each time that the box is opened for the removal of mail.

I claim as my invention—

1. The combination with a letter-box having a door, of a card-receptacle, a series of cards therein, and mechanism connected with the door and card-receptacle for delivering a card from the receptacle and depositing it inside the box each time that the box is opened.

2. The combination with a letter-box, of a card-receptacle, a series of cards therein, a card-changer and connections between the card-changer and the door of the box, so constructed and arranged as to shift the card-changer when the door is opened and cause it to deposit a card in the box.

3. The combination with a letter-box having a hinged door, of a card-receptacle, a series of cards therein, a card-changing slide, and

a link connecting the card-changing slide with the hinged door.

4. The combination with a letter-box having a door for the removal of mail, a card-receptacle within the box, a series of cards therein, means for pressing the pack of cards forward toward an opening in the front of the box, a vertically-reciprocating slide and a link connecting the slide with the hinged door.

5. The combination with a letter-box having a hinged door provided with inwardly-projecting flanges, of a card-receptacle, a series of cards therein, a vertically-reciprocating slide, and a link connected with the slide and extending downwardly along the front of the box, and between the front of the box and the front flange on the door to which latter it is pivotally connected.

6. The combination of a letter-box having a door, a card-receptacle arranged therein, a front frame extending through an opening in the front of the box, in line with the open front end of the card-receptacle, a vertically-moving flanged slide arranged between the front end of the receptacle and the rear end of the frame, and means connected with the door of the letter-box for operating the slide.

7. The combination with a letter-box, of a card-receptacle, a front frame extending through an opening in the box in line with the front opening of the card-receptacle, rearwardly-projecting arms on the frame provided with spring-fingers, a vertically-moving slide arranged between the arms and the sides of the front end of the card-receptacle, and a link connecting the slide with the door of the letter-box.

In testimony whereof I have hereunto subscribed my name.

FRANK C. RIELY.

Witnesses:

LLOYD B. WIGHT,

GUSTAVUS B. MAYNADIER.