

(No Model.)

J. F. GOODRIDGE.

FARE BOX.

No. 272,952.

Patented Feb. 27, 1883.

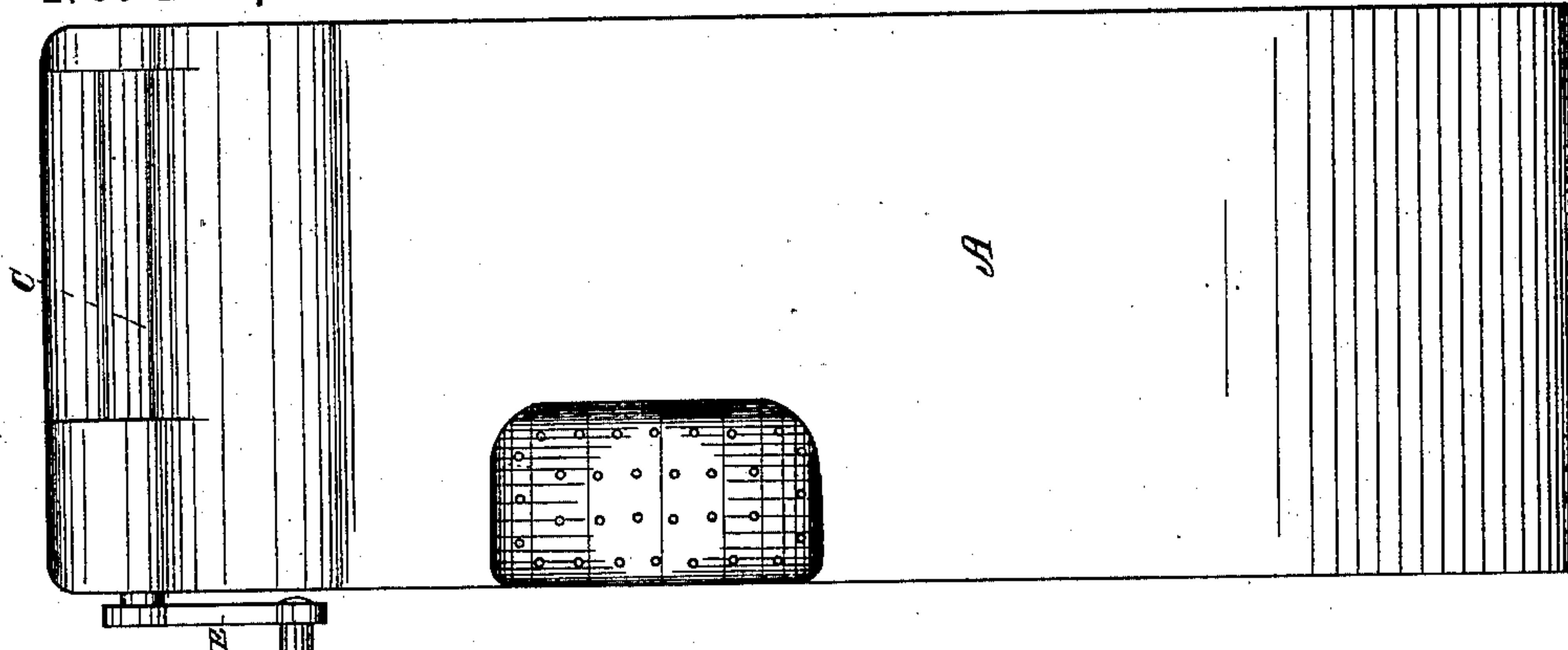


Fig. 1

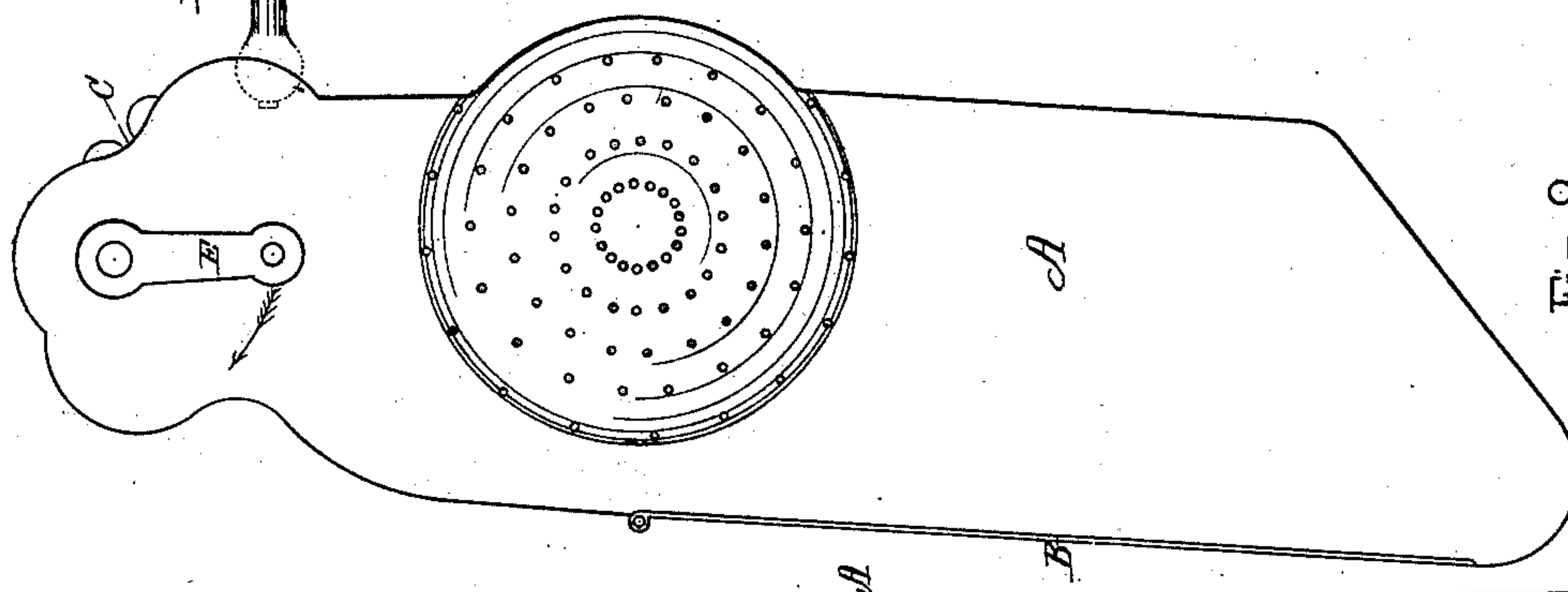


Fig. 2.

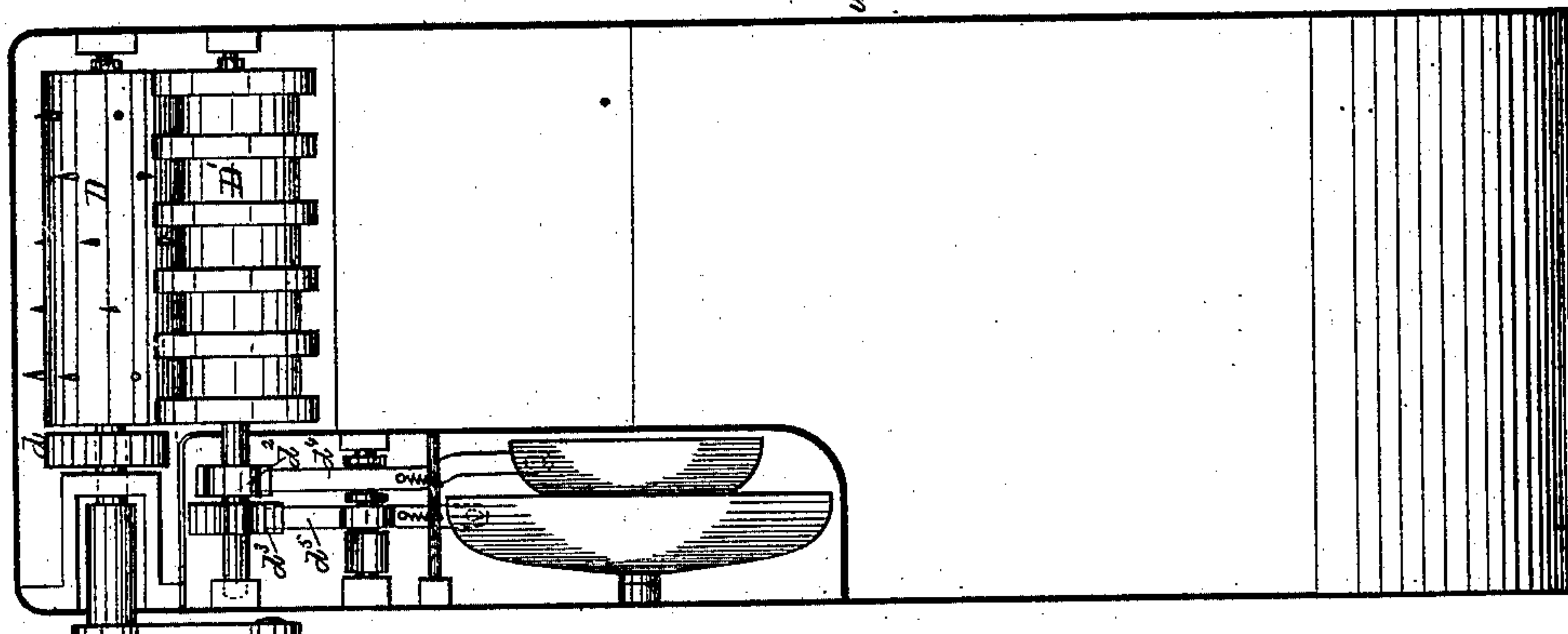


Fig. 3.

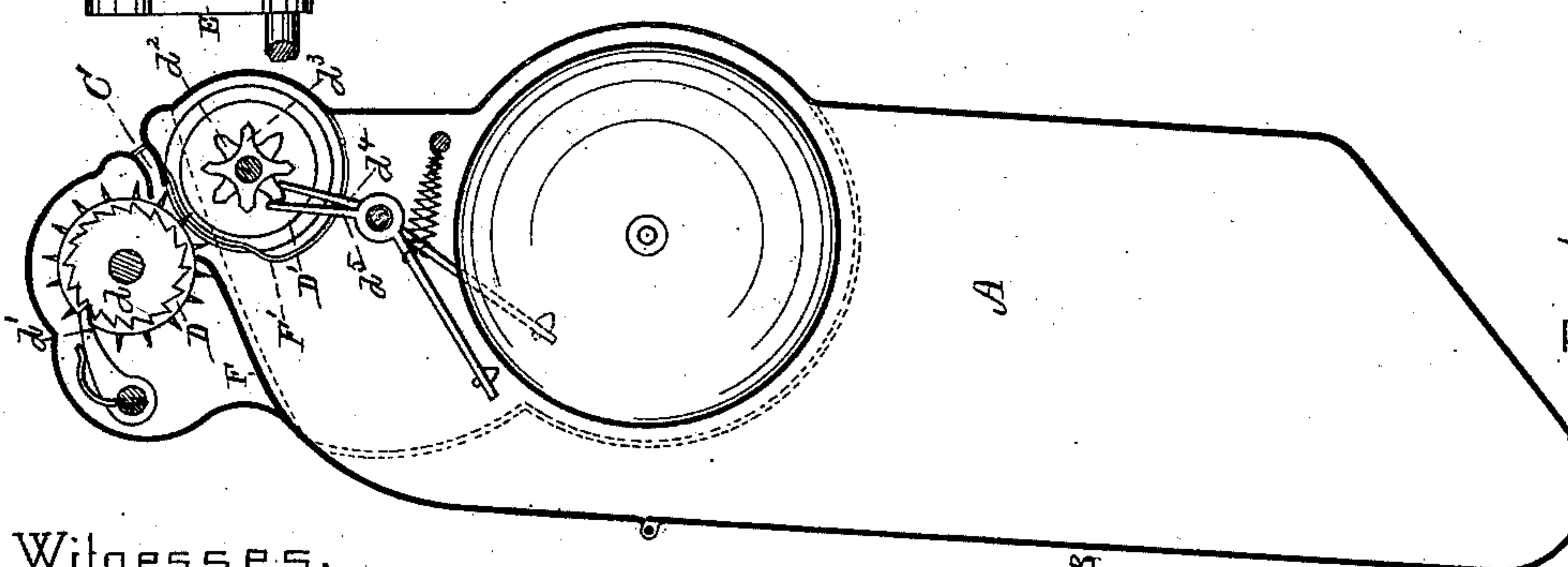


Fig. 4.

Witnesses.

Wm. A. Copeland
John R. Snow.

Inventor.
James F. Goodridge
by J. E. Maynardier his Atty

UNITED STATES PATENT OFFICE.

JAMES F. GOODRIDGE, OF BOSTON, ASSIGNOR OF ONE-HALF TO JOHN E. RUSSELL, OF LEICESTER, AND ALEXANDER POPE, OF BOSTON, MASS.

FARE-BOX.

SPECIFICATION forming part of Letters Patent No. 272,952, dated February 27, 1883.

Application filed October 28, 1882. (No model.)

To all whom it may concern:

Be it known that I, JAMES F. GOODRIDGE, of Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful Fare-Box, of which the following is a specification.

My invention relates to improvements in boxes in which a ticket is to be placed every time a fare is paid; and the objects of my invention are to so arrange the alarm-striking mechanism that it can be sounded only when a ticket or the like is put into the box, and to simplify the mechanism for striking an alarm as each ticket is put into the box.

The accompanying drawings illustrate a fare-box with my improvements embodied in the best way now known to me.

Figure 1 is a front elevation. Fig. 2 is a side elevation. Fig. 3 shows the front removed from Fig. 1, to allow the internal mechanism to be seen; and Fig. 4 shows the side removed from Fig. 2 for the same purpose.

The case A is made large enough to hold all the tickets collected for a certain time or trip, and to receive the feed and alarm mechanism. A door, B, attached and fastened in the usual way, is provided for removing the collected tickets. A slot C is made in the case A, through which the tickets are passed. Two rollers, D D', are so located in relation to the slot C that the ticket cannot be inserted unless these rollers are caused to revolve. These rollers are separated slightly, so that one of them may revolve without revolving the other when there is nothing between them, but so close together that the thinnest ticket will not allow one to revolve without revolving the other. They are provided, one with a series of pins and the other with a series of grooves, or other suitable means for giving a positive grip to the ticket. These pins or the like may also serve to deface the ticket and render it unfit for future use. These rollers D D' are mounted in bearings secured to the case A. One of them is provided with a crank, E, for revolving it. This crank is attached to the roller shaft, which projects through the case A for that purpose. The roller to whose shaft the crank is attached is prevented from being turned in the wrong direction by a ratchet-

wheel, d, and a pawl, d', arranged in the usual way. The other roller is revolved by the friction of the ticket alone as it is drawn in by the crank-roller, and has secured to its shaft one or more star wheels, d² d³, the radial arms of which operate the hammers d⁴ d⁵ of alarm-bells at each passage of a ticket. A plate, F, fits close to the roller, provided with the pins, and is properly slotted to allow the pins to pass, but strips the ticket from these pins and causes it to fall into the case A. A similar plate, F', with projections entering the grooves in the other roller, prevents the ticket from adhering to and wrapping around this roller. By reference to Fig. 3 it will be seen that the alarm-bells and the actuating mechanism are placed one side of the roller, so that there is nothing to catch or impede the fall of the tickets.

From the foregoing description, and by reference to the drawings, it will be seen that the cogs and other gearing heretofore used in fare-boxes of this class are dispensed with, and the mechanism is reduced to the most simple form.

In operation, the conductor is required to put a ticket into the case for every fare paid, and this he can do only by turning the crank and revolving one of the rollers, that draws in the ticket, which, by its friction, causes the other roller to revolve, and by means of the star-wheels on its shaft strike an alarm on the bell.

I am aware that the use of rollers on fare-boxes for feeding tickets is not new, such being shown in patents to G. W. Horne, No. 232,719, September 28, 1880, and to C. S. Locke, No. 237,561, February 8, 1881. In neither of these, however, could one roller be revolved without revolving the other and sounding an alarm. Hence it was necessary to provide other evidence than the alarm that a ticket had been actually deposited. In Horne's patent an inspection-floor was used, provided with small windows, through which the driver could see whether the alarm was sounded with or without inserting a fare. In Locke's patent a numbered ticket-strip was used, from which a number was torn for each fare, and then deposited in a locked receptacle. I therefore do not claim, broadly, the feed-rolls nor the alarm;

but I believe I am the first to so arrange the feed-rolls and the alarm that one of the rolls cannot be revolved nor the alarm be sounded unless a ticket is actually passed into the box.

5 I claim as my invention—

The combination, substantially as hereinbefore set forth, of the case A, having a ticket-slot, C, feed rolls D D', independent of each other, and mounted, as described, in relation
10 to the slot C, mechanism for revolving one of the feed-rolls, and mechanism for sounding an

alarm connected to the other feed-roll, the feed-rolls being so arranged that the passage of a ticket between them is requisite to cause the roll connected to the alarm mechanism to re- 15
volve and sound an alarm, as and for the purposes set forth.

JAMES F. GOODRIDGE.

Witnesses:

W. A. COPELAND,
J. R. SNOW.