E. J. BRUCE.

Change-Counter.

No. 211,131. Patented Jan. 7, 1879.

Fig. 1

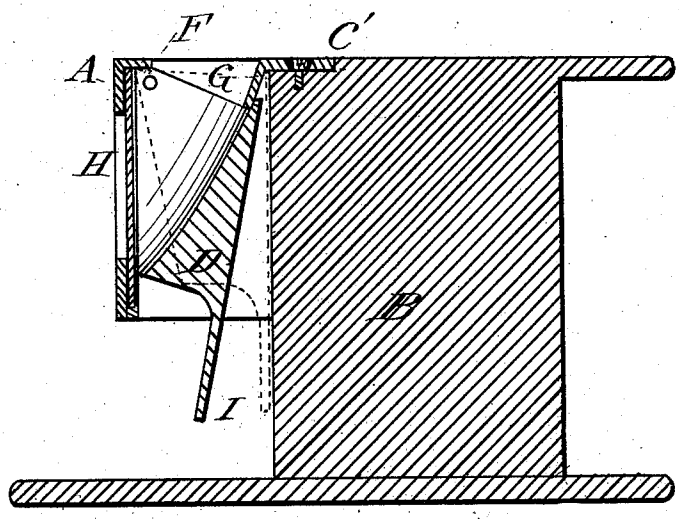


Fig. 2

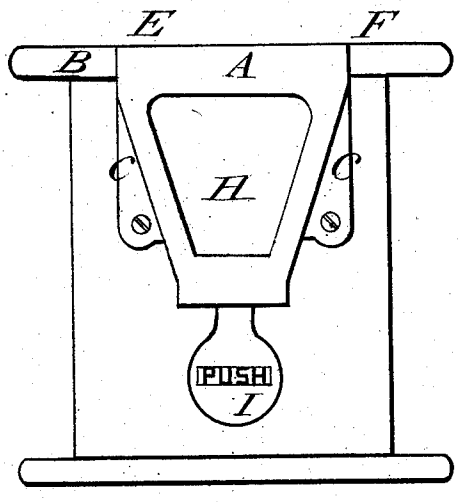
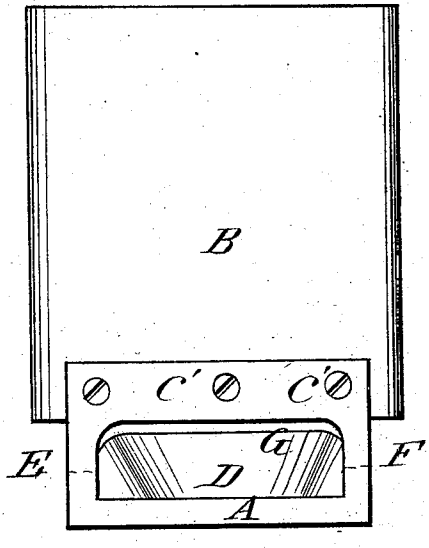


Fig. 3



Witnesses:

Alfred Rix

Daniel Cunningham

Inventor:

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UNITED STATES PATENT OFFICE.

ESTHER JANE BRUCE, OF NEW YORK, N. Y.

IMPROVEMENT IN CHANGE-COUNTERS.

Specification forming part of Letters Patent No. **211,131**, dated January 7, 1879; application filed March 19, 1878.

To all whom it may concern:

Be it known that I, ESTHER J. BRUCE, of the city, county, and State of New York, have invented a new and useful Improvement in Cash or Change Counters, which improvement is fully set forth in the following specification.

The object of my invention is to facilitate the delivery of change or tickets, and especially coin, at crowded ferries, theaters, fairs, stores, and particularly at rapid-transit and other offices where it is desirable to make change quickly. The present mode of delivering change on a plain counter is attended with inconvenience and delay too well known to require description.

In general terms, the invention consists in a hopper or inclosure at the front of the counter, into which the cashier moves the change from the counter, whether it consists of coin or tickets, and from which the customer receives it into his open hand by a simple movement thereof. There are numerous ways in which this may be done. I will first give the one I prefer, and then suggest certain others. There is a hopper consisting of two parts, to wit, the case and a spout swinging within it, as shown by the drawings, which are to be taken as a part of this specification.

Figure 1 is a vertical central section from front to rear. Fig. 2 is a front view, and Fig. 3 is a top view.

The same parts in the different figures are marked by the same letters.

The case A is fastened to the counter B by the flanges C and C′. The spout D swings within the case, to which it is pivoted at its two upper and front corners, E and F. The upper end or mouth of the spout is slightly larger than, and conforms to, the opening through the plate above it; but as it descends it contracts and runs into the semi-conical form. This prevents clogging. The front edges of the spout end against the inside of the front plate of the case.

The lip G may be attached to the upper plate, so as to hide the opening above the spout when the hopper is closed below, or it may be omitted.

The parts should be so adjusted as to leave below, when the hopper is open, room sufficient for a free discharge of its contents and no more.

The lateral width of the opening should be a trifle more than the diameter of the largest coin in general use. At present this is the trade-dollar. Five-eighths of an inch opening from front to rear is ample for the present style of change. The lower end of the case extends somewhat below the spout, so that the hand is kept away from the spout for a free discharge. The ticket should be of such material and form as to pass freely through the hopper.

The front of the hopper is furnished with a pane of glass, H, to allow persons unaccustomed to the device to see its nature and how to operate it. The glass should not extend downward so far as to be struck by the change.

The finger-piece I is attached to the rear of the spout, and extends downward somewhat below the case, where it is lettered "push." Sufficient weight is put into its upper part to hold it closed against the weight of change.

The operation is obvious. The cashier slides the change forward on the counter into the hopper, by which it is gathered at the bottom. The weight of the spout, suspended as it is in front, keeps the hopper closed, so as to retain its contents. The passenger sees through the glass his change waiting for him, and also the word "push" on the finger-piece, and obeys the direction by pressing against it, when the contents of the hopper fall into his open hand instantly and certainly, whether he presents it endwise or sidewise.

I will now indicate some of the variations of which the invention is capable.

First, of course, more than one hopper may be used in the same counter, and may be used in the permanent counter or in a movable one, and may be opened by a forward or lateral movement instead of a backward one, and the case may move instead of the spout; second, a spring may be used instead of a weight to keep the hopper close; third, instead of having the spout swing it may slide up and down on an incline; fourth, the change can be moved forward by the cashier into a tray on a level with the counter, and emptied into the hand by pressing against an arm below, the tray being pivoted to the counter at its rear, and held in place by a weight or spring.

I am aware of the coin-trays now in common use, being a box with a side opening, and do not claim them; but do claim as new, and

my invention, and desire to secure by Letters Patent the following things in a device for the rapid delivery of change, when constructed in the manner, operating in the way, and producing the effects substantially as set forth, to wit:

1. The stationary case A and spout D, or other movable part described, in combination with a counter, for the ready delivery of coin or change, as described.

2. The hopper consisting of a fixed part, A, combined with a movable part, D, and a counter to receive, hold, and deliver the change, as set forth.

3. The combination, with a counter, of a spout or hopper for the rapid delivery of coin or change to the hand of the receiver held outside or under the margin of the counter, as set forth.

Signed this 16th day of March, 1878.

ESTHER J. BRUCE.

Witnesses:

ALFRED RIX,

DANIEL CUNNINGHAM.