IMPROVEMENT IN ELECTRIC LETTER-BOXES.


To all whom it may concern:

Be it known that I, WILLIAM H. RODGERS, of Brooklyn, E. D., in the county of Kings and State of New York, have invented an Improvement in Electric Letter-Boxes, of which the following is a specification.

Letter-boxes have been made with a circuit-closing device within the letter-box, actuated by the weight or pressure of the letter as the same is placed within the box. If the weight of the letter is insufficient, or if it is very thin material, the electric indicator will not always act.

My present invention is made for closing the electric circuit by a circuit-closing device actuated by the cover of the letter-box, so that the distant alarm is rung by the act of raising the cover over the slit of the said letter-box, and I make use of a peculiar locking circuit-closer that remains in a position to continue the alarm until the box is opened for the removal of the letter.

It is to be understood that this improvement applies to letter-boxes that are to be placed near the front door and connected electrically with a bell or other alarm in an office or other distant place, so that signal will be made at the distant place when a letter is dropped into the box.

In the drawings, Figure 1 is a vertical section of the letter-box, and Fig. 2 is a sectional plan at the line x x, Fig. 1.

The box is made with the back a, bottom b, sides c, and top d. These will usually be cast in one piece, and the door e is hinged at f, and forms the front of the box. I remark, however, that the box may be of any desired size or shape.

The slit at g, through which letters are dropped, has a swinging cover i, pivoted at j, and provided with a counterpoise arm, within the box, so that the cover i will close automatically.

Within the box there are circuit-closing springs k, r, that are each fastened to the box at one end, and there is a latch at s on one spring to catch and hold the end of the other spring.

The spring r is shaped so that the counterpoise arm m, as it moves in lifting the lid or cover i, presses upon the spring r, bringing its moving end into contact with the spring r, and in so doing the electric circuit, of which the springs k, r form part, is closed, and the distant signal or alarm given, by even lifting the cover a small distance.

By moving the cover i sufficiently for the insertion of a letter through the slit at g the spring k is pressed down and latched beneath the catch upon the spring r, so that the circuit continues closed and the alarm or signal continues to operate.

Upon the door e there is a stud s, that serves to hold the spring r toward the spring k, but so soon as the door is opened and the stud s moved from the spring k said spring flies back and releases the end of the spring r, and breaks the electric circuit, and the alarm ceases.

It is to be understood that the springs k, r may both be insulated, and the circuit-wires h connected directly to the respective springs, or one circuit-wire may be connected to the metallic letter-box and the other to the spring.

In Letters Patent No. 214,007, granted to me April 8, 1879, a letter-box is shown with a circuit-closing device within the box, operated by the letter as it is passed into the box, and the opening of the door of the letter-box disconnects the alarm by breaking the circuit.

I do not herein claim any of the devices shown therein, my present invention being limited to a letter-box in which there is an external cover to the slit in the letter-box, which cover is moved to allow for the insertion of a letter, and in so doing the cover actuates the circuit-closer to the distant alarm.

I claim as my invention—

1. The combination, with the letter-box and the cover to the slit, of a circuit-closer that is operated by the movement of the cover and an electric circuit and distant signaling instrument, substantially as set forth.

2. The circuit-closing springs k, r and catch, in combination with the cover and the door of the letter-box, substantially as specified, so that the cover, when moved, closes the circuit, the springs are held by the catch, and the springs separate when the door is opened, substantially as set forth.

Signed by me this 19th day of May, A. D. 1879.

WILLIAM H. RODGERS.

Witnesses:

Geo. T. Pinckney,
William G. Mott.