E. E. WEAVER.

ELECTRICAL INDICATOR FOR LETTER BOXES.

No. 329,245. Patented Oct. 27, 1885.
To all whom it may concern:

Be it known that I, EPHRAIM E. WEAVER, of Philadelphia, in the State of Pennsylvania, have invented a certain new and useful Improvement in Electrical Indicators for Letter-Boxes, of which the following is a specification.

My invention is directed to that kind of letter-box which contains a circuit-closer in circuit with an alarm or indicator, and so arranged that the letter or parcel, when dropped into the box, will act upon said circuit-closer in such manner as to cause it to close the circuit and put in operation the alarm or indicator. It frequently happens that parcels are delivered by post or otherwise which are too large to be placed in the box, and consequently in such a case it is impracticable to actuate the circuit-closer within the box. To meet this emergency I combine with the box and automatic circuit-closer therein a manual key or circuit-closer, which is external to the box and in a branch of the circuit. The postman or other person delivering the parcel can under this arrangement close the circuit by hand, and thus announce to the owner of the box that the parcel has been delivered. It is this feature that mainly characterizes my improvement. I have also improved the construction and arrangement of the circuit-closing devices within the box, and have provided a means whereby the occupant of the room in which the alarm or indicator is placed can break the circuit at that point, so as to stop the alarm, if desired.

The nature of the invention will be readily understood by reference to the accompanying drawings, in which—

Figure 1 is a perspective view of the letter-box with the front partly broken away and with the circuit-connections and alarm or indicator. Fig. 2 is a transverse vertical section of the box. The letter-box itself (lettered A) is of any suitable construction and configuration. In this instance it has a slit in the top for the introduction of letters. Within it is a platform, B, of any suitable material, (usually wood or paper-board,) which at its rear is carried by a metallic spring tongue or strip, c, attached to the back of the box, and of sufficient flexibility to permit the platform to drop at its front end under the weight of a letter. An inclined deflecting-plate, b, above the platform, directs the letter dropped into the box to the front of the platform, and a ledge, e, at the front edge of the latter, prevents the letter from sliding off at that point. Beneath the platform B, and in proximity thereto, is the flexible horizontal end of the bent metallic conducting-strip d, which forms one of the 60 contact-pieces of the circuit-closer. The vertical stem of this strip is attached to the bottom of the box, and is electrically connected to the external binding-post f. The other contact-piece of the circuit-closer is the vertical post e, which is placed beneath and in proximity to the free end of the strip d, and is electrically connected to the external binding-post g. The contact-post e can be made adjustable, as customary, so as to set it at any desired distance from the contact-strip d.

The construction and arrangement of parts described possesses advantage on the score of efficiency and simplicity. The platform having a light spring support will yield readily, so as to bear upon the contact-strip d. At the same time it forms no part of the circuit, and need not have contact with strip d, unless when the circuit is to be closed. Consequently any slight jarring or other abnormal causes will not be sufficient to cause it to act upon the contact-strip d, and thus there is much less liability of accidentally closing the circuit than there would be were one of the contacts carried by the platform.

From the binding-posts f g extend the circuit-wires h, connecting with the poles of the battery or generator C. In the circuit is the electrical alarm or indicator D, of any approved construction. In practice the bell or indicator is located in the office or room of the owner of the box, while the box itself is in the hall of the building.

Frequently parcels are delivered which are too large to be put into the box, and thus the automatic circuit-closing arrangement therein is ineffective. To provide against this contingency, I take from the binding-posts f g a branch or derived circuit, k, which can be closed or interrupted at will by a manual key, r, located on the side of the box or in convenient proximity thereto. The postman de-
delivering a parcel too large for the box can by the aid of this switch readily announce the delivery of parcels, even if they be too large for the box. This arrangement can also be conveniently used as a means to convey conventional or agreed-upon signals to the occupant of the room in which the indicator is to inform him of presence of one—such as a foreman, superintendent, or the like—whom he may wish to see.

To enable the receiver of the signal to stop the alarm at any time before going to the mailbox, a key, F, is provided at or near the alarm D.

Having described my improvement, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination, with the electric circuit and alarm or indicator therein, of the letter-box provided with the spring-supported platform B, the separate and independent flexible contact-strip d, placed beneath and in proximity to the free end of the platform, and the contact-post e, beneath the contact-strip d, as and for the purposes shown and described. 25

2. The letter-box, the movable platform within the same, and the circuit-closer operated by said platform, in combination with the circuit h, the alarm or indicator D, the branch circuit h', and the circuit-closing key E, external to the box, under the arrangement and for operation as herein shown and described.

In testimony whereof I have hereunto set my hand this 26th of November, 1884.

EPHRAIM B. WEAVER.

Witnesses:

EDGAR T. GADDIS,
J. WALTER BLANDFORD.