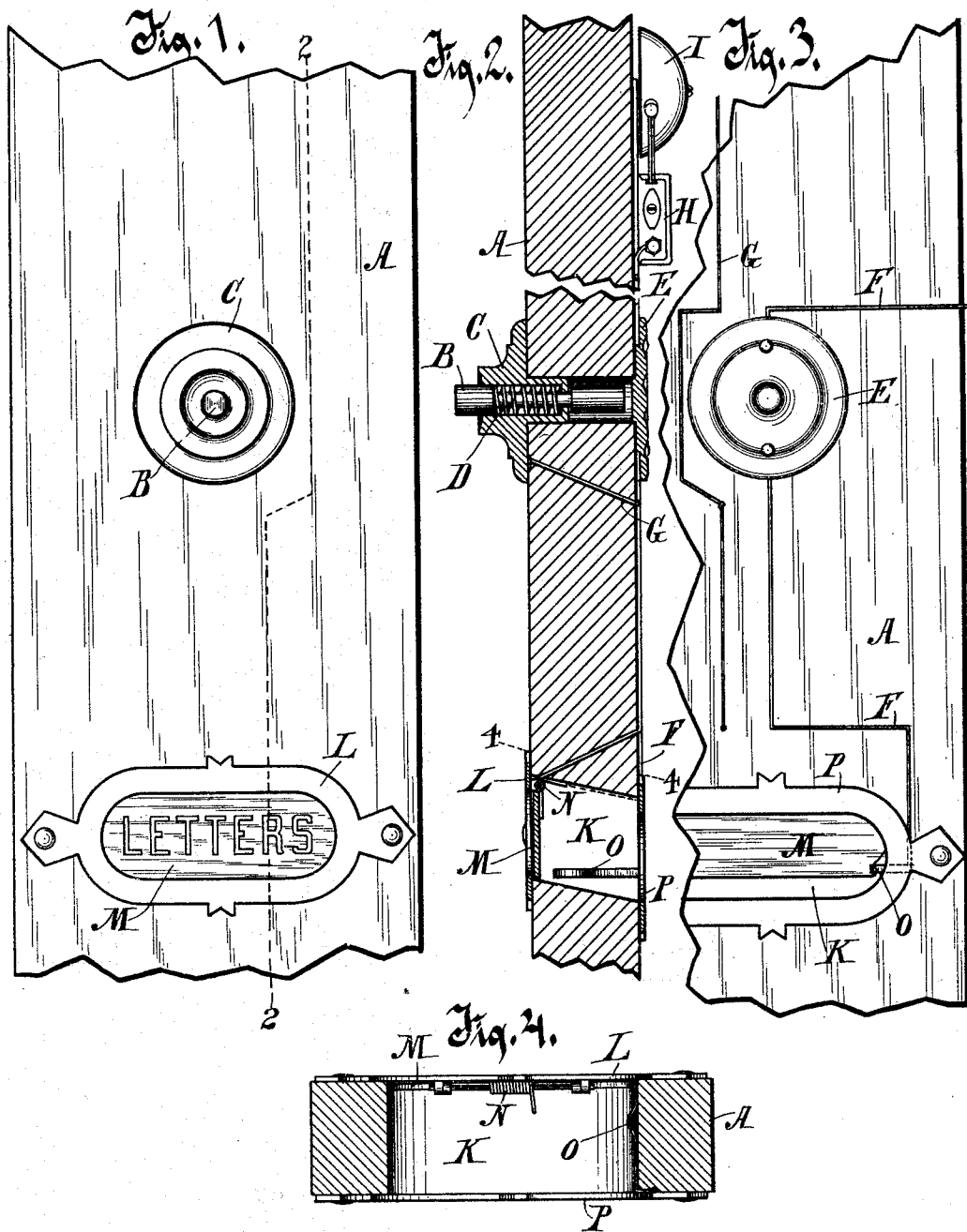


(No Model.)

C. R. PIGGINS.
ELECTRIC SIGNAL DEVICE.

No. 504,745.

Patented Sept. 12, 1893.



Witnesses.

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UNITED STATES PATENT OFFICE.

CHARLES R. PIGGINS, OF RACINE, WISCONSIN.

ELECTRIC SIGNAL DEVICE.

SPECIFICATION forming part of Letters Patent No. 504,745, dated September 12, 1893.

Application filed April 4, 1893. Serial No. 469,072. (No model.)

To all whom it may concern:

Be it known that I, CHARLES R. PIGGINS, of Racine, in the county of Racine and State of Wisconsin, have invented a new and useful Improvement in Electric Signal Devices, of which the following is a description, reference being had to the accompanying drawings, which are a part of this specification.

The object of my invention is to provide means by which on the depositing of letters in a letter box, a signal will be given automatically, and if desired at a distance from the box.

The invention consists of the apparatus hereinafter described and claimed and its various parts or their equivalents.

My invention in the form in which it is most likely to be used, is related to those boxes or receptacles for receiving letters, or packages delivered at residences by carriers, that are located in the vicinity of electric signal push buttons, near the front doors of residences. I have adopted this form of device for illustrating my invention.

In the drawings, Figure 1, is a fragment of the casing of a house door, with an electric push button, and an escutcheon for a letter chute therethrough. Fig. 2, is a longitudinal section taken on line 2—2 of Fig. 1. Fig. 3, is a view of the inside of the fragment of casing, with my improved devices therewith. Fig. 4, is a transverse section on line 4—4 of Fig. 2 looking downwardly.

In the drawings, A is the fragment of a casing of a door of a house constructed of wood or other material, practically a non-conductor of electricity. In connection therewith a metal push button B is mounted in a plate C fixed in the casing, the push button being provided with a spring D to hold the push button normally out of contact with the plate E, secured to the casing on the inner side opposite the push button and in the rear of an aperture through the casing in which the push button is movable. The metal plate E is in electrical contact with the insulated metal wire conductor F, and the plate C is in electrical contact with the insulated wire G. These wires F and G, forming insulated electric conductors, lead to a battery H having an armature provided with a clapper arranged to strike the bell I. The battery and

bell may be located near the push button or in a distant part of the house, or elsewhere, as desired. By forcing the push button B into contact with the plate E, the electric circuit is completed and the bell is rung. The device as thus far described is well known, and is in common use.

Letter boxes for receiving mail delivered at residences by carriers are also well known, and my invention includes the apparatus hereinafter described, in connection with the electric signal bell apparatus hereinbefore described, and letter boxes.

In connection with a letter box or receptacle for receiving letters, a chute K is formed by making an aperture of suitable size and shape, through the casing. At the exterior end of the chute, an escutcheon is secured to the casing, which escutcheon consists of the slotted metal plate L, and the swinging lid M, hinged to the plate L, and arranged normally to close the slot or aperture through the lid L and the mouth of the chute. The lid M is held normally closed yieldingly by a spring N, coiled about the pivot pin of the lid, its ends bearing respectively against the lid and against a part of the casing. The metal lid M is in electric contact with the insulated wire G, continued thereto beyond the push button. A continuation and terminal part O of the wire F, continued beyond the push button, is arranged to contact with the lid M when it is swung inwardly in opening the chute for passing letters through it. This terminal part O, is preferably constructed in the form of a metal spring, secured rigidly to a metal plate P, to which the wire F is also secured, making a complete electric contact therewith. It would be sufficient to give an ordinary signal on the bell, to so arrange the terminal O that the lid M would come in contact with it once at any part of the movement of the lid made in opening the lid to pass letters through the chute, but as it is desirable that a different signal should be given when mail is delivered, from the signal ordinarily given by means of the push button, I preferably so arrange the spring terminal O that the lid M will contact with the spring as it swings inwardly to open it, and will contact with the spring again as it swings back to its initial place, after a package has been passed

through the chute, thus causing the electric circuit to be completed twice, and two signals, or a repeated signal to be given. This is sufficient to distinguish the mail carrier's
5 signal, from the ordinary signal given by the push button.

What I claim as my invention, and desire to secure by Letters Patent, is—

10 The combination with an electric signal circuit, of a metal lid arranged automatically to close a letter chute, the lid being a part of the electric circuit which is open when the lid is closed, and a terminal of the electric

circuit so arranged as to contact with the lid and close the circuit when the lid passes it in
15 opening the chute, and to contact with the lid and close the circuit again when the lid passes it in closing the chute, substantially as described.

In testimony whereof I affix my signature in
20 presence of two witnesses.

CHARLES R. PIGGINS.

Witnesses:

JNO. W. KNIGHT,
A. L. ANDERSON.