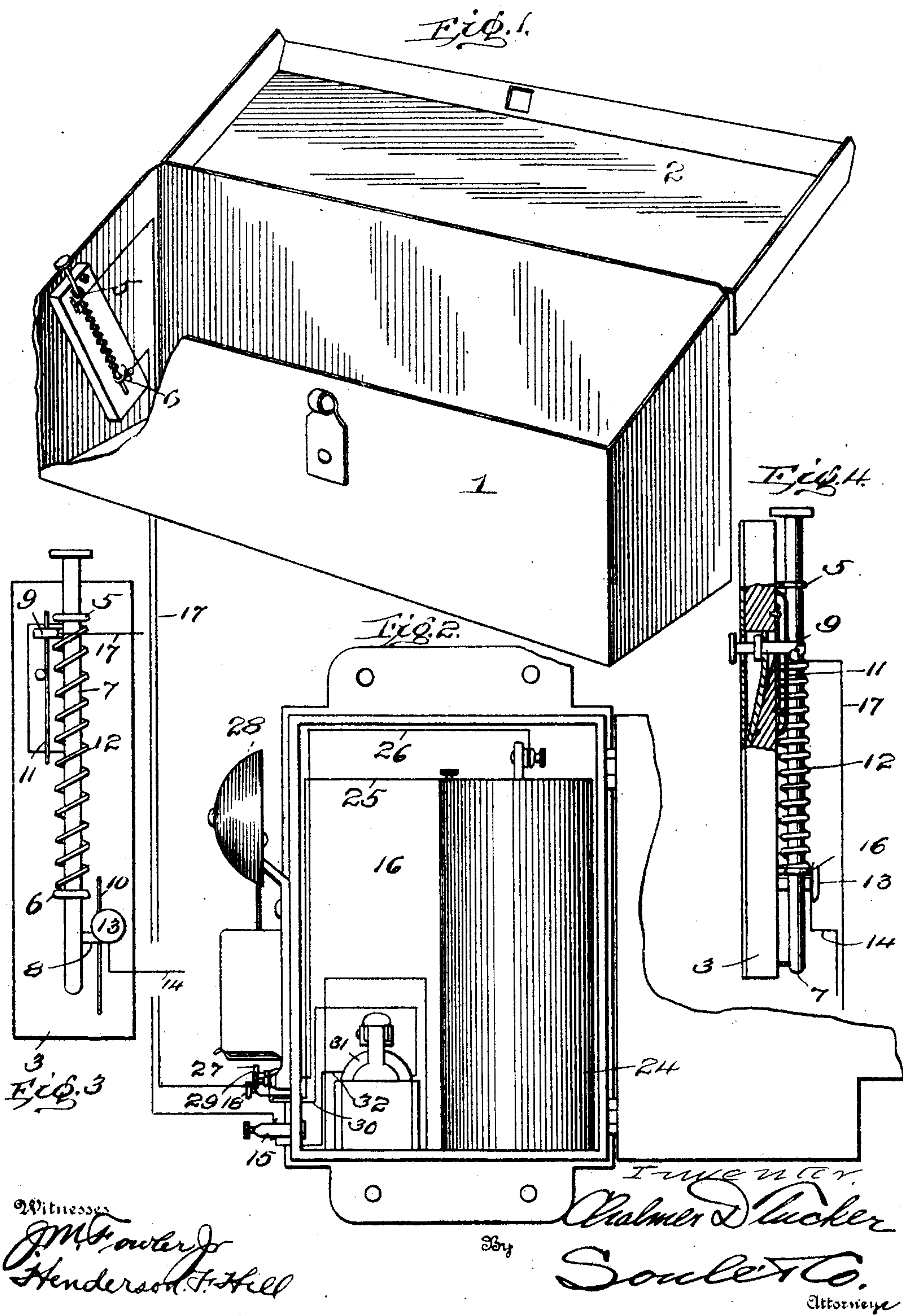


No. 798,933.

PATENTED SEPT. 5, 1905.

C. D. TUCKER.
AUTOMATIC LETTER BOX ALARM.
APPLICATION FILED JAN. 13, 1905.



UNITED STATES PATENT OFFICE.

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AUTOMATIC LETTER-BOX ALARM.

No. 798,933.

Specification of Letters Patent.

Patented Sept. 5, 1905.

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To all whom it may concern:

Be it known that I, CHALMER D. TUCKER, a citizen of the United States, residing at Oxford Junction, in the county of Jones and State of Iowa, have invented certain new and useful Improvements in Automatic Letter-Box Alarms, of which the following is a specification.

This invention relates to letter-box alarms, and has for its object certain means for giving an alarm, also actuating an annunciator automatically upon the raising of the box-lid to deposit the mail, though the lid may be raised for the purpose of collecting the mail without sending in an alarm, and actuating the annunciator by a special means, all of which will be hereinafter fully explained.

A further object of this invention is to provide a mail-box with an automatic contact device controlled by the lid of the box and by a locking push-button, the said contact device being adapted to open and close a circuit between the line-wires which lead from the letter-box to a house where the battery, annunciator, and alarm-bell are included in the circuit in a unique manner to be hereinafter described.

With these objects in view my invention consists in the particular construction of the various parts and in the novel manner of combination and arrangement of said parts, all of which will be fully described, and specifically pointed out in the appended claims.

In the drawings forming a part of this specification, Figure 1 is a perspective view of a letter-box with my contact device applied. Fig. 2 is a plan view of the box or casing inclosing the battery and annunciator, the alarm-bell being arranged upon the side thereof. Fig. 3 is an enlarged detail view of the contact device.

Referring by numerals to the drawings, 1 represents an oblong box having a hinged top 2, such as is now in general use in the rural free-delivery service, though any desired form of a box may be employed. Secured to one end of the inner wall of the box is a contact device consisting of an insulated plate 3, which is bolted to the box, as shown at 4, or secured thereto in any desirable manner. Screwed into this plate are two brackets 5 and 6, mounted to travel in which is a rod 7, carrying contact-pins 8 and 9, which have a bearing against the respective guides 10 and 11 in order to prevent the rod from turning. Between the bracket 5 and the contact-pin 9 is a coiled spring 12 wound around the rod 7

and adapted to force said rod up, so as to close the circuit in a manner to be hereinafter described. The contact-pin 8 is adapted when the rod is forced up by the coiled spring to engage a perpendicular contact 13, mounted in the plate 3 and connected to one of the line-wires 14, which leads from the letter-box to a binding-post 15, mounted upon the side of the box 16, to be hereinafter described. The contact-pin 9 is connected to the line-wire 17, which also leads from the letter-box to a binding-post 18, mounted upon the box above referred to. This contact-pin is provided with an angular edge 19, adapted to engage a notch 20 in the end of the push-button 21, which is mounted in the plate 3, and is normally held out of engagement with the contact-pin by a spring 22, and in such position projects through an aperture 23 in the end wall of the letter-box.

The box 16, hereinbefore referred to, consists of an oblong casing inclosing a battery 24, one pole of which is connected by a wire 25 to the binding-post 18, the other pole being connected by a wire 26 to the binding-post 27 of the alarm-bell 28, secured to the side of the casing or box. The other binding-post 29 of the alarm-bell is connected by a wire 30 to one end of the coil 31 of the annunciator arranged within the casing, the other end of the coil being connected by a wire 32 to the binding-post 15, thus completing the circuit.

It will be seen that by raising the lid of the box the rod will be moved upward by the coiled spring and in so moving closes the circuit which actuates the annunciator and alarm. If it is desired to open the box without actuating the annunciator and alarm, the push-button is shoved in and engages the upper contact-pin, so as to lock the spring-actuated rod, and thereby prevent the closing of the circuit.

Having thus described the various features of my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In an automatic letter-box alarm, a spring-actuated contact normally held open by the lid of the box, a push-button for locking the contact, an annunciator and an alarm-bell in circuit with the contact, substantially as specified.

2. In an automatic letter-box alarm, a contact consisting of a movable rod having two contact-pins, a spring for actuating the rod, one of the contact-pins being connected to one

of the line-wires, the other contact-pin being adapted to engage a contact connected with the other line-wire, a push-button for locking the movable rod, the line-wires being connected to a battery with an annunciator and an alarm-bell in circuit, substantially as specified.

3. In an automatic letter-box alarm, the combination with the letter-box, having a contact device arranged therein, said contact device consisting of a movable rod, a coiled spring for actuating said rod, two contact-pins carried by the rod, one of the contact-pins being connected to one of the line-wires, the other

contact-pin being adapted to engage a contact connected to the other line-wire, the lid of the box pressing upon the top of the movable rod, a push-button for locking the rod, a casing inclosing a battery and an annunciator, an alarm-bell upon the side of the casing, the said alarm-bell, annunciator and battery included in the circuit of the said line-wires, substantially as specified.

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Witnesses:

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