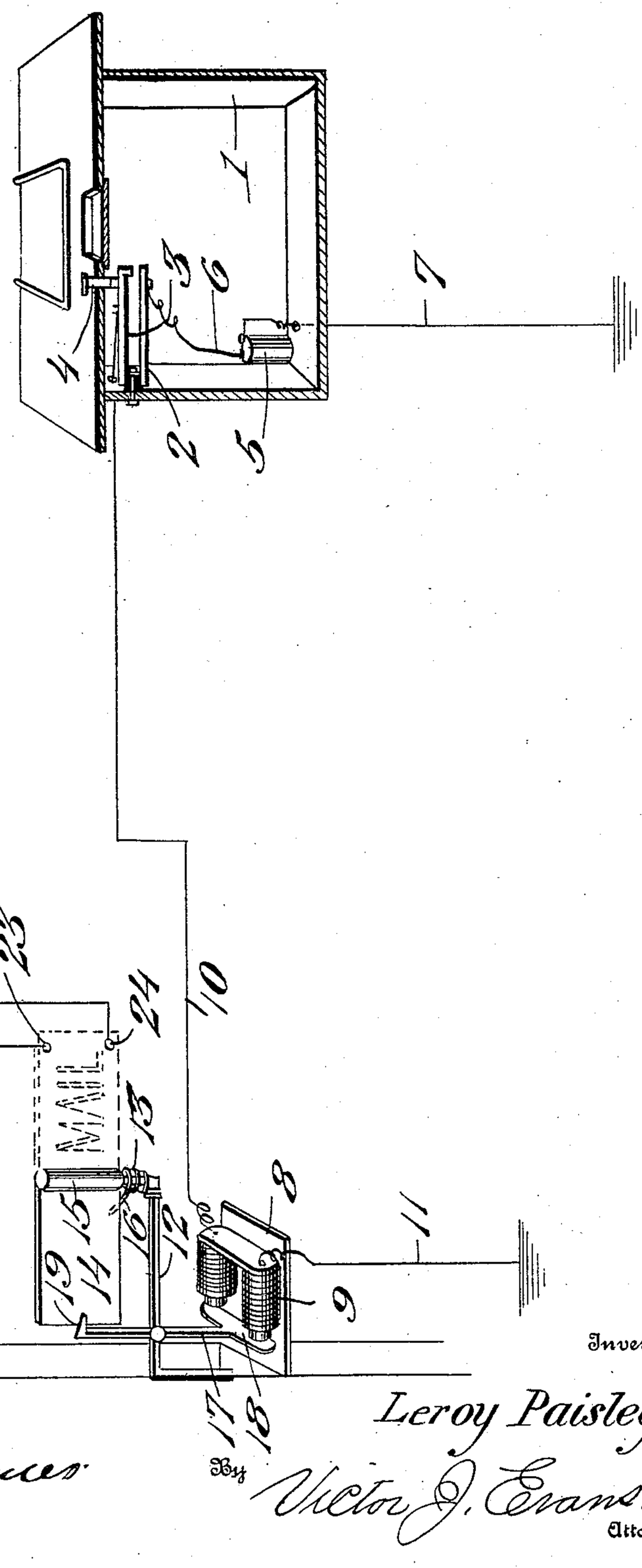
No. 869,728. PATENTED OCT. 29, 1907.

L. PAISLEY.

ALARM MECHANISM.

APPLICATION FILED MAY 9, 1906.



Witnesses
Phil. C. Barnes.
D. W. Gould.

Inventor
Leroy Paisley.
By Victor J. Evans.
Attorney

UNITED STATES PATENT OFFICE.

LEROY PAISLEY, OF WAVERLY, OHIO.

ALARM MECHANISM.

No. 869,728. Specification of Letters Patent. Patented Oct. 29, 1907.

Application filed May 9, 1906. Serial No. 315,896.

To all whom it may concern:

Be it known that I, LEROY PAISLEY, a citizen of the United States of America, residing at Waverly, in the county of Pike and State of Ohio, have invented new and useful Improvements in Alarm Mechanism, of which the following is a specification.

The invention relates to an improved alarm mechanism designed primarily for use in connection with rural free delivery mail boxes, and serving to notify the user of the presence of mail matter in the box.

As rural free delivery boxes are usually located some distance from the house to which they belong, and many needless visits to the box are occasioned by the inability of the householder to know whether or not the postman has deposited mail in the box, it is desirable that means be provided whereby the householder may be notified of the deposit of mail in the box.

The main object of the present invention therefore, is the provision of electrically operated means for controlling a signal arranged within the house, the controlling circuit being energized at the will of the postman, so that he may, upon the deposit of mail in the box, cause a display of a signal within the house and notify the householder.

The preferred details of construction of the present invention will first be described in the following specification, reference being had particularly to the accompanying drawings, in which the figure represents a perspective view showing the details of construction of the invention, the mail box being shown in sections.

Referring to the drawing 1 designates a mail box, which so far as the purposes of the present invention are concerned, may be of any form or detailed construction preferred.

Within the box, preferably adjacent the cover, are arranged spaced contacts 2 and 3, the former being fixed, while the latter is movable and arranged for operation through the medium of a push pin 4. The pin is so disposed in the preferred form as to project through the cover of the box, though it is equally obvious that said pin may be arranged wholly within the box, whereby to prevent unauthorized operation thereof. The detailed construction of the contacts is immaterial, though it is preferred that the movable contacts be of the usual spring type, and that both contacts be insulated from the box. The fixed contact is in circuit with a battery or other source of energy 5 through the medium of a conductor 6, said conductor leading to one pole of the battery, the remaining pole being grounded in any preferred manner, as by a conductor 7.

Within the house adjacent any desirable fixture, is arranged a shelf 8 on which is supported an electro-magnet 9, in circuit with the movable contact through a conductor 10, and suitably grounded by a conductor 11. This construction and arrangement provides a complete grounded circuit broken only at the normally spaced contacts 2 and 3. To the fixture within the house immediately above the shelf 8 is secured a bracket arm 12 projecting at right angles to the fixture for a determinate distance and upwardly extended at its forward end to provide a pintle 13.

The signal 14 is movably supported on the pintle, said signal preferably comprising a strip of suitable material rolled at one end to provide a sleeve 15 to receive the pintle. A spring 16 engages the bracket 12, and bears beneath the rear side of the signal, the spring being tensioned to move the signal to operative position under suitable actuation of the parts. A latch rod 17 is pivotally supported on the bracket arm 12, the lower end of said rod being connected to or formed integral with the armature 18 of the electro-magnet 9. The upper end of the latch rod is formed with a latch end 19 designed to bear against the signal when the latter is in inoperative position and prevent its movement under the influence of the spring 16. The parts are so disposed that when the armature is in inoperative position relative to the magnet, the latch end 19 will rest in front of the signal, while the movement of the armature due to the energization of the magnet will swing the latch rod on its pivot and withdraw the latch end from engagement with the signal, whereby the spring will operate to move the signal to indicating position. If preferred the face of the signal exposed when the latter is in operative position may bear any suitable character or characters to direct the attention of the householder thereto, as for example, the word "Mail".

To provide for audible indication of the movement of the signal, if such be desired, I arrange an alarm circuit including a source of energy 19, conductors 20 and 21 and an alarm 22, the terminals of the conductors, as 23, 24, being arranged in spaced relation so as to maintain the alarm circuit normally open. The terminals 23 and 24 are so disposed relative to the signal 14 that the movement of the latter to operative position will bridge said terminals and close the alarm circuit, thereby sounding the alarm while the signal remains in operative position.

The operation of the device is fully apparent from the above description taken in connection with the drawing, it being understood that the postman upon depositing mail in the box, will operate the push pin to cause engagement between the contacts 2 and 3, with the effect to energize the electro-magnet and disengage the latch 19 from the signal.

It is to be noted that as a signaling device the structure is complete without the use of the alarm, and I wish it understood that I contemplate the use of the mechanism either with or without the alarm circuit.

The parts are few in number and owing to their exposed positions may be readily inspected and repaired in the event such operation is necessary.

Having thus described the invention, what I claim is:

The combination with a mail box, of a signaling device therefor comprising a circuit closer arranged within the box, an electro-magnet included in the circuit and disposed at a distance from the box, a bracket arm supported above the electro-magnet, a signal revolubly supported upon said arm, a latch bar pivoted upon the bracket, an armature for coöperation with the electro-magnet carried at one end of said bar, a latch carried at the opposite end of the bar to engage one edge of the signal and maintain the same in inoperative position against the tension of the spring, and an independent signal circuit having spaced terminals to be bridged by the signal when the latter has been moved to operative position under the influence of the spring.

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

LEROY PAISLEY.

Witnesses:
JNO. W. LONG,
FRED W. VOELKER.