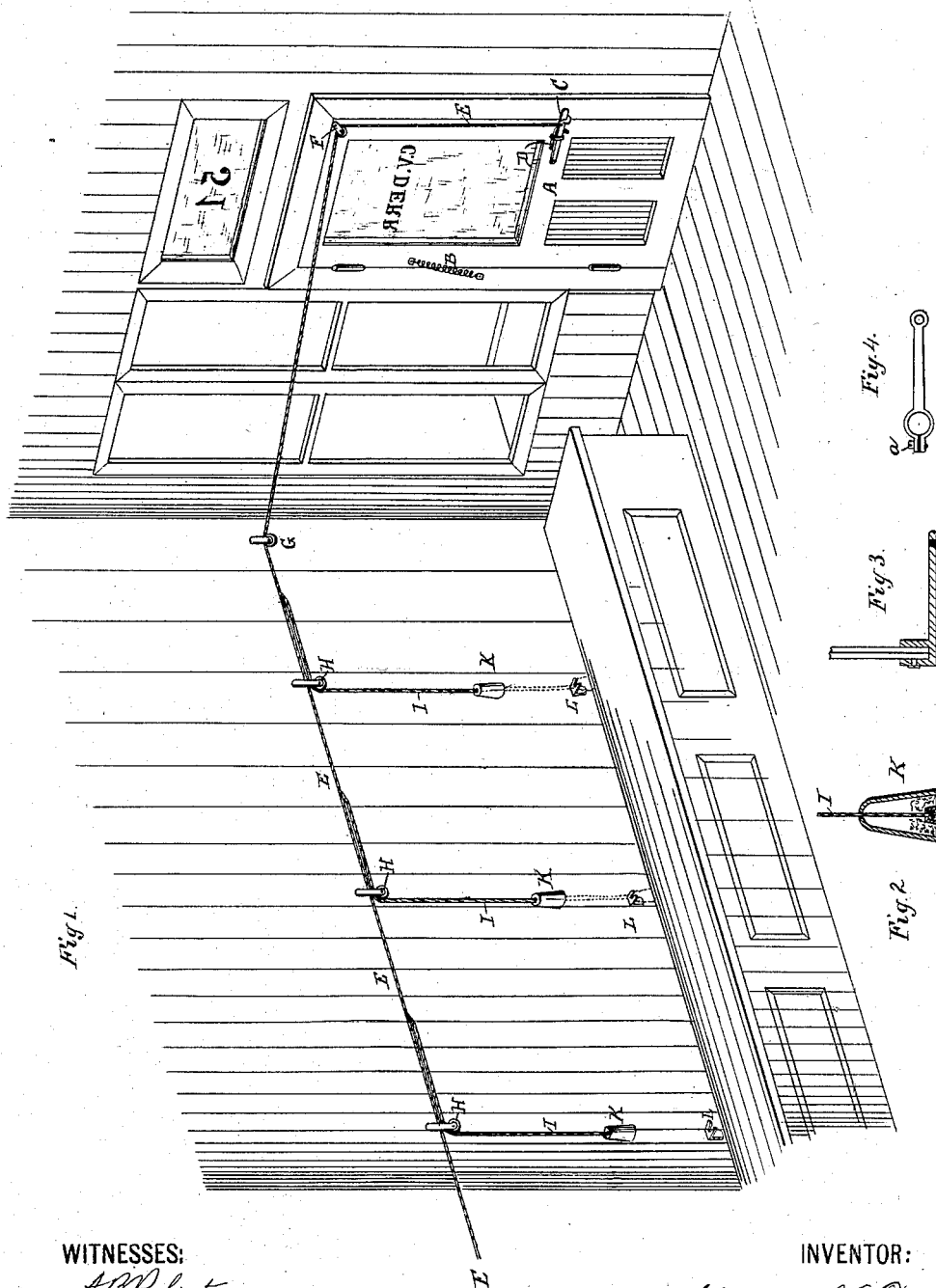


(No Model.)

C. V. DERR.
DOOR OPERATOR.

No. 263,771.

Patented Sept. 5, 1882.



WITNESSES:

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CLARENCE V. DERR, OF CUMBERLAND, MARYLAND.

DOOR-OPERATOR.

SPECIFICATION forming part of Letters Patent No. 263,771, dated September 5, 1882.

Application filed May 3, 1882. (No model.)

To all whom it may concern:

Be it known that I, CLARENCE V. DERR, a citizen of the United States, residing at Cumberland, in the county of Alleghany and State of Maryland, have invented certain new and useful Improvements in Door-Operators; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

15 This improvement relates to devices for opening doors, so arranged that a door may be opened by a person at varying distances from it; and the invention consists in the construction and arrangement of parts, as herein-
20 after described and claimed.

In the drawings, Figure 1 represents part of the interior of a store with my invention applied to the door; Fig. 2, a sectional view of a weighted handle, and Figs. 3 and 4 modifications.

A represents the door of a store, office, or other room, provided with a strong spring, B, to keep the door closed and a latch, C, to fasten it, which latch is kept down by a spring, D. Connected to this latch in any convenient manner is a cord, E, which passes over a swivel or swinging pulley, F, at the top of the door, around another pulley, G, at or near the corner of the store, and over as many other pulleys, H H H, as may be necessary, according to the length of the store-room. Attached to the cord near each pulley H, and passing over it, is a pendent cord, I, provided with a handle, K, which is preferably made
40 hollow, as shown in Fig. 2, so that it may be weighted with shot through an aperture in its bottom, which is ordinarily stopped by the knot in the cord. These handles should be weighted just sufficiently to keep the cord taut without lifting the latch C, and the spring D should be strong enough to close the latch against the weight of the handles.

To open the door, all that is necessary is to pull either of the cords I, when the latch
50 will be lifted, and by continuing the pull on the cord the door A opens. As soon as the cord is released the power of the spring B

closes the door, by which means a store-keeper or his clerk in any part of the store or room may readily and easily open the door at the entrance or departure of a customer or visitor. 55

Below each handle is a forked catch, as shown at L, where the handle may be held, as shown in dotted lines, if for any purpose it should be necessary to hold the door open—
60 as, for instance, if the clerk who has opened the door should see a departing customer lingering in the doorway, he might fasten the door and proceed to wait on another customer until the doorway was clear, when he could
65 allow the door to close by removing the handle from the catch.

I have shown my improvement attached to a door having an ordinary lifting or thumb latch; but it is obvious that it may be applied
70 to any other form of latch by using proper connections. For instance, the knob may be removed from the spindle of the ordinary spring-latch and a lever like that shown in section in Fig. 3 substituted; or the lever
75 shown in Fig. 4 may be placed over the tube of the knob and be clamped fast thereon by the screw a.

I have shown and described a cord, E, as the medium for opening the door; but it is
80 evident that a strap, chain, wire, or other similar device may be substituted for the cord, if preferred. It is also evident that a weight may be substituted for the spring B, or that the door may be hung upon self-closing hinges. 85

I have shown the pulleys and cord arranged against the wall of the store; but they may be, if preferred, arranged on the fixtures or shelving or in any other convenient place.

What I claim as new is—

1. The combination, with an automatically-closing door, of a cord or its equivalent connected with the latch and extending from it toward the rear of the room, and a series of handles connected to said rope at different
95 distances from the door, substantially as described.

2. The combination, with an automatically-closing door, A, the latch C, and pulley F, of the cord E, passing over pulleys G H, and provided with pendent cords I, substantially as
100 described, and for the purpose specified.

3. The combination, with a door, A, having a spring, B, and spring-latch C, of the cord E,

passing over suitable pulleys, and the pendent cords I, also passing over suitable pulleys, and the weighted handles K, all substantially as described.

- 5 4. In combination with the cord E of a door-opener, the cord I, handle K, and catch L, all substantially as described, and for the purpose specified.

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

CLARENCE V. DERR.

Witnesses:

A. B. ROBERTSON,
W. T. ROBERTSON.