

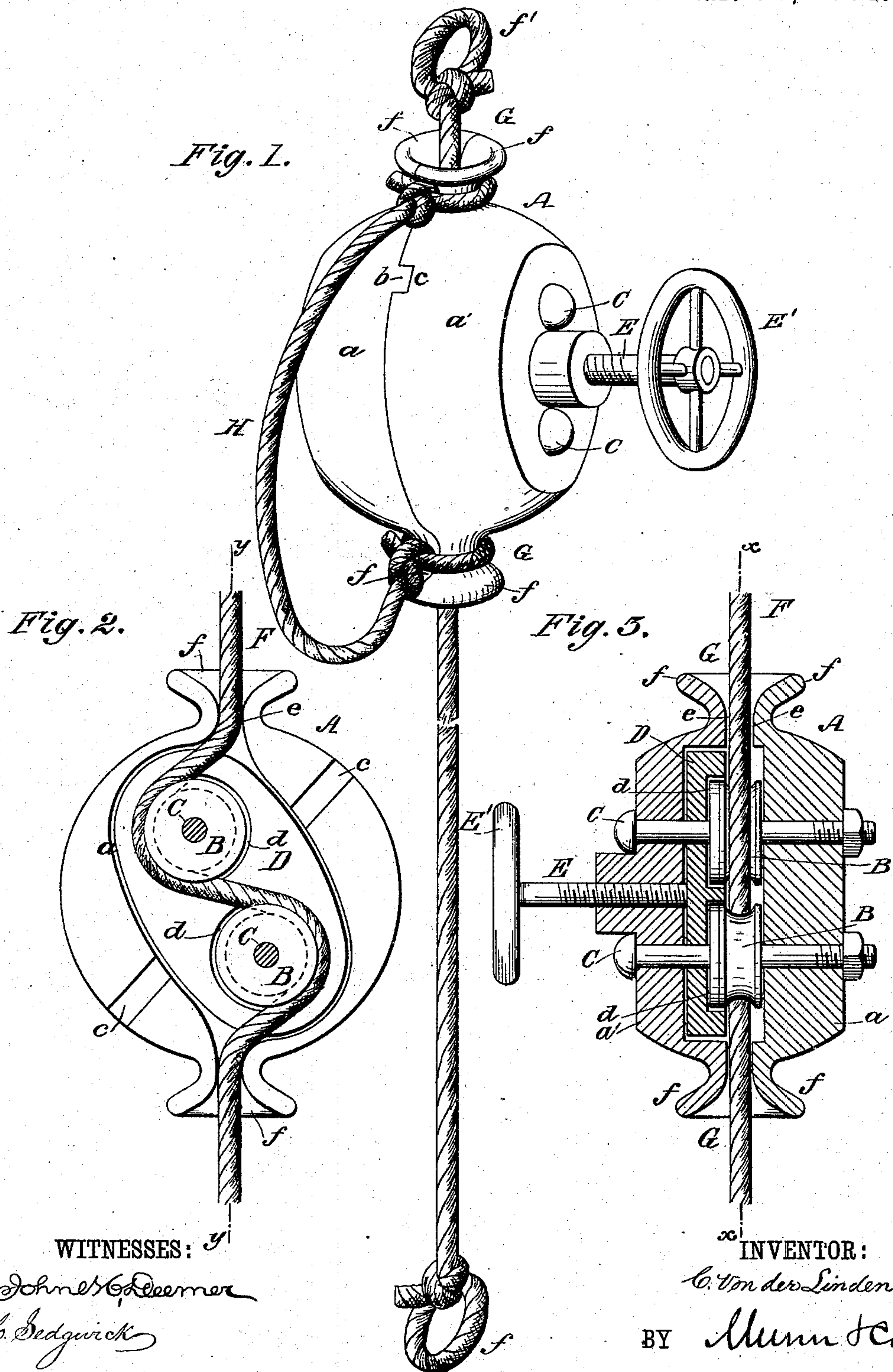
(No Model.)

C. VON DER LINDEN.

FIRE ESCAPE.

No. 295,465.

Patented Mar. 18, 1884.



WITNESSES:

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CHARLES VON DER LINDEN, OF RHINEBECK, NEW YORK.

FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 295,465, dated March 18, 1884.

Application filed October 24, 1883. (No model.)

To all whom it may concern:

Be it known that I, CHARLES VON DER LINDEN, of Rhinebeck, in the county of Dutchess and State of New York, have invented a new and Improved Fire-Escape, of which the following is a full, clear, and exact description.

This invention relates to that class of fire-escapes in which the person descends by means of a rope, a brake being provided to which the person clings or attaches himself, and by which he regulates his speed of descent; and the invention consists, principally, of a holder containing two pulleys, and a brake-plate adapted to act upon the pulleys, the holder being cast in two parts, and one part thereof provided with a screw for operating the brake-plate.

The invention also consists of the construction, arrangement, and combination of parts, all as hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view of my new and improved fire-escape. Fig. 2 is a sectional elevation of the same, taken on the line $x x$ of Fig. 3; and Fig. 3 is a sectional elevation taken on the line $y y$ of Fig. 2.

A represents the holder; B B, the grooved pulleys placed therein upon the bolts C C. D represents the brake-plate, also placed upon the bolts C C within the holder, and E represents the screw for operating the brake-plate to and from the pulleys B B, and F is the escape-rope, which passes through the holder in contact with opposite edges of the pulleys B B, as shown clearly in Figs. 2 and 3.

The holder A is, by preference, made of two hollow castings, $a a'$, held together by the bolts C C, and the brake-plate D is, by preference, countersunk, as shown at $d d$, to receive the sides of the pulleys B B, so that the plate will occupy small space and yet be of sufficient strength, and the bolts C C are arranged on opposite sides of a transverse plane through the center of the holder, as shown in Fig. 2, for holding the pulleys B B out of line with the end openings of the holder for increasing the friction upon the descending rope F.

The casting a is formed with the lips $b b$, and the casting a' with the corresponding recesses, $c c$, into which the lips $b b$ enter when the two castings are put together, thus forming a key to prevent the parts of the holder from moving out of place with respect to each other, and the castings $a a'$ are each formed with the half-openings $e e$, which correspond with each other and with the diverging lips $f f$ around the said half-openings, which lips also correspond with each other, so that when the two castings are put together the said half-openings form complete circular openings at opposite ends of the holder for the passage through the holder of the rope F, and the said diverging lips form jug-necks G G at opposite ends of the holder, to which necks the body strap or rope H is attached. This rope H may be in the form of a belt to buckle around the body, or it may be formed with a stirrup, or have both belt and stirrup attached to it, or be constructed in any suitable manner to enable a person to securely cling or attach himself to the holder A for descending the escape-rope F.

In use the rope F will be made fast at its upper end to the window-sill or to some fixed object in the room by means of the loop f' . The lower end of the rope F and holder A will then be thrown out of the window and the screw E turned to lock the holder fast to the rope. The person to descend will now attach himself to or cling to the rope H and holder A and grasp the wheel E' on the screw E and turn the screw outward, which will diminish the friction of the brake-plate D upon the pulleys B B and permit the holder to gradually slide down the rope. By turning the screw E more or less the person descending may control with perfect ease his speed of descent, so that the device is perfectly safe and reliable. In case there should be several persons to descend, the rope F and holder A will be drawn back by the person next to come down and the rope and holder reversed and the rope made fast by the loop f^2 , so that besides being safe and reliable the fire-escape is adapted for reverse action, so that it may be used very rapidly to enable many persons to escape, and, furthermore, the device is compact and may be packed away in small space.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

1. The case made in two parts, each formed
5 with half-openings *e* and diverging lips *f* at its top and bottom, and provided with the securing-bolts *C*, extending through the case, and having mounted thereon the pulleys and the brake, and a brake-screw, *E*, substantially
10 as set forth.

2. In a fire-escape, the brake-plate *D*, countersunk, as shown at *d*, to receive the pulleys *B*, substantially as and for the purposes set forth.

3. In a fire-escape, the holder *A*, composed 15 of the hollow castings *a a'*, held together by the bolts *C C*, in combination with the inclosed pulleys *B B* and brake-plate *D*, placed upon the said bolts, the casting *a'* being provided with the screw *E*, for operating the brake- 20 plate, substantially as described.

CHARLES VON DER LINDEN.

Witnesses:

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