

(No Model.)

T. BRICE.

2 Sheets—Sheet 1.

FIRE ESCAPE.

No. 383,340.

Patented May 22, 1888.

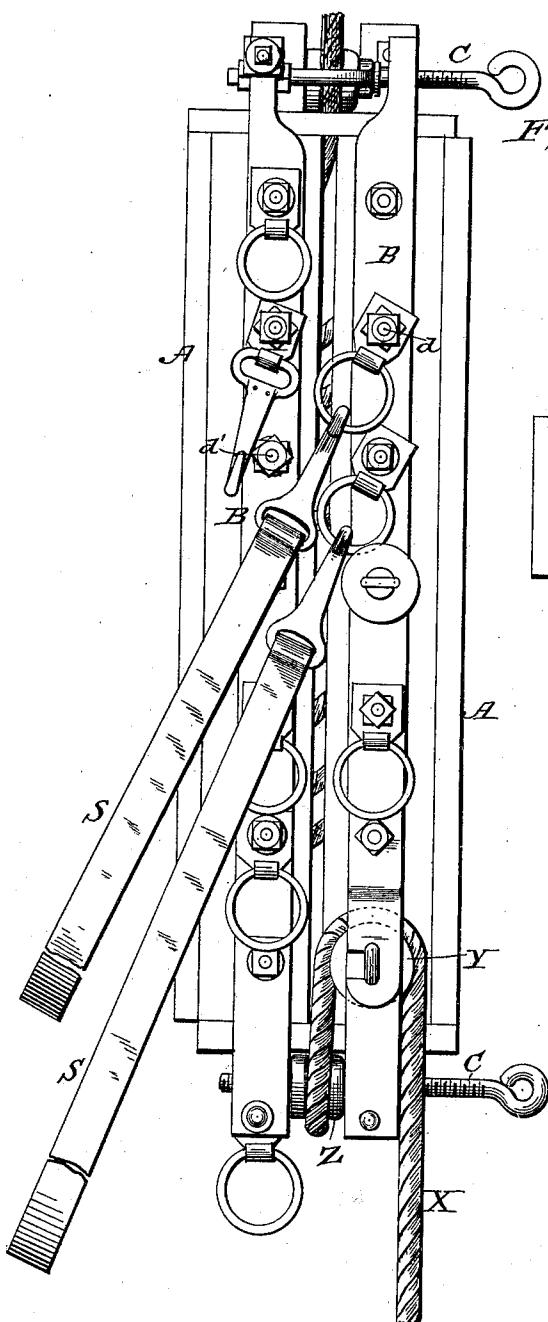


Fig. 1

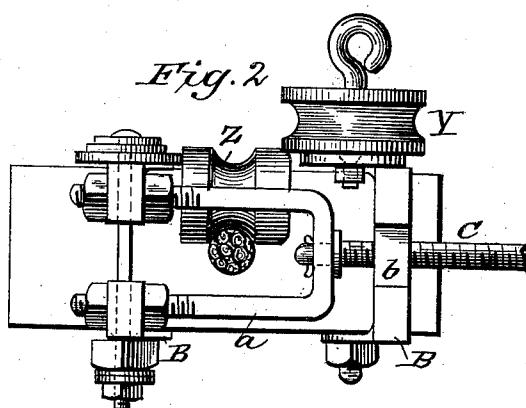


Fig. 2

WITNESSES:

Fred G. Dieterich
Edw. H. Ryan.

INVENTOR:

Thomas Brice
BY Mum L

ATTORNEYS.

(No Model.)

2 Sheets—Sheet 2.

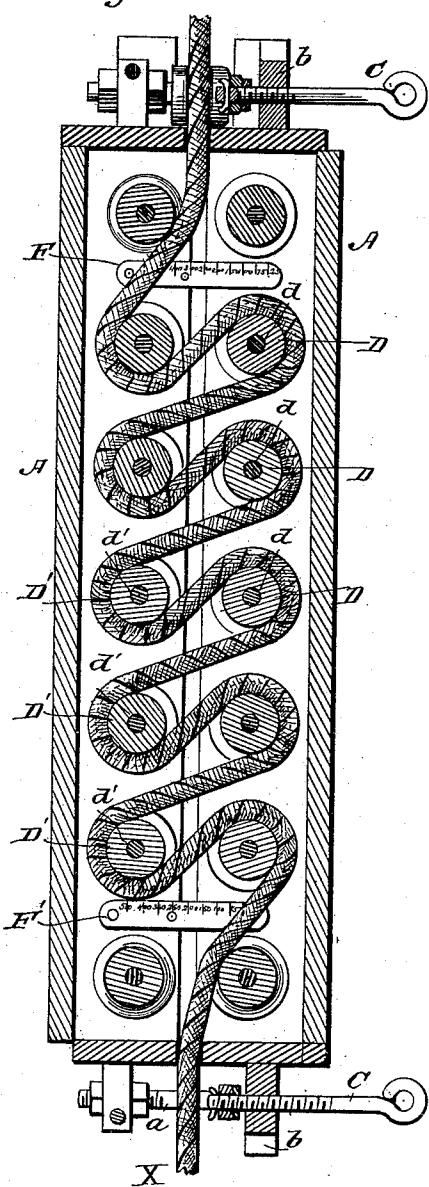
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Fig. 3.



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UNITED STATES PATENT OFFICE.

THOMAS BRICE, OF SANDY HILL, NEW YORK.

FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 383,340, dated May 22, 1888.

Application filed September 28, 1887. Serial No. 250,959. (No model.)

To all whom it may concern:

Be it known that I, THOMAS BRICE, of Sandy Hill, in the county of Washington and State of New York, have invented a new and useful Improvement in Fire-Escapes, &c., of which the following is a specification.

The object of my invention is to provide for the escape of persons from burning buildings when egress is cut off from the stairways by flame or smoke, and which may also be used for lowering staging in repairing or painting high buildings.

It consists in a peculiar construction of case with adjusting screws or bolts, pulleys, rope, and indicator for adjusting the device to the weight of the person who is to descend, as will be hereinafter described.

Figure 1 is a side elevation, Fig. 2 an end view, and Fig. 3 a longitudinal central section.

The case is made of two long rectangular half-boxes, A A, with their interior sides facing each other. The preferred dimensions of the case as formed by these half-boxes is about seven inches wide, two and a half inches thick, and about two feet long; but these dimensions may of course be varied. To the sides of each of the half-boxes are secured the longitudinal metal straps or bands B B, which extend to the ends of the boxes on their outer sides and terminate in couplings a b, arranged to be brought together or separated by handled screw-bolts C C, one at each end. One of these couplings, b, is screw-threaded internally to mesh with the bolt, and the other, a, is made U-shaped to give passage to the rope, and is swiveled to the end of the bolt.

D D D, &c., represent a series of grooved pulleys, which is arranged in one of the half-boxes, and D' D' D', &c., represent another series, which is arranged in the other half-box in the same plane as the first series. These pulleys all turn loosely upon their axes d and d', and said axes rest in the metal bands B B. Through each end of the case there passes the rope X, which is wound first around the pulley of one half-box, and then around its corresponding mate in the other half-box, and so is continued around the double series of pulleys from one end to the other of the case. Now, when the pulleys of one half-box are made to approach those of the other half-box by the adjustment of the screw-bolts at the end, the rope is turned in shorter bends, and it passes through the case with a greater re-

tardation to adapt it to the descent of an increased weight. When the boxes are separated, the rope passes more freely. To enable the operator to adapt this adjustment to the weight to be lowered, graduated indicator-plates F F' are attached to one of the half-boxes and register with the edge of the other half-box, or with a line made on the same. These indicator-plates are marked with numbers from 25 to 500, indicating pounds, and these marks in registering with the edge or line of the opposite half-box indicate that when the two half-boxes occupy this position the rope will pass through the pulleys at a proper speed for the descent of the number of pounds that may be thus indicated.

The rope in use is attached to the upper story of a building at the window, and straps S S' are attached to the case. One of these straps, S, passes around the body under the arms, and the other, S', receives the thighs. In the place of these straps a suitable harness or basket may be used for women, children, or goods. This device does not produce such friction on the rope as to burn it, and the rope moves freely and uniformly and without jerks. The device is also simple and reliable, and is not likely to be disarranged in the hurry and excitement of the occasion. By passing the rope up over a pulley, Z, Fig. 1, and over another, Y, on the outside of the case the rope may be grasped by the operator and the descent regulated or the device stopped at any desired point.

Having thus described my invention, what I claim as new is—

1. The combination of the two half-boxes A A with metal bands B B and screw-bolts C C, the two series of the pulleys D and D', with axes d d', sustained in the bands B, and the rope wound about the pulleys, substantially as shown and described.

2. The combination of the two half-boxes A A with metal bands B B and screw-bolts C C, the two series of pulleys D D', with axes d d' located in the bands, the rope wound around the pulleys, and a graduated indicator-plate attached to one of the half-boxes and adapted to register with the other half-box to indicate the adjustment, substantially as shown and described.

THOMAS BRICE.

Witnesses:

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HARRY L. BROUGHTON.