

(No Model.)

O. F. DAVIS.

FIRE ESCAPE.

No. 269,268.

Patented Dec. 19, 1882.



Fig:1.

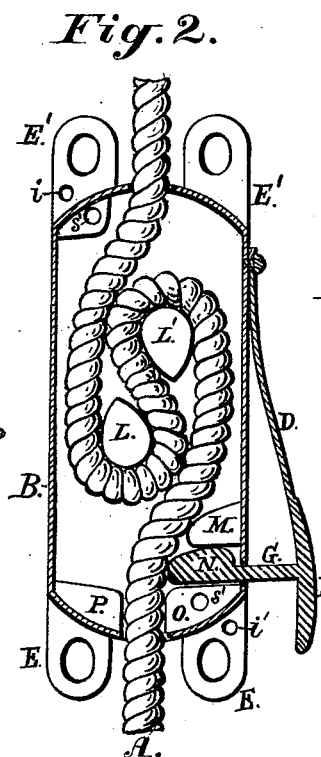


Fig. 2.

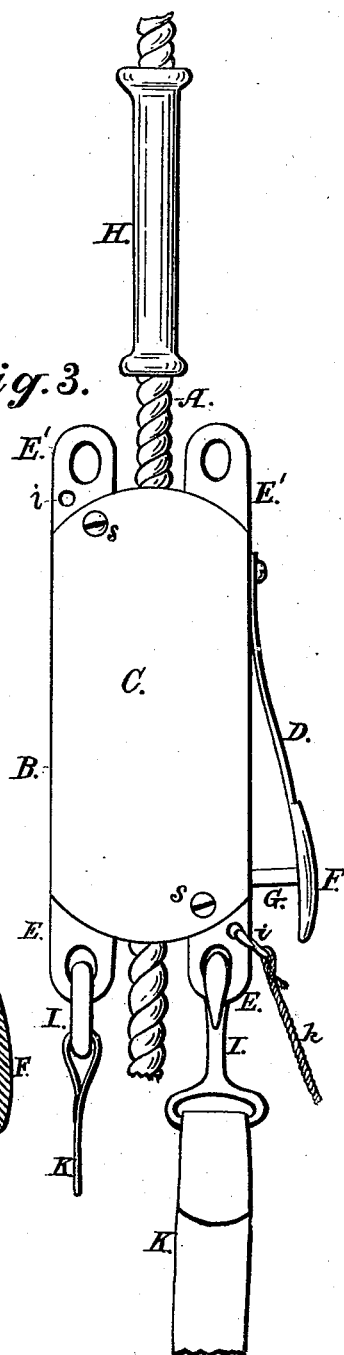


Fig. 3.

Witnesses:
Deputy M Davis
Brown

Inventor.
Oscar F. Davis

UNITED STATES PATENT OFFICE.

OSCAR F. DAVIS, OF TOPEKA, KANSAS.

FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 269,268, dated December 19, 1882.

Application filed January 16, 1882. (No model.)

To all whom it may concern:

Be it known that I, OSCAR F. DAVIS, a citizen of the United States, residing in the city of Topeka, in the county of Shawnee and State of Kansas, have invented a new and useful Improvement in Fire-Escapes, enabling persons to descend safely and promptly from the upper-story windows of burning buildings, of which the following is a specification.

My invention relates to an improvement in the fire-escape for which Letters Patent were issued to Eugene H. Rotschka and myself, Oscar F. Davis, October 22, 1878, numbered 209,137.

The object of my invention is to add to the availability and increase the security and durability of said fire-escape. I attain these ends by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 represents my improvement as it appears in actual use. Fig. 2 presents a separate view of the friction-box with the cover removed, showing the interior construction and arrangement of the rope in the box when the escape is ready for use; and Fig. 3 gives a separate view of the friction-box with its cover attached.

Similar letters refer to similar parts throughout the several views.

A is a fire-proof rope, of wire or other fire-proof material, of about the size indicated in Figs. 3 and 4, and may be of any desired length.

B is a friction-box, through which the rope passes, and to which the strap K for supporting the person is attached by snap-hooks I, secured to each end and hooking into the holes in the ears E or E'. This friction-box is of metal of about the form, size, and proportions indicated in Figs. 3 and 4, and thick enough to permit the rope to play just flush between the bottom and cover. All the parts of the friction-box seen in Fig. 2, with the exception of the rope and brake-block N, with its handle F and spring D, are cast entire. L and L' are friction-lugs whose face ends are just flush with the cover, and round which the rope coils, so as to generate friction to retard the sliding movement of the friction-box upon the rope.

P is a friction-shoulder whose face is flush with the cover, and whose function is to afford additional and requisite friction for perfecting the security of the escape.

N is a brake-block, of metal, and is operated

by the handle F and spring D, to which it is attached securely by the arm G. The brake-block and its arm are made to play flush against the bottom and cover of the friction-box. Complete firmness is secured to the brake-block in its operation by the opposing shoulders M and O, against which its upper and lower sides slide easily. The spring D is secured by means of a screw to the side of the brake-box, and is easily and readily manipulated by means of the handle F, which is formed with special reference to the grasp of the hand. The cover C is secured to its place by two small screws, S.

H is a thimble, of leather, fitting the rope closely, but sliding easily upon it either above or below the friction-box B, by means of which the rope may be grasped in the descent without burning or wearing the hand.

The strap K, to whose ends snap-hooks I are firmly secured, and by means of which it is promptly connected with the friction-box by snapping them into the holes in the ears E or E', provides a seat for the person who is to descend in the escape. The length of this strap may be varied by constructing it of two parts, of generous length, united by a buckle. The body-strap is so connected with the strap K as to permit it to slide up and down upon K, so as to adjust its position to persons of different lengths, so it may embrace the body just below the arms, while the buckle X enables one to fasten it closely or loosely at will. This device provides that all attention may be given to the manipulation of the friction-box without the possibility of becoming unseated.

k is a small wire provided at one end with a snap-hook that may be clasped into a small hole made in one of the ears E or E'. This wire should be as long as the rope. Its free end is to be thrown to the ground with the free end of the rope A. Its function is to enable any person on the ground to hold the person descending away from the building or from the flame of any window he may be required to pass.

With my improved fire-escape constructed as now described only a moderate share of the space in an ordinary grip-sack is required for its transportation. It can be always readily adjusted to the person, with one end of the rope A attached to a bed-post or other fixture in

the room, and so supply a cheap, readily available, easily adjusted, easily operated, and thoroughly safe device for escaping from any of the upper stories of a burning building. An
5 additional feature of great value in this device is that it may be operated by any person on the ground, as by pulling on the lower end of the rope A the friction of the box B may be
10 graduated completely, so as to arrest the descent of a person or slide him gradually to the ground without any attention on the part of the escaping person to the manipulation of the friction-box.

What I claim, and desire to secure by Letters Patent, is—

1. The combination, in a friction-box, B, of the ears E', by which the said box is readily made reversible, with the friction-shoulder P, by which desirable and additional friction is

secured against the rope A, the opposing shoulders M and O for securing desired firmness to the operation of the brake-block N, and the handle F for the better manipulation of the brake-block, substantially as described.

2. The combination, with the box B, provided with friction devices, as described, of the fire-proof rope A, substantially as described.

3. The combination, with the box B, provided with friction devices, as described, of the wire k for holding the person descending away from the building or from the flame of a window by which he may be compelled to pass, substantially as described.

OSCAR F. DAVIS.

Witnesses:

DECATUR M. DAVIS,
C. J. BROWN.