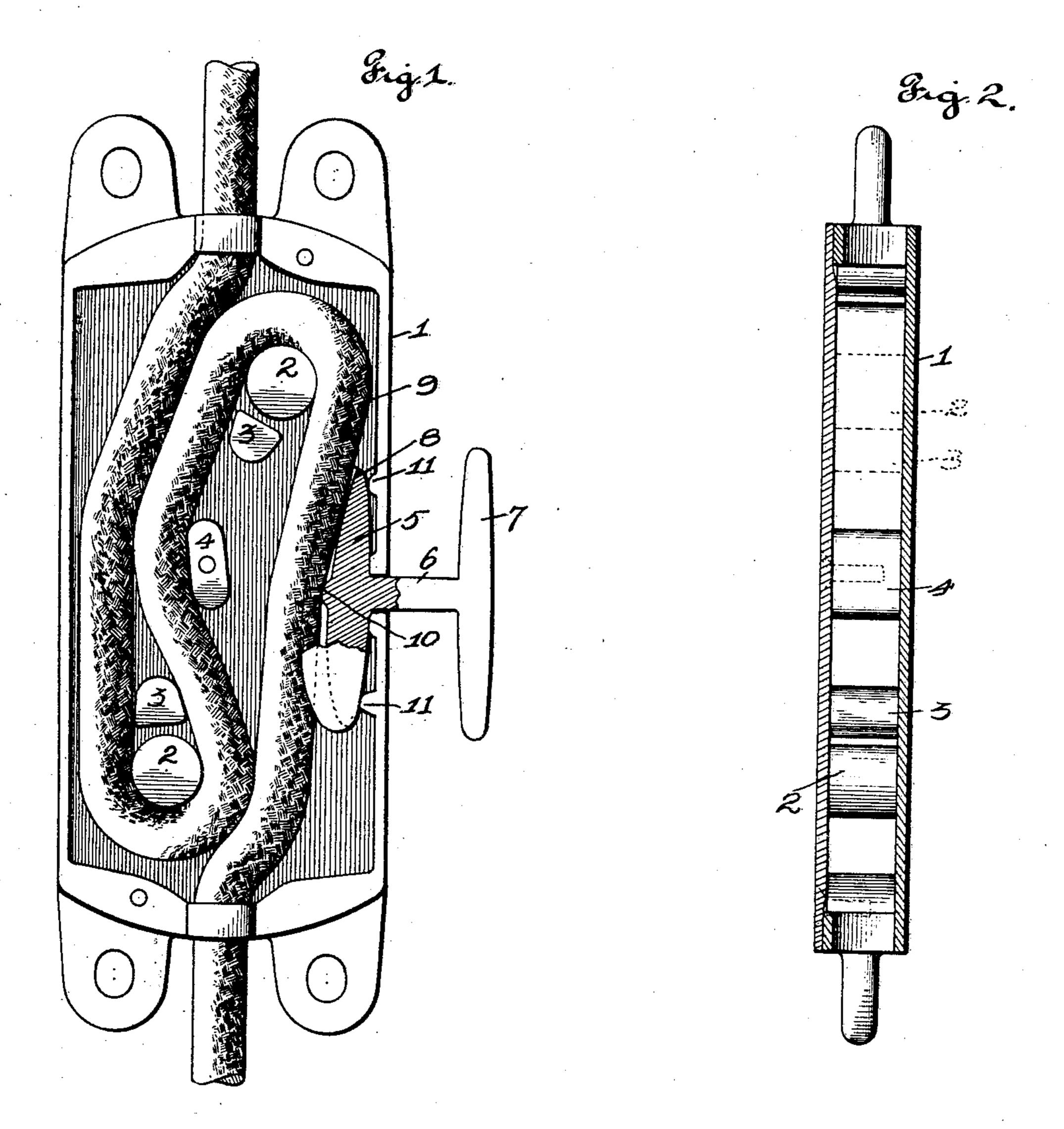
## O. F. DAVIS. FIRE ESCAPE.

APPLICATION FILED JAN. 6, 1903, RENEWED AUG. 29, 1904,

NO MODEL.



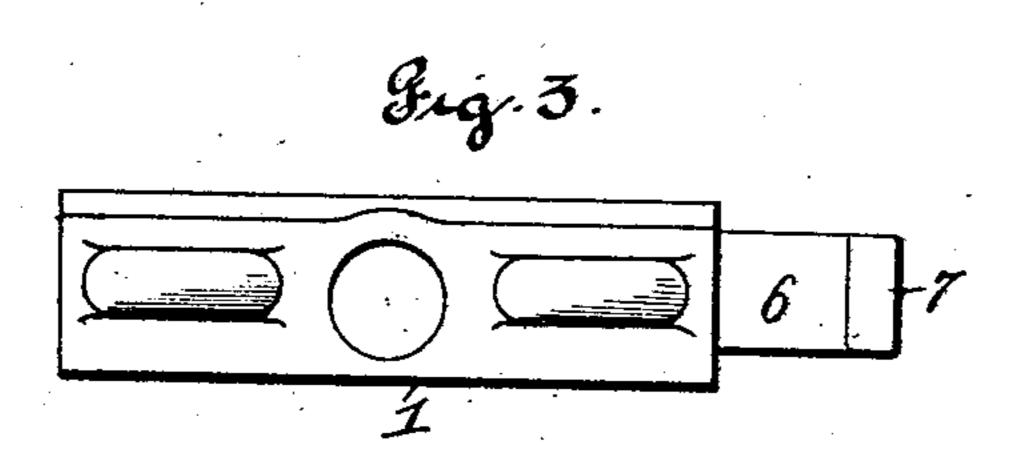


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## United States Patent Office.

OSCAR F. DAVIS, OF ST. LOUIS, MISSOURI, ASSIGNOR TO DAVIS FIRE ESCAPE COMPANY, OF ST. LOUIS, MISSOURI, A CORPORATION OF MISSOURI.

## FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 771,794, dated October 4, 1904.

Application filed January 6, 1903. Renewed August 29, 1904. Serial No. 222,604. (No model.)

To all whom it may concern:

Be it known that I, Oscar F. Davis, of the city of St. Louis, State of Missouri, have invented certain new and useful Improvements in Fire-Escapes, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention relates to fire-escapes; and it consists of the novel construction, combination, and arrangement of parts hereinafter

shown, described, and claimed.

The object is to improve upon the invention shown and described in my former Letters Patent No. 651,653, dated June 12, 1900, whereby the device will be rendered more durable and efficient and less likely to get out of order in operation.

Figure 1 shows my new fire-escape with the cover removed, the brake in its normal position. Fig. 2 is a central longitudinal section with rope omitted. Fig. 3 is an end view with

the rope removed.

In the construction of the device I provide 25 the usual friction-box 1, having the cylindrical friction-studs 2 and adjacent semicircular friction-stude 3, and the center frictionstuds 4, against which the rope comes in contact in the manner shown in Fig. 1. The studs 30 2 are made cylindrical in form, so that they may be more readily finished by a machinetool adapted to finish cylindrical studs. A single brake 5 is provided with a shank 6, which extends through an opening in the edge 35 of the box 1 and carries upon its outer terminal a handle 7. Said brake 5 is provided with the usual groove 8 upon its inner side, into which the rope 9 fits. The brake is provided midway of its length within the said groove 40 8 with a transverse rib or projection 10.

To prevent rocking of the brake, I provide the box 1 with two lugs or projections 11, one at either side of the shank-opening, so that the back of the brake will normally rest upon the said projections and hold the same firmly 45

in position, as shown in Fig. 1.

During operation the brake 5 is pressed inwardly by the operator, thereby causing the lateral rib 10 to be projected into the rope and generating a much greater amount of 50 friction than would be generated were the groove 8 devoid of said rib. Further inward movement of said brake will press the rope firmly into contact with the center stud 4 and greatly increase the friction and also presses 55 closely together the oppositely-moving coils of rope. The weight of the person being lowered also draws the oppositely-moving coils closer together. By these several means of creating friction the operator can lower him- 60 self at any degree of rapidity desired and the device is rendered more reliable, durable, and efficient than heretofore.

I claim as new and desire to have secured to me by the grant of Letters Patent—

In a fire-escape, the combination of the friction-box 1 having friction-studs 2 and 4, the grooved brake 5 provided with shank 6 and handle 7 and the transverse rib 10 located opposite the center stud 4, and lugs 11 to prevent rocking of the said brake, substantially as described.

In testimony whereof I affix my signature in

presence of two witnesses.

OSCAR F. DAVIS.

Witnesses:
M. G. Irion,
Alfred A. Eicks.