No. 666,879. Patented Jan. 29, 1901.

J. B. WHITE.

FIRE ESCAPE.

(Application filed Nov. 7, 1900.)

(No Model.)

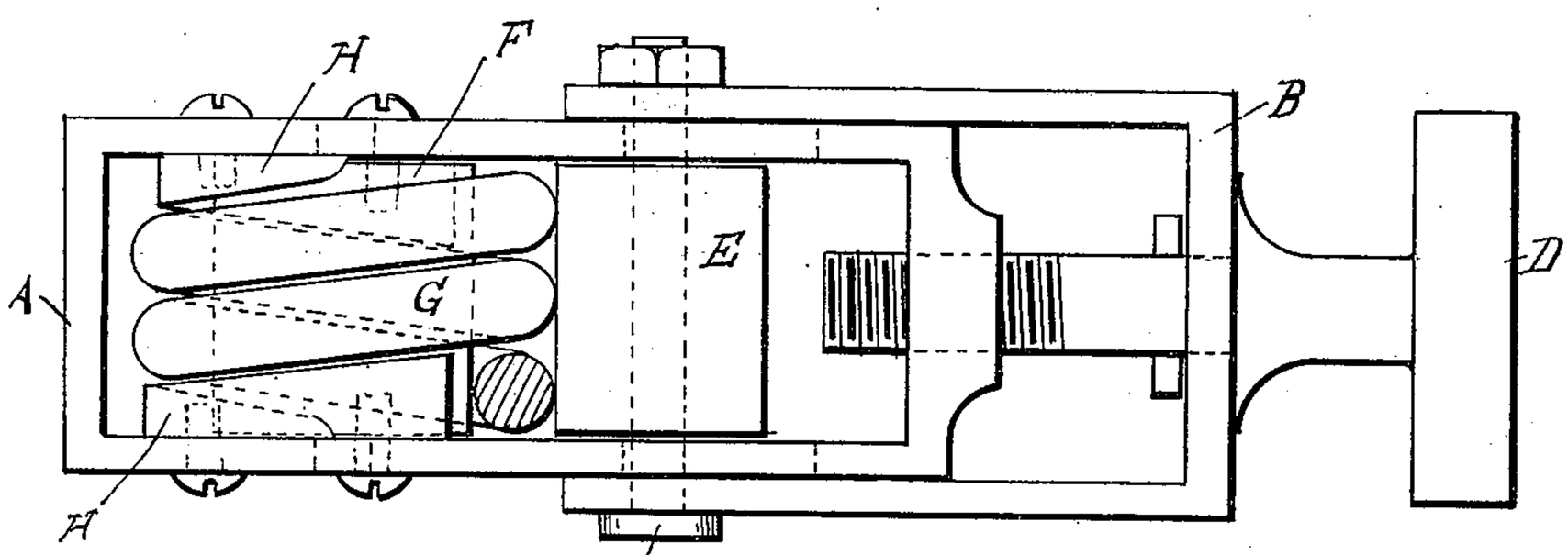

Fig. 1.

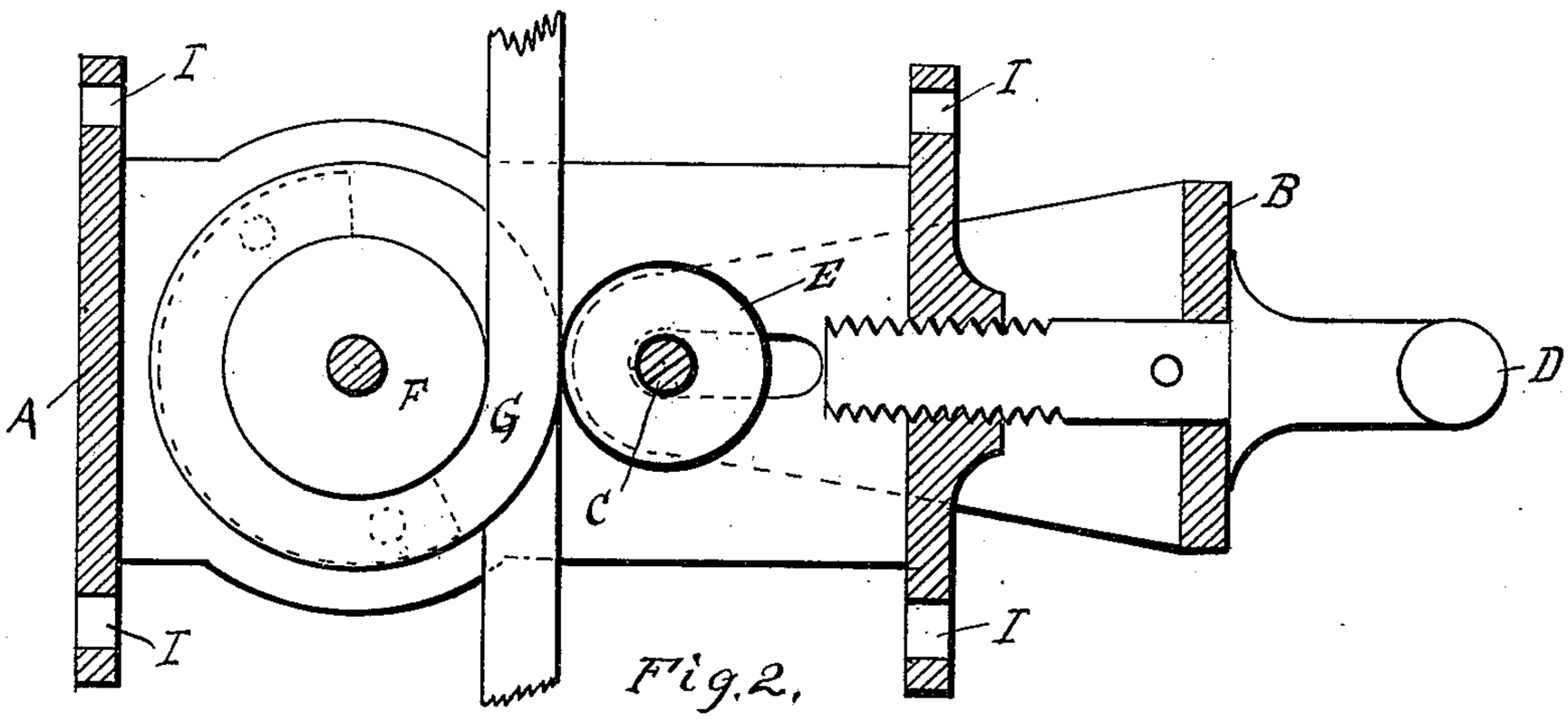

Fig. 2.

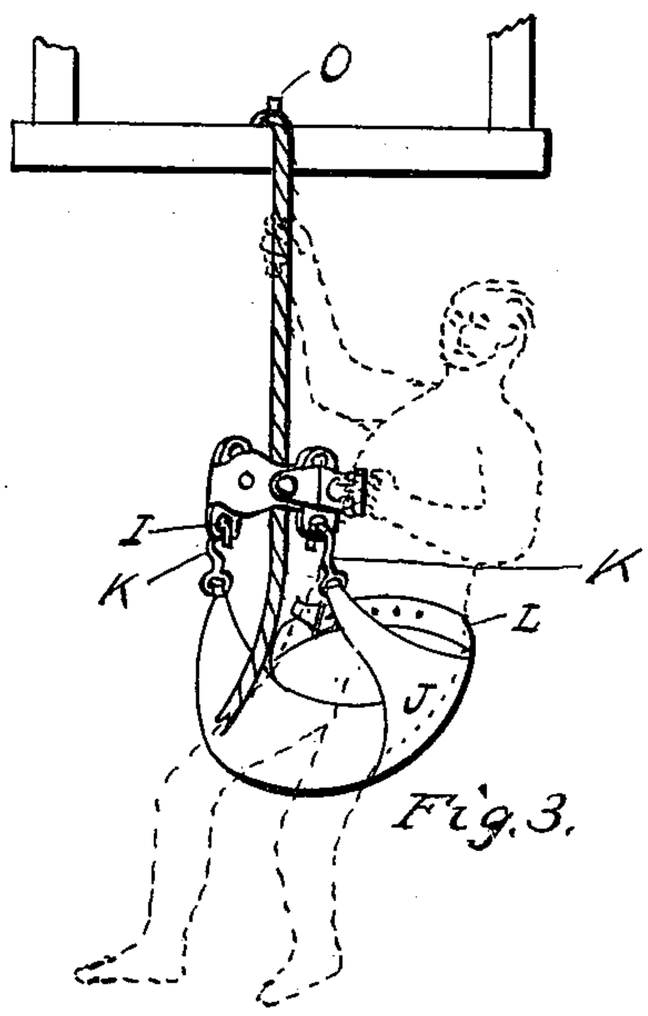

Fig. 3.

Witnesses.
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UNITED STATES PATENT OFFICE.

JAMES B. WHITE, OF PORTLAND, MAINE, ASSIGNOR OF ONE-HALF TO ALFRED A. WHITE, OF BANGOR, MAINE.

FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 666,879, dated January 29, 1901.

Application filed November 7, 1900. Serial No. 35,764. (No model.)

To all whom it may concern:

Be it known that I, JAMES B. WHITE, a citizen of the United States, residing at Portland, in the county of Cumberland and State of Maine, have invented certain new and useful Improvements in Portable Fire-Escapes; and I do hereby 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.

My invention relates to improvements in portable fire-escapes. It is designed to be of sufficiently small size and light weight to be conveniently carried in a trunk or traveling-bag. It is designed to be of such simple structure and operation that one can readily learn to use it with confidence and safety. It is of the class of fire-escapes wherein a cable is made to pass around a rotatable drum and to be regulated by a rotary brake; and my invention consists principally in the method of applying the brake and in means for preventing the cable from being crowded against the wall of the casing and binding so as to interfere with the free operation thereof.

In the drawings herewith accompanying and making a part of this application, Figure 1 is a top plan view of my improved fire-escape. Fig. 2 is a longitudinal vertical section thereof, the drum and brake being shown in elevation; and Fig. 3 is a perspective view showing one means of attaching my improved fire-escape to a window and means for supporting the person.

Same letters of reference refer to like parts.

In said drawings, A and B represent a frame consisting of two members, which form the support for the mechanism of my improved fire-escape. The two members are joined together by a transverse bar C, which passes through holes in the member B and through longitudinally-disposed slots in the member A, and a presser-screw D, passing through the ends of A and B, said screw being swiveled in the member B and having a screw-thread working in a female screw in the member A. Upon the transverse bar C aforesaid is a rotatable brake E. Mounted in the member A is a rotatable drum F, around which the cable G is wound, as seen in Fig. 1. Secured to the inner sides of the member A are reversely-inclined guides H. The guides H are tapered, beginning at one end with a width substantially equal to the diameter of the cable and thence tapering until they terminate in a thin edge next to the wall. The effect of these guides is to leave the cable at the point where it leaves the drum perfectly free, so that the cable can turn around the drum without doubling upon itself or being crowded against the wall of the supporting member, as would be the case if it were not for said guides. The member A has eyes I or other means for attaching thereto a supporting strap or apron J, and this may be conveniently done by snap-hooks K, attached to the ends of the strap and adapted to engage the eyes aforesaid. The supporting-strap may be used alone or it may be secured there to the supplemental strap L, which may be buckled around the body, as seen at M, affording additional security against falling out of the support.

The operation of my improved fire-escape is as follows: The end of the cable is first secured in any convenient way to the building, as by a pin O, and the supporting-strap is secured to the eyes in the member A, first being put around the body, as seen in Fig. 3. The brake should be set so as to fully sustain the weight of the body until ready to descend. The brake is then loosened by turning the presser-screw until the weight of the body causes the drum around which the cable passes to revolve slowly, allowing the fire-escape and person to descend slowly. If eyes are made both at the top and bottom of the fire-escape, it may be used a second time without first winding the cable by simply reversing the supporting-strap and attaching the opposite end of the cable to the building.

The advantages of my improved fire-escape are that it can be made from light material and of small size, can be readily reversed, and requires for its manipulation but one hand, the other being free to grasp the cable, which gives additional security and confidence to the person using the same.

Having thus described my invention and its use, I claim—

1. In a fire-escape, a frame consisting of two

members capable of longitudinal adjustment, one with respect to the other, a rotatable drum mounted in one member, curved tapering guides secured to the walls of the frame adjacent to said drum, a cable passing one or more times around said drum, a rotatable brake and means for operating said brake.

2. In a fire-escape, a frame consisting of two members capable of longitudinal adjustment, one relative to the other, one member provided with slots in the walls thereof, a rotatable drum, curved tapering guides adjacent to the ends of said drum and a cable passing one or more times around said drum, the other member provided with a transverse shaft passing through said slots and adapted to render therein, a rotatable brake mounted on said shaft, a presser-screw swiveled in the end of the latter member and having threaded connection with the former, whereby by the turning of said screw the brake is operated, a support for the person and means of securing said support to said frame.

In testimony whereof I affix my signature, in presence of two witnesses, this 3d day of October, 1900.

JAMES B. WHITE.

Witnesses:
NATHAN CLIFFORD,
MARION RICHARDS.