(No Model.)

L. SLOUGH.

FIRE ESCAPE.

No. 409,511. Patented Aug. 20, 1889.

Fig. 1.

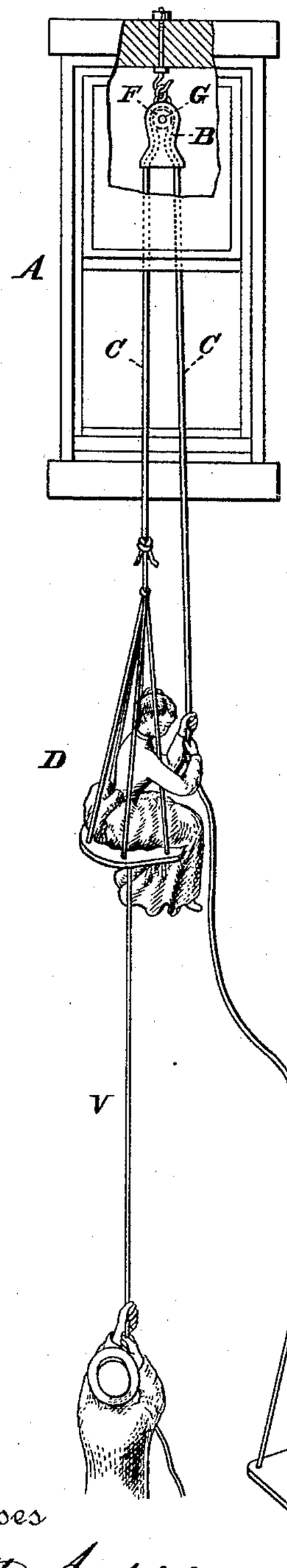

Fig. 2.

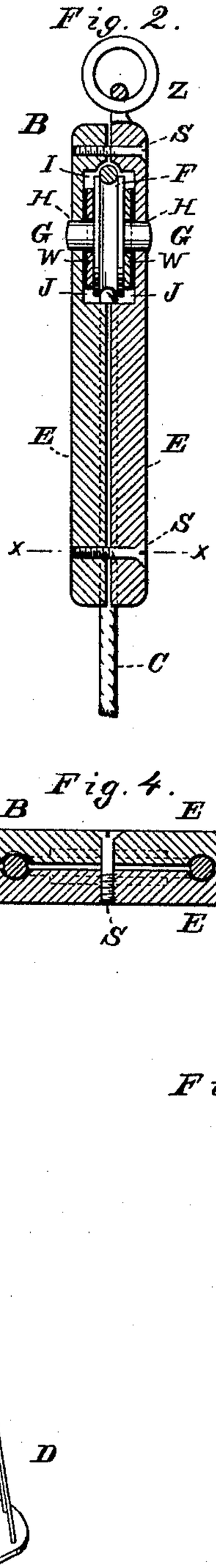

Fig. 3.

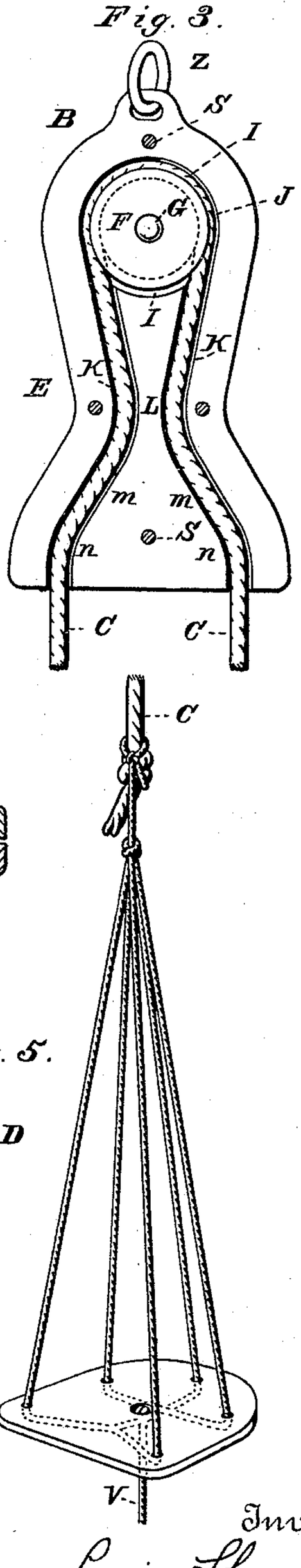

Fig. 4.

Fig. 5.

Witnesses
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LOUIS SLOUGH, OF WELLSVILLE, NEW YORK.

FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 409,511, dated August 20, 1889.

Application filed April 13, 1889. Serial No. 307,078. (No model.)

To all whom it may concern:

Be it known that I, LOUIS SLOUGH, a citizen of the United States, and a resident of Wellsville, in the county of Allegany and State of New York, have invented certain new and useful Improvements in Fire-Escapes; and I do 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, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a representation of this invention, and shows the manner of operating the fire-escape. Fig. 2 is a vertical section through the block. Fig. 3 is a view of the inside face of one-half of the block. Fig. 4 is a horizontal section taken where the broken line *x x* is marked on Fig. 2. Fig. 5 is a perspective view of one of the chairs or baskets.

This invention has relation to fire-escapes; and it consists in the novel construction and combination of parts, as hereinafter set forth, and pointed out in the appended claim.

In the accompanying drawings, the letter A designates a window-frame, and B the friction-block, through which passes the rope C, having at each end a basket or car D.

The friction-block B consists of two sections E E, of iron, and the iron sheave F, having the journals G, which work in the bearings H in the central portion of the upper part of the sections, the sheave being inclosed between the sections in the chamber I, formed by the circular recesses J J in the upper portion of the sections.

Communicating tangentially with the sides of the circular recesses J J are the curved lateral grooves K K, which approach each other toward the waist portion L and diverge, as at *m m*, below said waist portion, the diverging branches of the grooves terminating in reversely-curved ends *n n*, which are open at the lower ends of the sections, as shown. When the sections are secured together, these grooves have their middle convexities turned toward each other, and curved friction-passages are formed thereby for the ascending and descending branches of the escape-rope C. The inward curves of the passages bear upon the rope according to the tension made on said rope, and the reversely-curved open end portions *n n* allow the rope to move into and out of the block on vertical lines, so that there will be no angular or abrupt frictional contact at these points to injure the rope.

The sections E E are secured together by means of screws S, as indicated, and washers W are placed on the journals of the sheave between the same and the walls of the recesses J.

To each end of the escape-rope C is attached a basket or car D, which may be made in seat form, as shown, and should be provided with an extension-cord V, designed to afford means of steadying the car or seat when handled by some person below on the sidewalk. This additional rope or cord V also affords a means of applying tension to the escape-rope when it cannot be done by direct action upon the escape-rope itself.

The friction-block is provided at its upper end with a strong ring or eye Z, through which is passed the attachment-rope, whereby it is securely connected to a strong hook or bracket at the top of the window-casing. Over the hook or bracket the escape-rope and its steady-cords may be coiled, so as to be ready for use whenever required; or the friction-block may be rigidly secured by strong screws to the top of the window-casing.

In using this fire-escape the rope is drawn through the block until one of the baskets or cars is brought close to said block, and the other basket is then dropped from the window to the sidewalk with the longer branch of the escape-rope, and the steady-cord connected to this basket. The steady-cord of the upper basket is also let down out of the window, and the person wishing to descend takes hold of the longer branch of the escape-rope and gets into the basket attached to the shorter branch, in which he can easily let himself down at such rate of speed as he may desire by manipulating the longer branch of the escape-rope to increase or lessen its tension, and thereby its frictional engagement with the curved grooves of the block B. Whenever any one incompetent to manage the escape-rope is to be let down, the tension on the escape-rope can be

regulated by some person in the street below through the medium of the extension-rope or steady-cord of the descending basket, while the extension-cord of the ascending basket can be manipulated also by some one in the street to hold this basket steady in its descent.

Having described this invention, what I claim, and desire to secure by Letters Patent, is—

A fire-escape comprising the recessed sections having the curved friction-grooves tangential to the recesses of the sections, the intermediate sheave in the recesses, and the screws securing the sections together to form the friction-block, having the inwardly-convex passages terminating in reversely-curved open end portions, the escape-rope having at each end a basket or car, and the extension-ropes or steady-cords attached to the baskets or cars, substantially as shown and described.

In testimony where of I affix my signature in presence of two witnesses.

LOUIS SLOUGH.

Witnesses:

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