

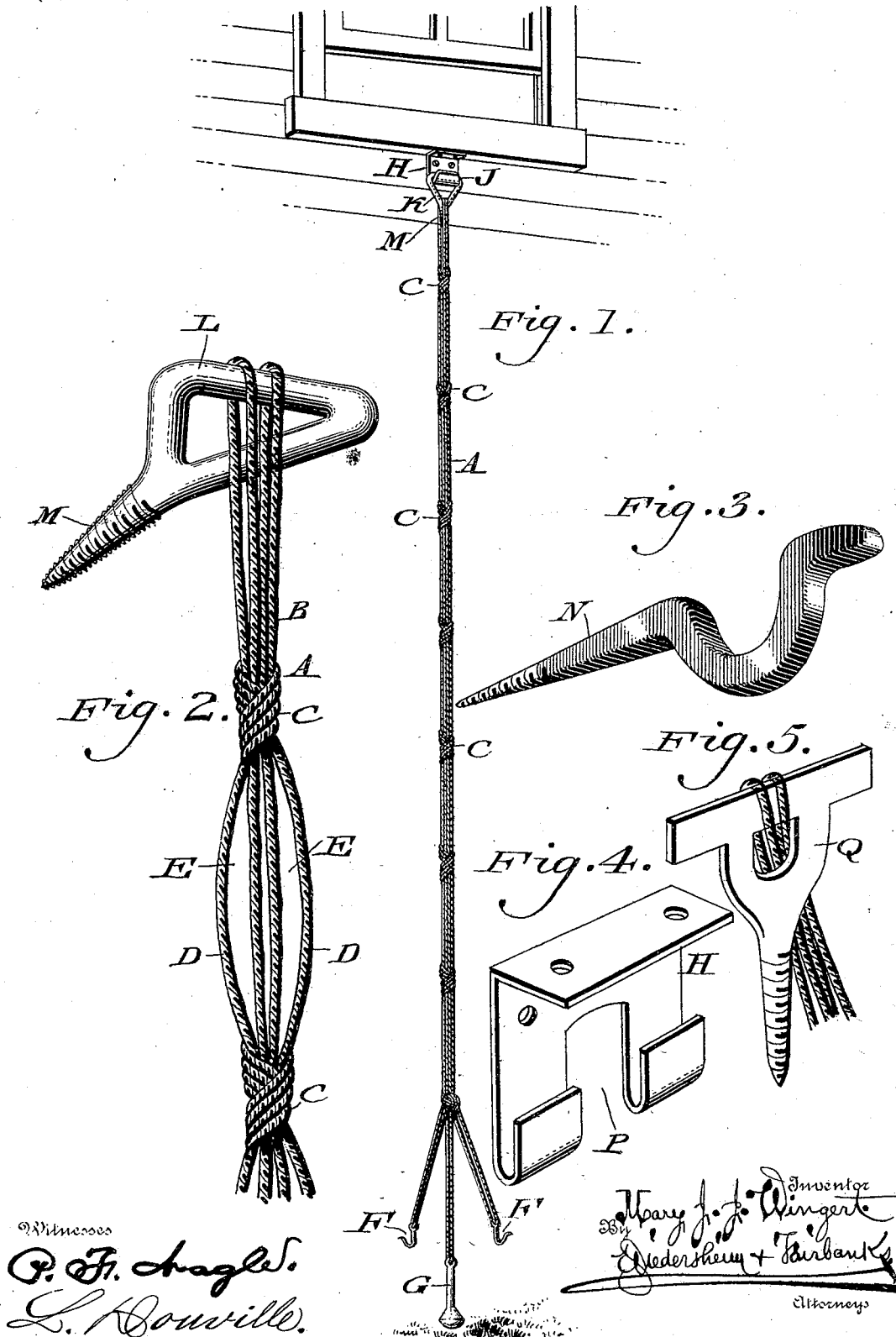
No. 645,677.

Patented Mar. 20, 1900.

M. J. J. WINGERT.
FIRE ESCAPE.

(Application filed Oct. 4, 1899.)

(No Model.)



UNITED STATES PATENT OFFICE.

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FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 645,677, dated March 20, 1900.

Application filed October 4, 1899. Serial No. 732,452. (No model.)

To all whom it may concern:

Be it known that I, MARY J. J. WINGERT, a citizen of the United States, residing at Reading, in the county of Berks and State of Pennsylvania, have invented a new and useful Improvement in Fire-Escapes, which improvement is fully set forth in the following specification and accompanying drawings.

My invention relates to an improved construction of a fire-escape which can be readily placed in position and has attached thereto hooks, whereby articles may be lowered to the ground in case of fire, it having also secured to its lower portion a weight which imparts proper tension to the rope and prevents swaying of the same and constitutes a hammer which can be utilized as a convenient implement in times of fire in order to secure the escape instantly in position or to break a window, shutter, &c.

It also consists in employing strands of rope having loops which are interposed between knotted portions of said rope, the same serving as a support for the arms or limbs of the person during descent.

It further consists of novel details of construction, all as will be hereinafter fully set forth, and particularly pointed out in the claims.

Figure 1 represents a side elevation of a fire-escape embodying my invention and a portion of a window frame or support to which the same is applicable. Fig. 2 represents, on an enlarged scale, a side elevation of the fire-escape, showing another manner of supporting the same and loops in which the limbs of the user may be inserted. Fig. 3 represents a perspective view of an arm which may be employed for supporting the upper end of the fire-escape in lieu of the devices seen in Figs. 1 and 2. Figs. 4 and 5 represent perspective views of other forms of my invention.

Similar letters of reference indicate corresponding parts in the figures.

Referring to the drawings, A designates a fire-escape, the same consisting of strands of rope or its equivalent B, formed of a number of ropes, some of which are knotted at different points throughout their length, as at C, certain portions of the strands of the rope, as D, being adapted to be spread or deflected from the fire-escape proper, so as to form loops

E, through which the user can insert an arm or limb, so as to rest the person on his descent down the rope. The deflected portions of the strands of rope are secured to the continuous right-lined strands by knotting at the ends of said portions, thus avoiding a break in the length of the rope and providing a strong structure. The lower portion of the rope is divided, forming different lengths, on the members of which are hooks F, suspended therefrom, so that any article may be engaged thereby and conveniently lowered from the room or apartment.

G designates a weight attached to the lower end of the other number of the rope and adapted to impart proper tension thereto and to prevent undue swaying thereof, said weight also constituting a hammer and serving as a convenient implement in times of fire in order to secure the escape in position or to break a door, window, or shutter, if desired.

H designates a clip or bracket which may be secured to a sill or window-frame or other suitable point and has a hook or member J, which serves as a connection for an eye, such as K or L, each of which is provided with a spur or threaded shank M, adapted to be screwed into the woodwork or other suitable part.

N designates an arm from which the rope may be supported in lieu of the bracket H or eye L. It will thus be seen from the foregoing that a cheap and convenient fire-escape is produced which cannot readily get out of order, part of which can be utilized for breaking windows or shutters and also for letting down articles from the apartment prior to the utilization of the device to assist the descent of the person, said escape being also provided with loops E to facilitate the descent of the escaping party, as is evident. As some of the ropes are unbroken continuities and pass through said loops E, they provide means for the hand to grasp and hold onto the same, while the person descending is rested on the base of said loops. Then as the several ropes are knotted together at the ends of the loops they are prevented from slipping or tightening on the inclosed unlooped portions.

It will be understood that the bracket is attached to a window-sill, frame, or other suitable member of an apartment adjacent

to a window thereof and the eye is provided with the shank, so that the latter may be driven into said member in the event of the displacement of said bracket. One of the sides of the eye is adapted to be fitted on the limbs of said bracket when the latter is in position, so as to support the rope, it being noticed that the eye is a fixture of said rope, so that the latter is always attachable to said bracket or a member near the window.

In Fig. 4 the bracket is formed with the vertical recess P, so that when the cross-piece of the eye Q (shown in Fig. 5) is fitted on the limbs of said bracket the portion of the rope adjacent to said recess may enter the same, and is thus prevented from being cut or chafed while swaying, as it is removed from direct contact with said limb and the upper portion of the bracket.

In Fig. 2 the eye L may be supported on the bracket H between the limbs of the latter, the opening in said eye permitting the rope to be passed therethrough and wound around the upper wall as a cross-bar.

In Fig. 3 the arm N has a depression or recess, and the portions aside of said depression serve as cross-bars to be seated in the bracket.

In Fig. 5 the opening in the eye Q receives the adjacent portion of the rope, and the cross-bar has another portion of the rope wound around the same.

In either case the eye and arm remain fixtures of the rope, and owing to the opening or recess therein and the opening or recess in the bracket the respective cross-bar is permitted to be fitted on the bracket without causing the rope to bind or jam in the limbs of the bracket.

Having thus described my invention, what

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

1. In a fire-escape, a rope formed of members, some of which are looped, and others passed straight through said loops and portions of all of the members being knotted together at the ends of said looped members.

2. In a fire-escape, a rope formed of a number of members, some of the same being separated at bottom into different lengths which are provided respectively with a hook and weight, portions of the members in the length of the rope being straight and portions of other members being deflected, producing loops through which the adjacent portions of the straight members are passed, the several members being knotted together at the ends of said loops.

3. In a fire-escape, a bracket with limbs and an eye provided with a cross-bar, and a securing-shank, said bar being adapted to be seated on said bracket between the limbs thereof.

4. In a fire-escape, a bracket with limbs, and an eye provided with a cross-bar and a securing-shank, said bracket and eye having registering openings therein, and said cross-bar being adapted to be seated in said bracket.

5. A bracket with upturned limbs and a vertical recess between the sides thereof, and an eye with a cross-bar adapted to be seated within said limbs, the opening in said eye being adapted to register with the recess of said bracket, and a rope passed through said opening and secured to said cross-bar.

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Witnesses:

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