No. 666,028. Patented Jan. 15, 1901.

J. G. SCHAEFER.

FIRE ESCAPE.

(Application filed Nov. 29, 1899.)

(No Model.)

Fig. 1.

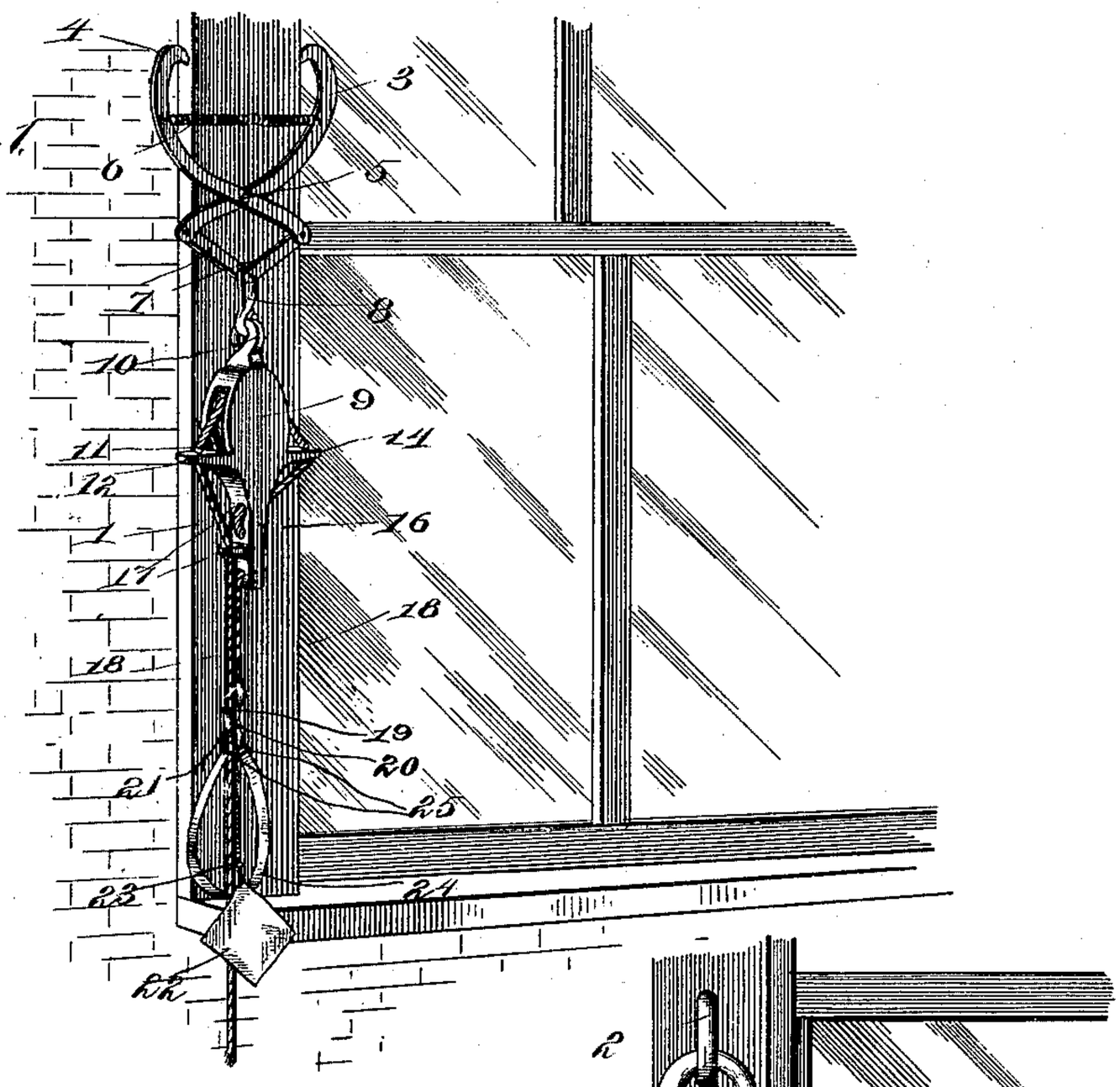


Fig. 5.

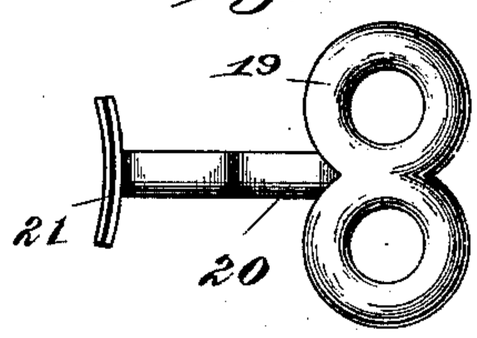


Fig. 2.

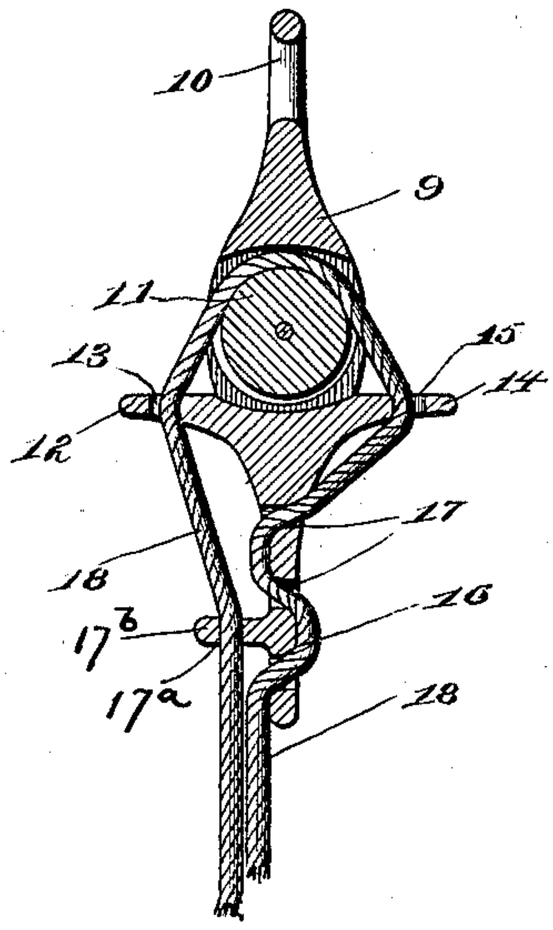


Fig. 3.

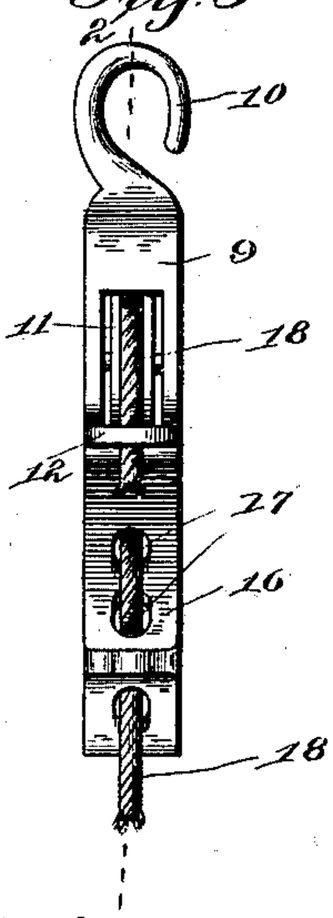
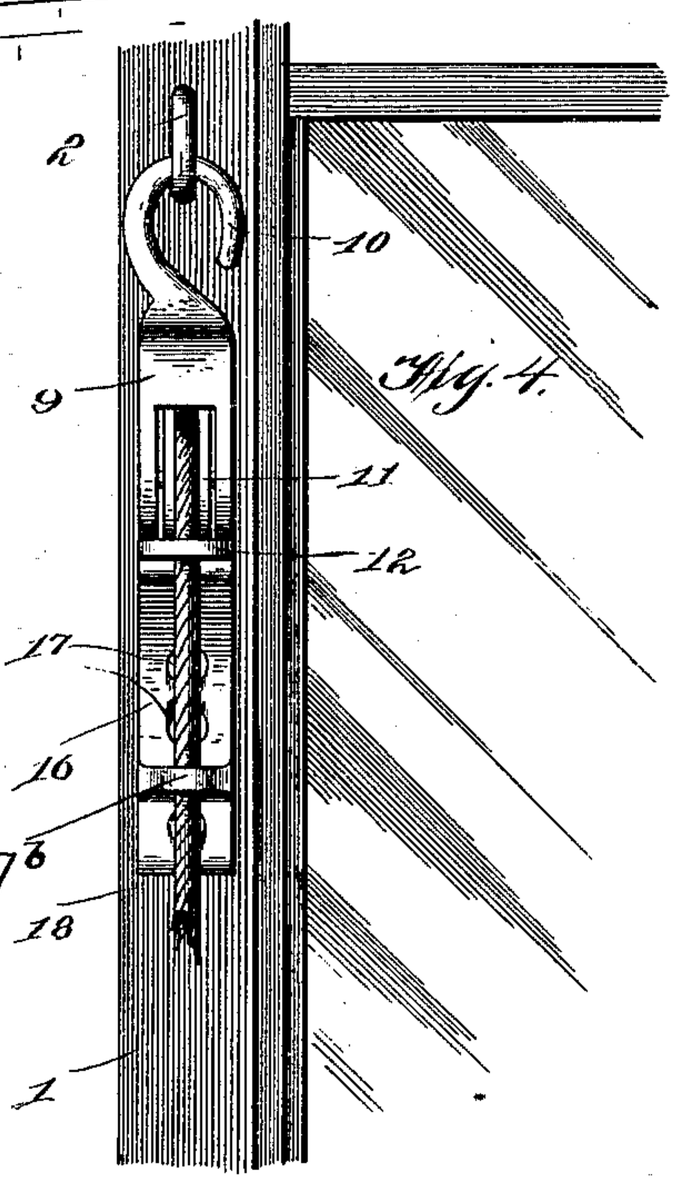


Fig. 4.



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UNITED STATES PATENT OFFICE.

JOHN GEORGE SCHAEFER, OF WAPPINGER'S FALLS, NEW YORK.

FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 666,028, dated January 15, 1901.

Application filed November 29, 1899. Serial No. 738,702. (No model.)

To all whom it may concern:

Be it known that I, JOHN GEORGE SCHAEFER, residing at Wappinger's Falls, in the county of Dutchess and State of New York, have invented a new and useful Fire-Escape, of which the following is a specification.

This invention relates to devices whereby the inmates of a burning building may escape therefrom, known as "portable fire-escapes," the object of the invention being to provide a fire-escape which shall be extremely simple in its construction and arranged to be readily and easily attached to a building in position for use or detached therefrom and stowed away in a very small compartment in readiness for use.

With this object in view my invention consists in the improved fire-escape hereinafter fully described and the novel points specifically set forth in the appended claims.

In the accompanying drawings, forming a part of this specification, Figure 1 is a perspective view illustrating my invention attached to a building in position for practical operation. Fig. 2 is a vertical sectional view of the frictional tension-block with the rope in position, the view being on the plane indicated by the broken lines 2 2 of Fig. 3. Fig. 3 is a view in side elevation of the same parts shown in Fig. 2. Fig. 4 is a view in side elevation, showing the block secured directly to an eye or staple in the window-frame. Fig. 5 is a fragmentary detail view to be referred to hereinafter.

Like numerals of reference indicate the same parts wherever they occur in the several figures of the drawings.

Referring to the drawings by numerals, 1 indicates the frame of a window in which an eye or staple 2 may be secured upon which to attach my improved fire-escape when it is to be put in place by the owner or occupant of the building. This means of attachment will be used when the fire-escape is kept in the room ready for use when required. When, however, the fire-escape is to be carried by and attached to the building by the firemen or other person from the outside, and when the eye or staple is not in position, the escape will be attached by means of a pair of tongs 3 to the window-frame 1 or any other suitable point of attachment.

The tongs 3 have sharp points 4 to engage in wood or other material. Their legs are crossed and pivoted together at 5, their jaws kept normally apart by a spring 6, and to their arms are pivotally attached bars 7, which are also pivotally joined to a depending link 8, which when the tongs are secured in place serves the same purpose as the eye or staple 2, which is to receive the frictional tension-block 9, the hook 10 of which engages in the link 8 or eye or staple 2. The block 9 is further provided with a grooved pulley 11, opposite lateral wings 12 and 14, having vertical eyes 13 and 15, respectively, and a depending extension 16, having horizontal eyes 17 17. This extension is formed with a horizontal lug 17^a, having a vertical eye 17^b.

18 indicates a rope which is of a sufficient length to pass through the block and have both ends extend to the ground. This rope passes up through eyes 17 17 and 15, over pulley 11, and down through eye 13 and eye 17^a of lug 17^b. To its end is secured a double link 19, (shown in Fig. 5,) to which is secured an inwardly-projecting bar 20, provided at its inner end with a rub-shoe 21 to bear against the building in the descent and keep the descending person away from the wall.

22 indicates a pad of ticking, heavy duck, or other suitable material suspended from bar 20 by a cord 23.

24 indicates a strap, belt, or sling having hooks 25 at its ends to engage in link 19.

In practical operation the person desiring to descend secures the belt 24 about his body, grasps the free end of the rope with pad 22, and swings off. The friction of the rope through eyes 13, 15, and 17 so retards its motion that the rope can be allowed to pass through the pad in the hand at any desired speed, and the person can safely lower himself to the earth without danger and without burning his hands by the rapid passage of the rope therethrough. A person in a room

can place the sling around the body of an insensible or helpless person and lower it safely, or it can be lowered by a person on the ground.

Should it be desirable or necessary, a fireman can carry the escape, with the tongs, up with him, attach it wherever desired, place a body in the sling, and lower it from his place on the ladder or permit a person on the ground to lower it.

The device is simply and cheaply constructed, is strong, durable, and reliable in operation, and the advantages attending its use will be apparent from the foregoing description.

Having thus fully described the invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. In a fire-escape, a frictional tension-block provided with a grooved pulley, a lateral wing on each side having vertical eyes in the same vertical plane with the groove in the pulley, and a depending extension provided with horizontal eyes in the same vertical plane, substantially as described.

2. In a fire-escape, a double-eyed link adapted to receive the lowering-rope in one eye and a sling or belt in the other and provided with an inwardly-projecting guard-bar having a rub-shoe on its inner end, substantially as described.

3. In a fire-escape, the combination with a frictional tension-block provided with a grooved pulley, lateral wings having vertical eyes in the same vertical plane as the grooved pulley, and a depending extension with horizontal eyes in the same vertical plane, of a rope passed up through the horizontal eyes and one of the vertical eyes, over the pulley and down through the other vertical eye and a link secured to the end of the rope, substantially as described.

4. In a fire-escape, a frictional tension-block, a grooved pulley mounted thereon, said block having laterally-extending wings projecting from opposite sides thereof and having vertical eyes, and a depending extension having horizontal eyes, and formed with a laterally-extending lug having a vertical eye, substantially as described.

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