C. PALATINI.

FIRE-ESCAPE.

No. 193,176. Patented July 17, 1877.

Fig. 1.

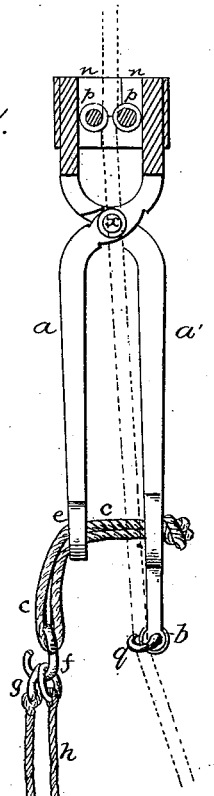


Fig. 2.

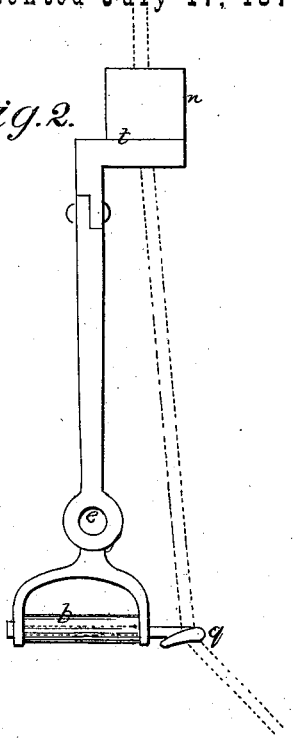


Fig. 3.

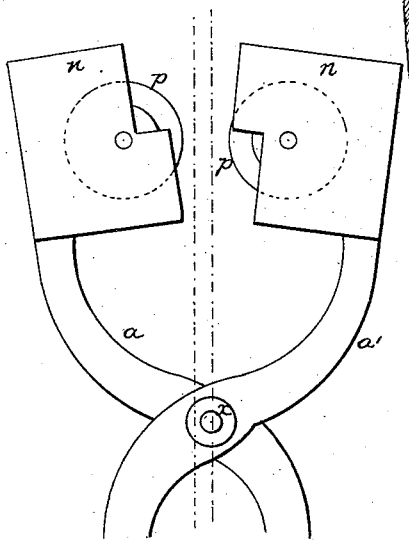
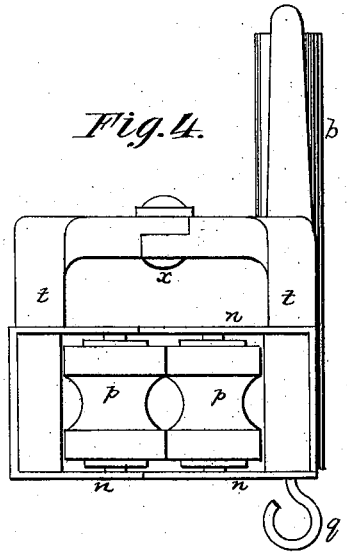


Fig. 4.



Attest:

Fred Benjamin

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By his atty

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UNITED STATES PATENT OFFICE.

CONSTANTINO PALATINI, OF NEW YORK, N. Y.

IMPROVEMENT IN FIRE-ESCAPES.

Specification forming part of Letters Patent No. **193,176**, dated July 17, 1877; application filed May 9, 1877.

To all whom it may concern:

Be it known that I, CONSTANTINO PALATINI, of the city, county, and State of New York, have invented an Improved Fire-Escape, of which the following is the specification:

My invention relates to an improvement in fire-escapes, in which a clamp traversing a rope is employed, the object of my invention being to apply the clamp to the rope at any point with facility, and to prevent the person operating the same from clamping the rope so tightly as to be immovable.

In the drawing, Figure 1 is a view, partly in section, showing my improved escape. Fig. 2 is a side view. Fig. 3 is a face view of the upper portion of the clamp enlarged, and Fig. 4 is an end view.

The clamp consists of two jaws, *a a*, crossing each other, and pivoted at *x*, the lower arm of the jaw *a'* terminating in a handle, having a cross-piece, *b*, and a doubled rope, *c*, extending from said arm through an eye, *e*, in the opposite arm, and carrying a hook, *f*, for receiving rings *g*, on the end of a short rope, *k*. The upper end of each jaw is bent laterally, and is provided with flanges *n*, in which turn the journals of a grooved roller, *p*, which rollers, in consequence of the lateral extension of the jaws, are at one side of the main body of the clamp, which may, therefore, be opened, as shown in Fig. 2, so as to apply the clamp to the rope at any point of the latter, instead of its being necessary to insert the end of the rope between the jaws, as in ordinary clamps, thus avoiding the loss of time heretofore experienced in making the application. The rope is also passed through a hook, *q*, on the jaw *a'*, which holds it away from the hands of the operator, and also prevents it being drawn from between the jaws when the lower end is pulled out to swing the operator away from the building. After the clamp has been applied the operator passes the rope *h* around his body, and places the rings *g* on the hook *f* and grasps the handles, so as to bring the rollers *p* to bear upon the rope with a greater or less force, according to the speed at which he desires to descend, or a strap, basket, hammock, or chain may be substituted for the rope *h*.

Ordinary clamps are so constructed that excessive pressure will fasten them immovably to the rope, so that they become useless in case a very heavy person attempts to descend, or a nervous person grasps them too tightly.

By placing the rollers *p p* in the clamp this is prevented, as sufficient friction can never be applied to absolutely arrest the movement of the clamp.

The transverse handle *b* enables the clamp to be grasped by the operator to relieve the pressure upon the cord *c*, if necessary.

I claim—

1. The fire-escape clamp, provided with jaws, secured to which are bearings constructed and arranged in such a manner that when the clamp is opened the rope can enter laterally between said bearings, in the manner and for the purpose herein set forth.

2. The jaws *a a'*, provided with lateral extensions *t*, as and for the purpose specified.

3. The fire-escape clamp, provided with clamping-rollers *p*, arranged to form the bearing-surfaces between which the rope is pressed, as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CONSTANTINO PALATINI.

Witnesses:

CHARLES E. FOSTER,

HOWARD ZEVELY.