C. A. GREGORY.

Fire-Escape.

No. 197,727. Patented Dec. 4, 1877.

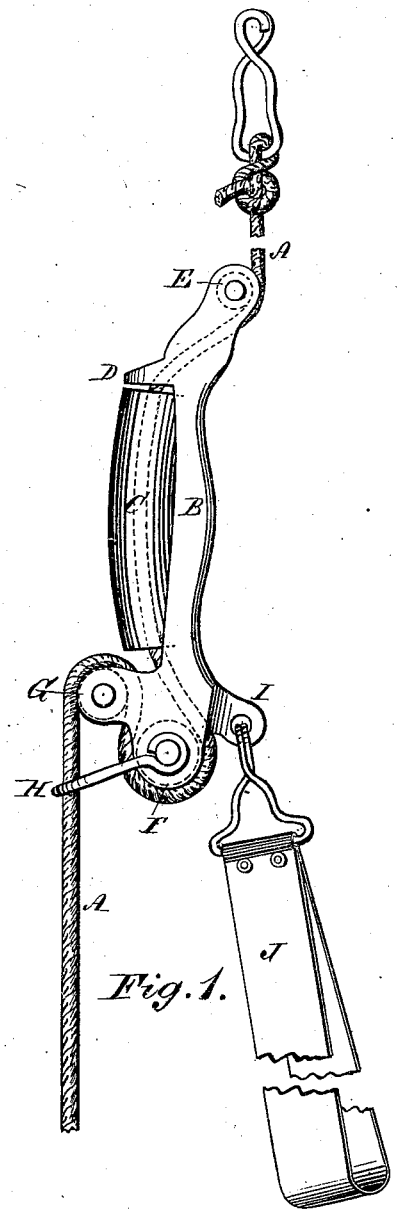


Fig. 1.

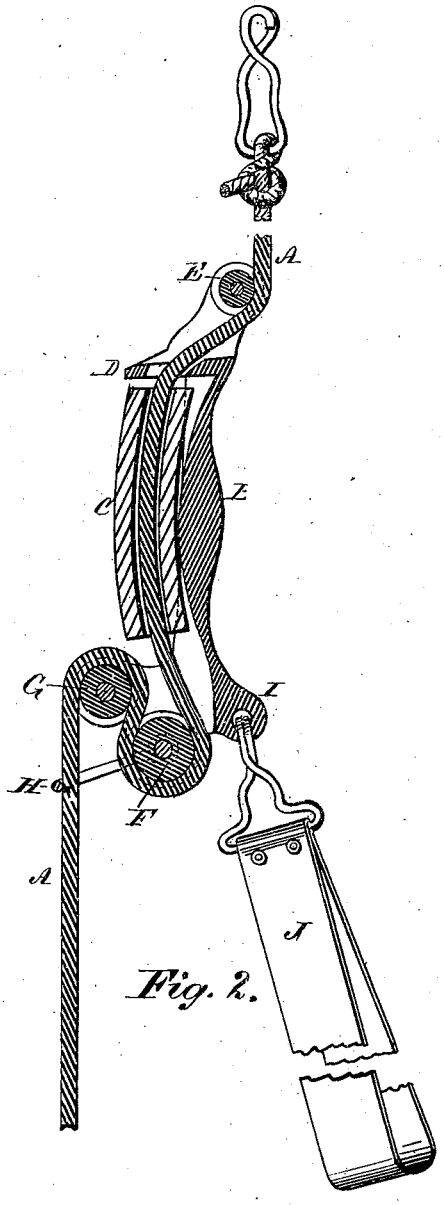


Fig. 2.

Witnesses
John Grist
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Inventor
C. A. Gregory
By his Attorney
Henry Grist

# UNITED STATES PATENT OFFICE.

CHARLES A. GREGORY, OF MONTREAL, QUEBEC, CANADA, ASSIGNOR OF ONE-HALF HIS RIGHT TO D. B. TOWSLEY, OF SAME PLACE.

## IMPROVEMENT IN FIRE-ESCAPES.

Specification forming part of Letters Patent No. **197,727**, dated December 4, 1877; application filed September 21, 1877.

*To all whom it may concern:*

Be it known that I, CHARLES ALEXANDER GREGORY, of the city and district of Montreal, in the Province of Quebec, in the Dominion of Canada, have invented certain new and useful Improvements in Fire-Escapes; and I do hereby declare that the following is a full, clear, and exact description of the same.

This invention relates to that class of fire-escapes in which the descent is made by means of a rope secured to a fixture in the apartment, and dropped to the ground; and the object of the invention is to construct a device to slide on the rope, having a handle which can be frictionally compressed on the rope by the hand of the person descending, where his descent is regulated by the pressure of his hold on the handle; and it consists of a metal handle, constructed with sheaves at both ends, over which the rope passes, and centrally a rubber tube, sliding on the rope, which, conjointly with the handle, is griped by the hand, its compression resulting in the rubber exercising frictional contact with the rope, thereby sustaining or slowing the passage of the rope over the sheaves.

Figure 1 is a side view of my device, and Fig. 2 is a longitudinal section of the same.

A is the escape-rope, attached to a spring-hook, which is fastened to any fixture in the room, the other end being thrown from the open window to the ground.

B is a handle-frame, with a rise on its outside, to fit into the hollow or palm of a man's hand, and the inside formed with a circular recess to receive a rubber tube, C, the recess being formed centrally with a rise longitudinally, to give the rubber C a curved form, both inner and outer rising being conducive to the operator being enabled to give the handle and tube a more powerful grip, whereby greater friction is exerted on the rope A. The upper part of the handle is formed with a loop projection, D, against which the rubber tube C stops, and through which the rope passes to under a sheave, E, journaled in a projecting bifurcation at the upper end of the handle. The lower end of the handle is provided in like manner with a sheave, F, and a sheave, G, journaled in a bifurcation extending beyond the sheave F, whereby the rope, after passing under the sheave F, passes upwardly and downwardly on the sheave G.

H is a clevis held pivotally to the handle by the journal of the sheave F, and brakes against the bifurcation of the sheave G, its object being to crowd the rope on the sheave, and thus prevent it slipping off.

I is an extension on the back part of the handle, to which is hooked a looped strap, J, through which the operator passes one leg, to form a saddle for his seat when descending.

If desired the upper end of the handle may be formed like the lower end, and be provided with two sheaves.

I claim as my invention—

The handle B, constructed as set forth, with sheaves E F G at the ends, clevis H, and projection D, in combination with rubber tube C, sliding on rope A, passing over the sheaves, as set forth.

C. A. GREGORY.

Witnesses:
JOHN GRIST,
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