(No Model.)

E. SOLOMONS.

FIRE ESCAPE.

No. 281,154. Patented July 10, 1883.

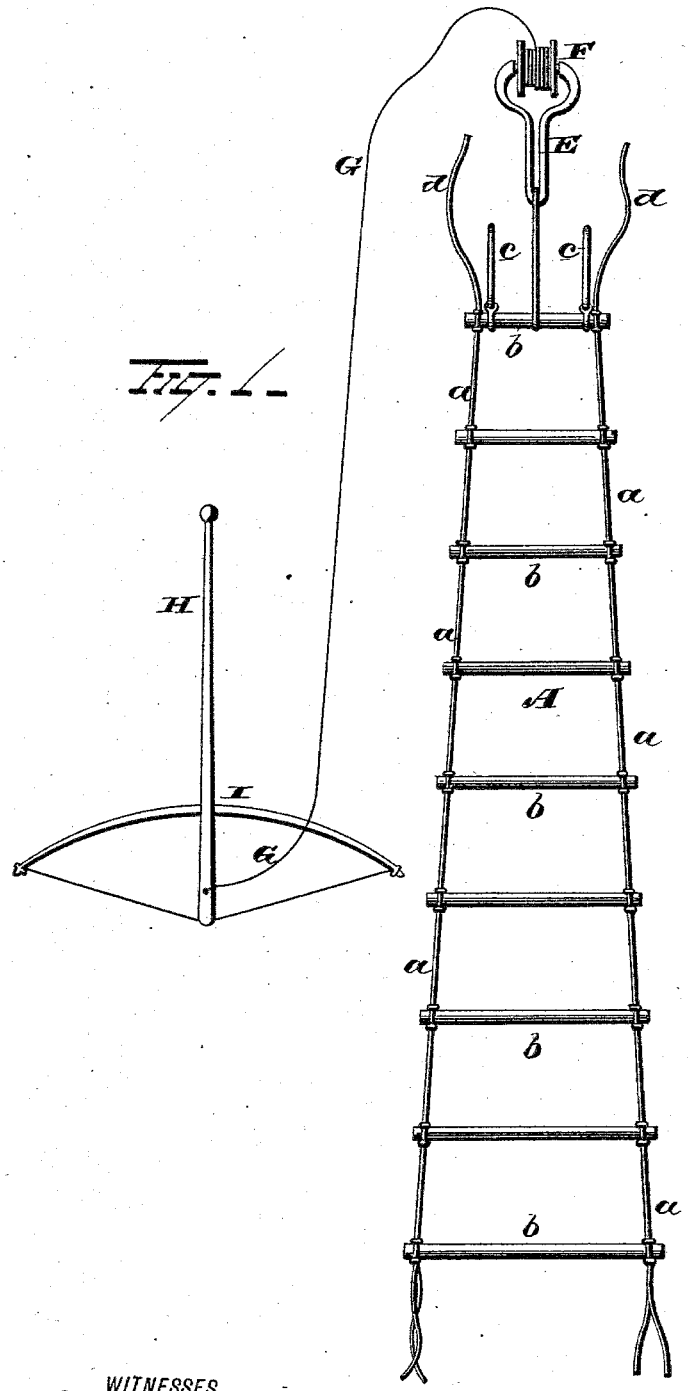

Fig. 1.

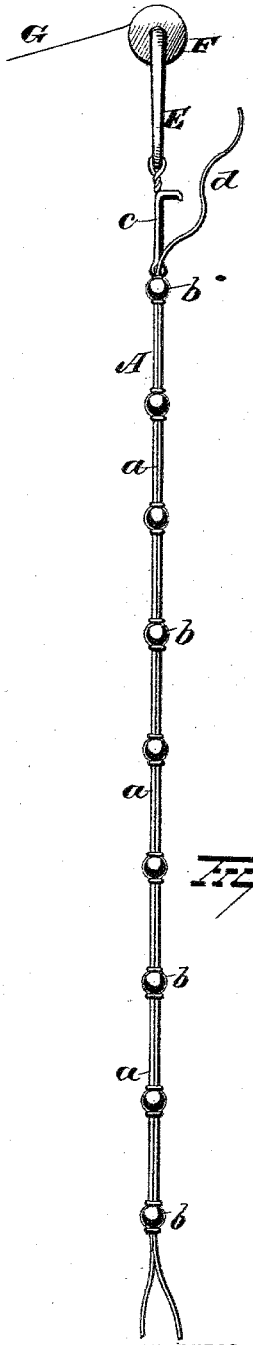

Fig. 2.

WITNESSES

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EDWARD SOLOMONS, OF SUMTER, SOUTH CAROLINA.

FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 281,154, dated July 10, 1883.

Application filed March 3, 1883. (No model.)

To all whom it may concern:

Be it known that I, EDWARD SOLOMONS, of Sumter, in the county of Sumter and State of South Carolina, have invented certain new and useful Improvements in Fire-Escapes; and I do hereby 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 pertains to make and use the same.

My invention relates to an improvement in portable fire-escapes; and it consists of the parts and combinations of parts, as will be more fully described, and pointed out in the claims.

In the accompanying drawings, Figure 1 shows in front elevation my improved ladder and life-line, and Fig. 2 is a side view of the same.

A represents a ladder, the sides *a* of which are made of rope or other suitable flexible material, and the rounds *b* of wood or metal for the purpose of keeping the sides *a* separated and to prevent the ladder from swinging while suspended from a building. The upper round *b* of the ladder A is secured to the extreme upper ends of the sides *a*, and is provided near opposite ends with the metallic hooks *c*, which are adapted to engage the window sill or cornice and hold the ladder in proper position. As a matter of extra precaution, I have also provided the upper round with safety-ropes *d*, which can be secured to an article of furniture in the room, and hold the ladder in case the hooks should break or slip from position. The upper round *b* is also provided with the rope D, to the outer or free end of which is secured the reel-frame E. This frame can be of any suitable size and shape, and is provided with the reel F, on which the life-line G is wound. The life-line is preferably made of twine, and the outer or free end thereof is secured to the arrow H, which is adapted to be shot from the bow I through a window or over a building. When the life-line is grasped, it is drawn upward until the person can grasp the safety-ropes and the hooks secured to the upper round, and is then released.

The reel-frame can be held by a person while the arrow is flying; or it can rest on the ground, as desired; but it is better to have it slightly elevated, so as to enable the life-line to pay off from the reel without resistance. As soon as the life-line is grasped by the person at the window or on the building, it is drawn upward until the reel is elevated. The rope D is then grasped and drawn in until the hooks and safety-ropes are reached, when they are secured to any convenient articles of furniture or to the window-sill, so as to afford a strong support for the ladder.

The bow I can be made of steel or wood, as desired.

This improvement is simple in construction, can be manufactured at a small initial cost, and is adapted to be packed in a small compass when not desired for use.

It is evident that instead of making my ladder of rope I can make it of wire or any other suitable material, and instead of employing a bow and arrow or cross-bow and arrow for projecting the life-line, a spring-gun and carrier can be employed in their stead. It also evident that other slight changes in the construction and relative arrangement of the several parts might be resorted to without departing from the spirit of my invention; and hence I would have it understood that I do not confine myself to the exact construction shown and described, but consider myself at liberty to make such changes and alterations as fairly fall within the spirit and scope of my invention.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination, with a ladder composed of flexible sides and rigid rounds, of hooks and safety-lines secured to the upper round, a reel-frame connected indirectly therewith, a reel secured to the reel-frame, and a life-line wound on the reel.

2. The combination, with a ladder composed of flexible sides and rigid rounds, of a reel connected indirectly therewith, a life-line wound on the reel, and an arrow secured to the free end of the life-line, for the purpose set forth.

3. The combination, with a ladder com-

posed of flexible sides and rigid rounds, of hooks secured to the upper end of the ladder, a reel indirectly connected to the upper end of the said ladder, a life-line wound on the reel, and an arrow secured to the free end of the life-line, substantially as set forth.

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

EDWARD SOLOMONS.

Witnesses:
W. E. JENNINGS,
J. B. ROACH.