

(No Model.)

M. L. ROSE & E. W. SOUTH.

FIRE ESCAPE.

No. 259,279.

Patented June 6, 1882.

Fig. 1.

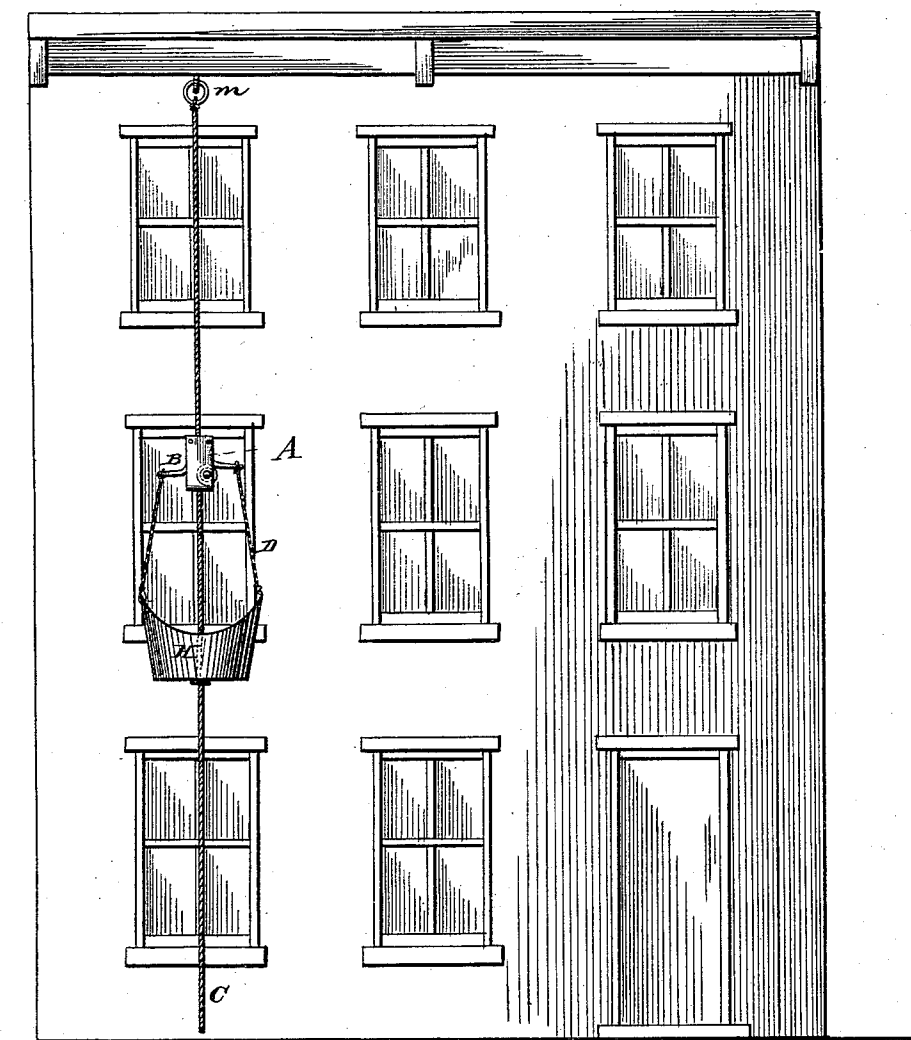
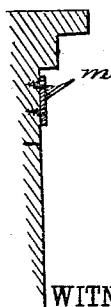


Fig. 4.



WITNESSES:

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Fig. 2.

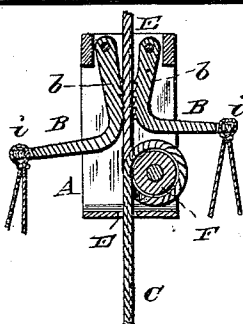
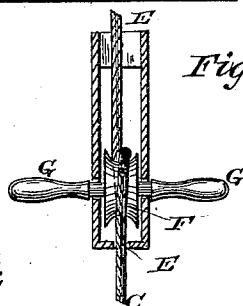


Fig. 3.



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UNITED STATES PATENT OFFICE.

MAX L. ROSE AND E. WHITFIELD SOUTH, OF ANDERSON, SOUTH CAROLINA;
SAID SOUTH ASSIGNOR TO SAID ROSE.

FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 259,279, dated June 6, 1882.

Application filed March 13, 1882. (No model.)

To all whom it may concern:

Be it known that we, MAX L. ROSE and E. WHITFIELD SOUTH, citizens of South Carolina, residing at Anderson, in the county of Anderson and State of South Carolina, have invented certain new and useful Improvements in Fire-Escapes; and we 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 appertains to make and use the same, reference being had to the accompanying drawings, and to the letters or figures of reference marked thereon, which form a part of this specification.

The object of our invention is to render escape from fire certain and speedy by means of an invention so simple in its construction that the most ignorant can readily adjust it and escape at a moment's warning with perfect safety.

All fire-escapes heretofore used that have come under our observation have been so complicated that persons could not readily comprehend their *modus operandi*, and particularly when life was in imminent danger and the mind confused.

Figure 1 represents our fire-escape suspended from a spike or bracket over a window in the front end of a house. Figs. 2 and 3 are detailed views of the fire-escape. Fig. 4 represents the end of a house with the spike or bracket M secured to the same immediately under the cornice and over a window thereof.

It consist of a frame, A, made of iron or other metal of sufficient strength, curved at its lower end, and receiving at its upper end two elbow-levers, B B, which are pivoted or bolted through the top of the frame A, as is shown, the two elbow-levers B B, pivoted at their upper ends into the upper end of said frame A and running down perpendicularly on either side of the rope C, and then turning out suddenly at right angles on either side of the frame A, thus forming levers or arms extending out sufficiently to receive the basket-cords D D from the basket H, suspended below. The inner surfaces of the elbow-levers B B, where they engage the rope C, are fluted and roughened, the fluting and roughening being designed to guide the rope C and increase the grasping power of the elbow-levers B B. The openings

E E in the frame A, at its upper and lower ends, are of sufficient size to allow the rope C to pass through freely, and they also answer the purpose of guiding the rope and keeping it in the groove of the loose pulley F, which runs on shaft G. Shaft G is set in the lower end of the frame A at right angles with the arms of elbow-levers B B. This shaft G and pulley F have rope C passed round them once and bear the weight of the basket H. This pulley is loose upon the shaft G, and this shaft extends on either side of the frame A of sufficient length to serve as handles.

The basket H can be made of any shape desired, adapting the shape to avoid any obstructions that may be on the side of the building, and is suspended to the elbow-levers B B at either extremity by the cords D D, passing through holes *i i* in the levers B B and holes J J in the basket H. The object in having two holes on each side of the basket, as described, is to keep it steady and in its proper position.

The rope C and cords D D should be wire, or, if of flax, cotton, or other suitable substance, should be coated with fire-proof solution. On the upper end of said rope is a ring securely attached thereto, the rope extending down through the upper opening, E, in frame A and between the fluted edges *b b* of the levers B B, thence around the loose pulley once, thence down and out of the lower opening, E, at the bottom of the frame A, and thence down to the ground through opening K in the bottom of basket H.

Modus operandi: There must be secured or driven into the facing of the window or cornice of the building a spike or bracket, M, at such height that the basket will be convenient to be entered from the window. This spike or bracket must have an angle of thirty-six degrees upward, or at least so many as to insure perfect safety from the slipping off of the ring. The ring on the upper end of the rope C is thrown over the spike or bracket M. The machine is now suspended and ready for use. When ready to descend slip into the basket H, and the weight of the person or persons in the basket causes the elbow-levers B B to clamp the rope C and hold the basket from descending. When ready to move down,

the person or persons in the basket reach up and grasp the handles of the shaft G. This relieves the weight in the basket from the elbow-levers B B, and allows them to open and the basket to descend. The velocity of the basket in its downward motion is regulated by the pressure placed upon the handles of the shaft G. The heavier the pressure the greater the velocity, and the lighter the pressure the less the velocity. Supposing now two persons have descended and others are in the same room. Those still remaining in the room can pull up the basket with the rope, and then, pulling the rope through the frame A until it stands at the upper end of the rope again, get into the basket and descend as before, and so on. Should the flames leap from the sides of the building, so that it might be unsafe to descend through them, some one on the ground should grasp the lower end of the rope and run off from the building for some little distance, so the persons in the basket would descend on an inclined plane.

We may use a coil of rope in the bottom of the basket instead of passing it through opening K in said basket; or we may use the coil of rope in a well below the window on the ground, in which case the rope may or may not be passed through opening K in said basket.

After all parties have been rescued, by giving the rope a quick jerk the ring will fly off of the spike M, and thus, should the building have only one fire-escape, it may be used at other windows.

Having described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. In a fire-escape, the elbow-levers B B, having fluted and rough edges *b b*, adapted to grasp rope C, and holes *i i*, and pivoted at their upper ends in frame A, substantially as shown and described.

2. In a fire-escape, the combination, with frame A, of rope C, passing through openings E E in said frame and around pulley F on shaft G, elbow-levers B B, having fluted and rough edges adapted to grasp said rope, pivoted at their upper ends in said frame, and cords D D, attached to the outer ends of said levers and to the basket H, substantially as shown and described.

In testimony whereof we affix our signatures in presence of two witnesses.

MAX L. ROSE.

E. WHITFIELD SOUTH.

Witnesses:

M. B. ARNSTEIN,

A. M. DUFFIE.