

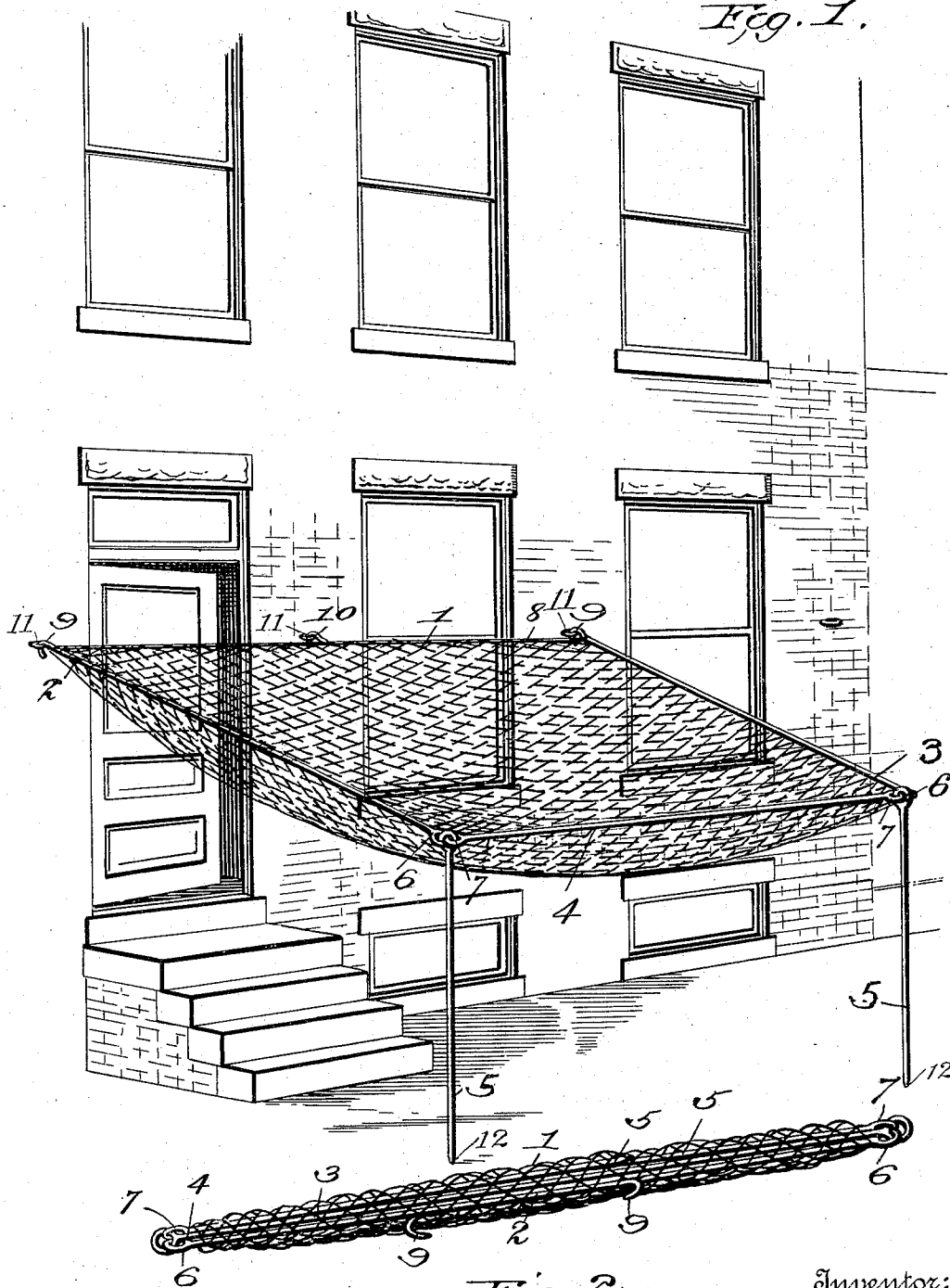
(No Model.)

M. R. FITZHUGH.
FIRE ESCAPE.

No. 567,642.

Patented Sept. 15, 1896.

Fig. 1.



Witnesses
[Signature]
Mass Guilford.

Fig. 2. Inventor:
Maria P. Fitzhugh,
per *[Signature]* Attorney

UNITED STATES PATENT OFFICE.

MARIA R. FITZHUGH, OF BAY HEAD, NEW JERSEY.

FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 567,642, dated September 15, 1896.

Application filed April 25, 1896. Serial No. 589,138. (No model.)

To all whom it may concern:

Be it known that I, MARIA R. FITZHUGH, a citizen of the United States, residing at Bay Head, in the county of Ocean and State of New Jersey, 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 appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

My invention relates to that class of fire-escapes in which a net is used to rescue persons jumping from burning buildings.

Heretofore it has been proposed to use a net attached to a frame supported upon legs, so that the whole structure could be moved from place to place and deposited alongside of burning buildings at the point desired, but the size and shape of the old devices made the work of transportation and manipulation too awkward and the room occupied on the hook-and-ladder carriage too great.

The purpose of my invention is to overcome these objections by providing a fire-escape net with a foldable and adjustable frame by means of which the whole device can be condensed into such a very small space that it would not materially add to the bulk of the firemen's equipment now in common use, and which would be easier and quicker to handle, adjust, and apply.

A further object of my device is to provide means to facilitate placing and holding it in the proper manner alongside of a burning building, so as to insure the successful catching of falling persons, and to permit the net to be more conveniently and quickly lowered to remove them and to raise and reset it.

With these purposes in view my invention consists of three hinged side bars to which three sides of the net are attached, and of an elastic band or border to which the fourth or inside of the net is attached, so that the length of the latter can be stretched and varied in order to adjust it to the variations in distance between the supports on the side of the building to which the net is adapted

to be attached and to accommodate it to the variations in the wall of the building. In addition to the folding feature of the net-frame I provide supporting-legs for the outside of the frame, and which are constructed to fold up parallel with the side bars of the frame when not in use, or to be swung out laterally to permit the net to be quickly lowered. These and certain other peculiarities of my invention will be more fully described hereinafter and pointed out in the claims.

In the accompanying drawings, Figure 1 represents a perspective view of my complete invention as applied to the outside wall of an ordinary house, and Fig. 2 a view of my device folded into a compact form for depositing on the carriage and for moving about from place to place.

The reference-number 1 represents the net, which may be constructed of any suitable material capable of withstanding the strain to be brought upon it.

2, 3, and 4 denote hollow side bars to which the three edges of the net are attached in any convenient manner, and 5 a pair of hollow legs which support the corners of the outside of the frame when it is placed in operative position alongside of a building. These legs are provided with points 12, which enter the ground to steady them. The three side bars are joined to each other at the two outer corners of the frame by loops 6, and the legs are also joined at the top by loops 7, passing through those of the bars. In this manner the three intersecting ends of the bars are hinge-joined or swiveled to allow the latter to be folded one upon the other. The inside free ends of the bars 2 and 3 are connected by an elastic band or cable 8, which permits them to be moved toward and away from each other in order to be adjusted to engage loops 11, fixed on the side of a building, and the bars are provided with hooks 9, adapted to engage the loops for the purpose of supporting the inside of the net. These loops should be a fixture on the side of buildings where my device is to be used, so that the hooks can be quickly placed in them, and should be placed a regulation distance above the ground. Such distances should correspond

approximately with the length of the legs of the frame in order to hold the net level.

The loops 11 should, by preference, be placed midway between first-story windows in order to bring the net directly beneath the windows above. A hook 10 is attached to the middle of the elastic band 8 for the purpose of engaging one of the loops 11 in order to sustain the middle of the inner edge of the net. To make the net most effective, it should be arranged to sag considerably at the central portion like a bag.

From the foregoing construction it will be seen that the net and its frame are exceedingly light, portable, simple of construction, and therefore easy to manage, and all that is necessary to be done to place it in position is to open it, pass the hooks 9 and 10 into the loops on the side of the house to support the inside of the net, then unfold the legs and place them in an upright position to support the outside of the net. In this way it will always be held in the proper position and with the requisite security for safety to those who fall into it. The moment the net receives a person it can be quickly lowered by simply lifting the lower ends of the legs upward and outward.

It is obvious that many small changes in the details of the construction of my device could be resorted to without departing from the scope and spirit of the invention. For instance, in place of the loops which connect the ends of the arms and legs ball-and-socket or any other universal joint might be employed; but the form shown and described is the one preferred.

What I claim as new, and desire to secure by Letters Patent, is —

1. In a fire-escape, the combination of a net with hinged side bars on three of its sides, and an elastic band or cable to which the fourth side is attached, said cable having its opposite extremities attached to the free ends of two of said side bars, whereby the ends can be adjusted laterally, substantially as described.

2. In a fire-escape, the combination with a net, of a frame composed of three hinged side bars to which the sides of the net are attached, and hooks on the free ends of two of the side bars, substantially as described.

3. In a fire-escape, a net attached to a frame composed of three hinged side bars, hooks at the ends of two of said side bars, whereby the frame is arranged to engage devices on the side of a building, and supporting-legs hinged to the frame, in the manner and for the purpose substantially as described.

4. In a fire-escape the combination with a net, of a frame composed of three hinged side bars to which the net is attached on three sides only, the free ends of two of said side bars being arranged to be spread apart or brought nearer together, as and for the purpose substantially as described.

In witness whereof I affix my signature in presence of two witnesses.

MARIA R. FITZHUGH.

Witnesses:

RHESA G. DU BOIS,
JOHN H. SIGGERS.