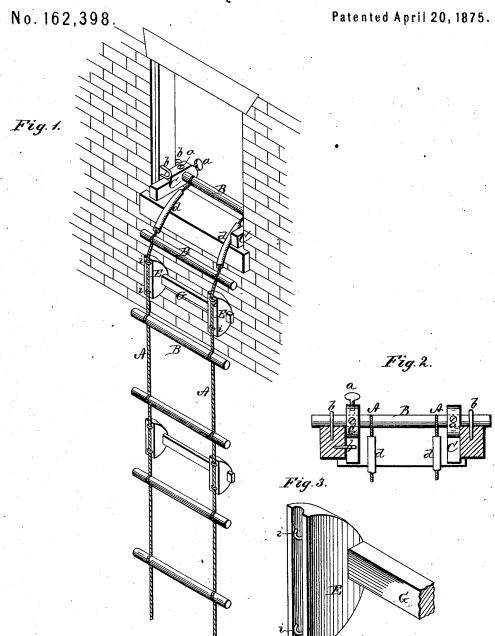
E. MATTESON.

Fire-Escape:



WITNESSES

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UNITED STATES PATENT OFFICE.

ELISHA MATTESON, OF NORWICH, CONNECTICUT, ASSIGNOR OF ONE-HALF HIS RIGHT TO OTIS G. BAILEY AND THOMAS H. BROWNING, OF SAME PLACE.

IMPROVEMENT IN FIRE-ESCAPES.

Specification forming part of Letters Patent No. 162,398, dated April 20, 1875; application filed October 13, 1874.

To all whom it may concern:

Be it known that I, ELISHA MATTESON, of Norwich, in the county of New London and in the State of Connecticut, have invented certain new and useful Improvements in Fire-Escape; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon, making a part of this specification.

The nature of my invention consists in the construction and arrangement of a fire-escape, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a perspective view of my fireescape, showing the same attached to and depending from a window. Figs. 2 and 3 are detached views of certain parts thereof.

A A represent two ropes of suitable dimensions, to be of sufficient strength to support all the weight that may be put upon them. These ropes are connected at suitable regular intervals by means of rounds B B, which are fastened to the ropes in any convenient man-

ner to be strong and durable.

The ladder or fire-escape thus formed is designed to be of such length as to reach from the highest part of a building to the ground, and it is to be suspended from a window, door, or scuttle in the following manner: The top round of the ladder or fire-escape is to be of such length as to reach across the inside of any window, door, or scuttle frame, from which the fire-escape may have to be suspended. On each end of this top round is an arm, C, movable laterally thereon, and each fastened at any desired point thereon by means of one or more set-screws, a a. In suspending the fire-escape, these arms are to rest on the window-sill against the sides of the frame, as shown in Fig. 1, and then fastened by the set-screws, when the fire-escape is held from moving laterally and coming loose from the window.

In factories or other places where fire-escapes are, or should be, kept in readiness for immediate use, the arms C C may be attached in their proper places on the top round, so as to fit in the window or other frame where the fire-escape is to be suspended. As additional security, staples b b may be driven into the frame, straddling the ends of the top round, and also above the arms C C, as shown in the drawing. When the fire-escape is to be attached to the roof of a building, these staples only may be used.

That portion of the ropes A A which comes over the edge of the sill is incased in leather, as shown in d, to prevent the ropes from wear-

ing out.

To prevent the fire-escape from hanging too close in to the wall, I attach, at suitable points on the ropes, semicircular blocks E, the straight sides of which are grooved longitudinally, and the ropes held therein by means of staples *ii*. Each set of these blocks are connected by means of a cross-bar, G, as shown. This device, coming against the wall of the building, holds the ladder sufficiently far out therefrom to render the descent easy.

A fire-escape of this construction may be used on any building, and from any point

thereon where it can be suspended.

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

1. The combination of the ropes A A, rounds B B, and the laterally-adjustable arms C C, with set-screws a a, substantially as and for the purposes herein set forth.

2. The combination, with the fire-escape A B, of the semicircular blocks E E, with crossbar G, adjustable upon the ropes, substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 13th day of October, 1874.

ELISHA MATTESON.

Witnesses:

H. A. HALL, C. L. EVERT.