

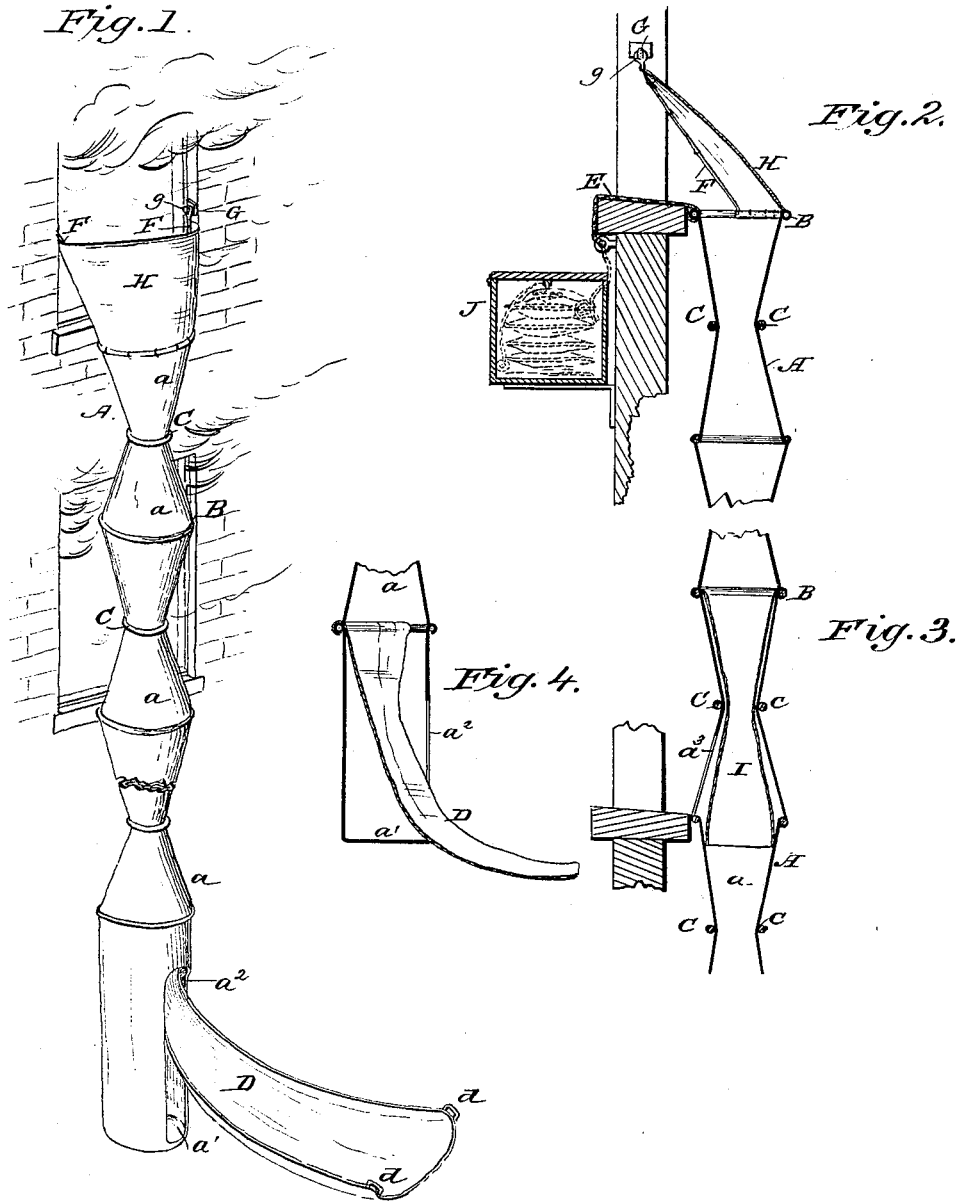
(No Model.)

M. H. MARCUS & O. G. MOORE.

FIRE ESCAPE.

No. 386,253.

Patented July 17, 1888.



WITNESSES:

Fred G. Dieterich
Chas. R. Wright.

INVENTOR:

M. H. Marcus
O. G. Moore
BY *Munn & Co*

ATTORNEYS.

UNITED STATES PATENT OFFICE.

MORRIS H. MARCUS AND OTIS G. MOORE, OF KNOX, PENNSYLVANIA.

FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 386,253, dated July 17, 1888.

Application filed November 4, 1887. Serial No. 254,331. (No model.)

To all whom it may concern:

Be it known that we, MORRIS H. MARCUS and OTIS G. MOORE, of Knox, in the county of Clarion and State of Pennsylvania, have invented a new and useful Improvement in Fire-Escapes, of which the following is a specification.

Our invention relates to that class of fire-escapes in which a flexible chute is employed and through which the persons escaping from the fire-slide, and is an improvement upon the fire-escape for which a patent was granted to us January 8, 1884, No. 291,756.

The invention will first be described in connection with the accompanying drawings, and then pointed out in the claims.

Figure 1 is a perspective view of our improvement, showing it applied to a window of a building. Figs. 2, 3, and 4 are detail sectional views.

Similar letters of reference indicate corresponding parts in all the figures.

Referring to the drawings by letter, A represents a chute, made of canvas or other flexible material, and composed of a series of sections, *a*, sewed or otherwise secured together, the said sections being alternately inclined in opposite directions, so as to give a zigzag shape to the chute, as in our patent above referred to. At each joint of the chute we arrange a ring, B, and intermediate the rings B, and on the outside of the chute, we place the rubber bands or rings C. The rubber bands or rings C are about one-half the size of the rings B, so that they will contract the chute, and thereby retard the descent of the person passing through the same. The lower end of the chute A is closed by a canvas bottom, *a'*, and near the said closed end it is provided with an opening, *a''*, through which the person descending through the chute escapes. To the ring B, above the opening *a''* and around said opening, is secured the canvas or other flexible sheet or blanket, D. The sheet or blanket D is provided with handles *d*, and is adapted to be held by the persons on the ground, so that the persons descending through the chute can

slide out through the opening *a''* upon the said sheet or blanket.

The chute A is attached to the sill and frame of a window by means of chains or ropes E F, which are secured to rings *g* of plates G, secured to the sill and frame. The rope or chain E is permanently secured to the ring on the sill, and the chains or ropes F are provided with hooks or other equivalent devices for detachably securing them to the rings on the frame. To increase the facility of entrance to the chute, and to prevent all danger of falling over the same in the act of entering the chute, we secure to the outer side of the top ring and to the ropes or chains F the curtain H, as clearly shown in the drawings.

In order to permit persons from a lower window to enter the chute, an opening, *a''*, is formed in the chute opposite the said window, and to prevent the person descending from the upper window from falling out through said opening we secure a flexible tube, I, on the inside of the chute A at said opening. The tube I is secured to the ring B above the opening *a''*, and extends down a short distance below the ring over the opening, and is secured at one side to said ring to hold it in position.

The chute A is to be contained in a box or case, J, which is to be placed under the window in the room, so that it will be at all times convenient and ready for use. The back of the case is provided with an opening for the passage of the rope or chain E, which is secured at all times to the ring on the sill, and the sides of the box are provided with openings for the passage of the ropes F, which hang out through said openings ready for attachment to the rings on the frame.

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

1. A fire-escape consisting of a flexible chute held extended by rings and surrounded by elastic bands or rings between said extension-rings, substantially as described.

2. A fire-escape consisting of a zigzag-shaped

flexible chute formed of a series of sections
and provided with rings at the joints for
holding the same extended and with elastic
bands or rings intermediate said extension-
5 rings, substantially as described.

3. The combination, with a flexible chute
having a closed lower end and provided with
an opening near said closed end, of a blanket
or sheet secured to the chute at the opening

to receive the person emerging from the said 10
opening, substantially as herein shown and
described.

MORRIS H. MARCUS.
OTIS G. MOORE.

Witnesses:

SAM. GIBBS,
WILBUR F. MYERS.