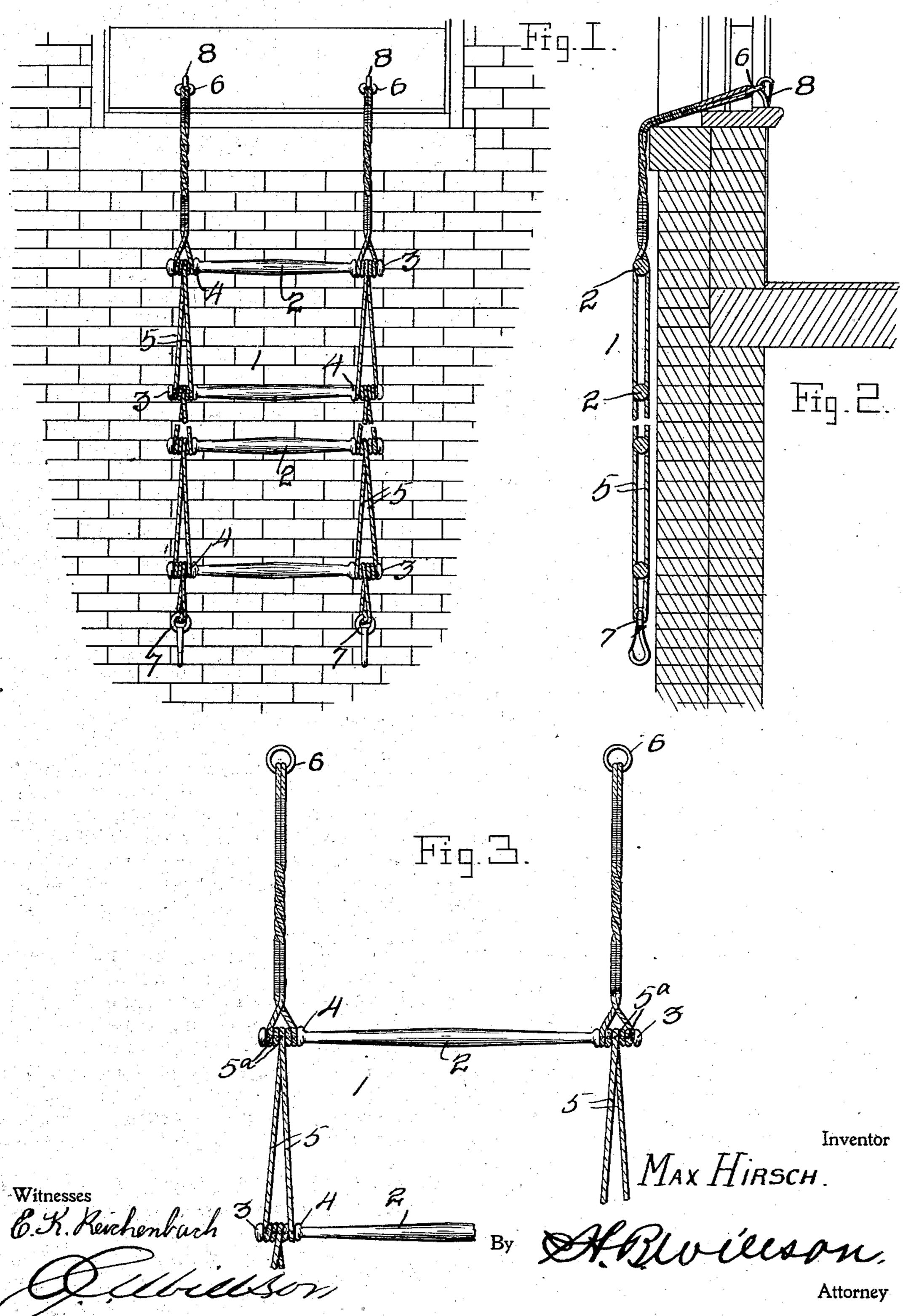
M. HIRSCH. FIRE ESCAPE. APPLICATION FILED SEPT. 24, 1903.

NO MODEL.



## United States Patent Office.

## MAX HIRSCH, OF NEW YORK, N. Y.

## FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 749,558, dated January 12, 1904.

Application filed September 24, 1903. Serial No. 174,491. (No model.)

To all whom it may concern:

Be it known that I, Max Hirsch, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Fire-Escapes; and I do 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.

This invention relates to improvements in

fire-escapes.

The object of the invention is to provide a fire-escape which can be quickly and easily arranged for use and which is simple and strong in construction, inexpensive, and well adapted to the use for which it is designed.

With these and other objects in view the invention consists of certain novel features of construction, combination, and arrangement of parts, as will be more fully described, and particularly pointed out in the appended claims.

In the accompanying drawings, Figure 1 is a view showing the application of the device to a window of a dwelling. Fig. 2 is a sectional view through a window-sill, showing the manner of attaching the fire-escape to the same. Fig. 3 is an enlarged detail view of the

30 upper end of the fire-escape. Referring to the drawings more particularly, 1 denotes the fire-escape, which is in the form of a flexible ladder and consists of a series of stout rungs 2, of wood or other suit-35 able material, having formed on their ends a knob or enlargement 3, and near said enlargement is formed an annular bead 4, between which and the said enlargement is formed a rope-engaging space. The rungs are ar-40 ranged a suitable distance apart and connected together by two pairs of ropes 5, one pair being arranged at each end of the rungs. The ropes forming each pair engage the rungs and are wound around the same in opposite di-45 rections, as shown in Fig. 2 of the drawings, and may be fastened to the rungs by nails 5°, which will prevent the ropes from slipping. At their upper ends each pair of ropes 5 are passed through rings 6 and are then doubled 50 upon themselves and wrapped or otherwise

firmly bound to secure the same to said rings. At the lower end of the ladder the ropes are looped, and in said loops are arranged rings 7, to which may be connected the upper end of a second ladder should one not be sufficient 55 to reach the ground.

8 denotes screw-hooks, which are preferably in the form of snap-hooks, as shown. Said hooks are connected to the window-sill, as shown in the drawings, or in any other suit- 60 able manner or place on the building.

When not in use, the fire-escape may be rolled up in compact form and kept in a convenient place near a window or other place of exit.

In use it is intended that the windows of a building shall be permanently equipped with the hooks 8, so that in case of fire the rings at the upper end of the fire-escape may be quickly snapped into the same and the ladder allowed 70 to unroll and drop down out of the window to the ground.

The device being portable may be readily carried to such windows or exits which may be free from smoke and fire or, if desired, may 75 be let down from the roof a building.

Should there be no hooks upon which to secure the rings of the fire-escape, they may be attached in any suitable manner or to any object for support.

From the foregoing description, taken in connection with the accompanying drawings, the construction and operation of the invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

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

1. A fire-escape comprising a ladder, formed of a series of rungs, each having enlargements 95 at its ends forming rope-engaging spaces, ropes arranged in pairs at each end of said rungs, the ropes of said pairs being wrapped around the ends of said rungs in opposite directions, whereby said rungs are supported 100

at suitable distances apart, means for preventing said ropes from slipping on said rungs, and means for securing the upper ends of said ropes to a building, substantially as described.

2. A fire-escape comprising a ladder, formed

of a series of rungs, each having enlargements at its ends forming rope-engaging spaces, ropes arranged in pairs at each end of said rungs, each rope of said pairs being wrapped around the ends of said rungs in opposite directions, whereby said rungs are supported at suitable distances apart, means for preventing said ropes from slipping on said rungs, supporting-rings secured to the upper doubled

ends of said ropes, screw snap-hooks adapted to be secured to the window-sill of a building to receive said supporting-rings, and devices secured to the lower ends of said ropes to which may be secured a second fire-escape, substantially as described.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

MAX HIRSCH.

Witnesses:
Léon Krunáz,
F. Sorak.