

(No Model.)

G. AARONS.
WINDOW FIRE ESCAPE.

No. 433,061.

Patented July 29, 1890.

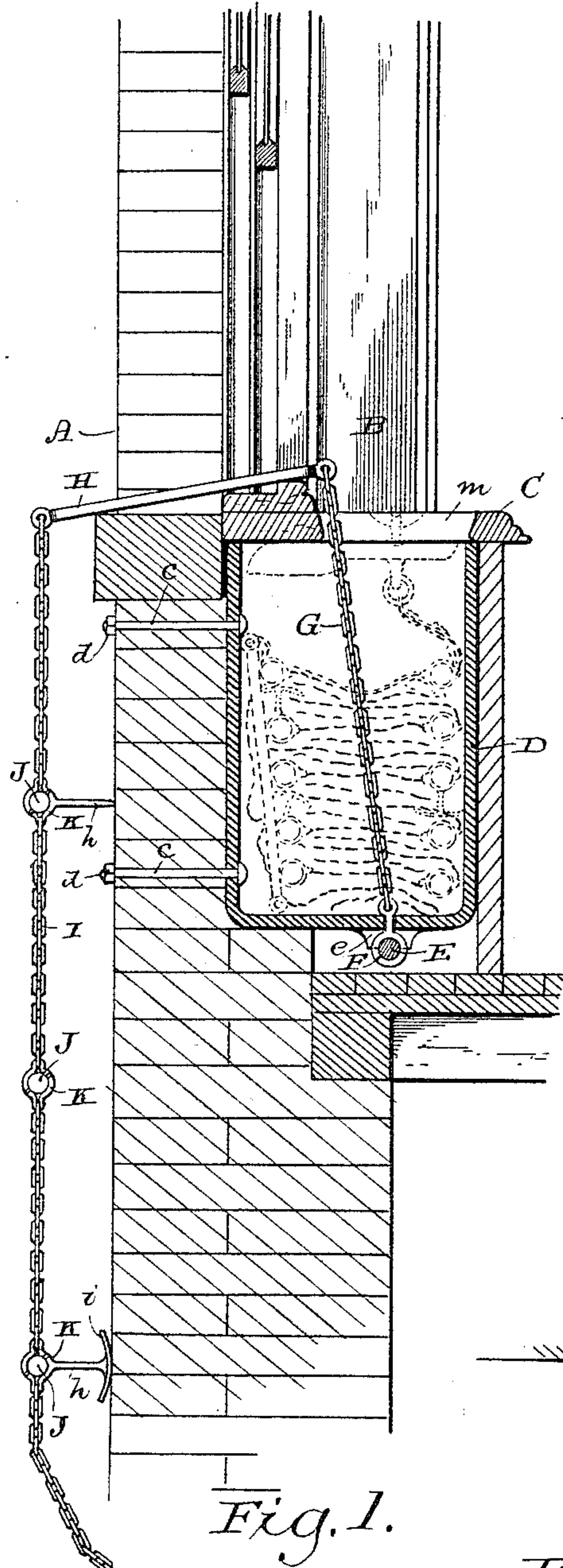


Fig. 1.

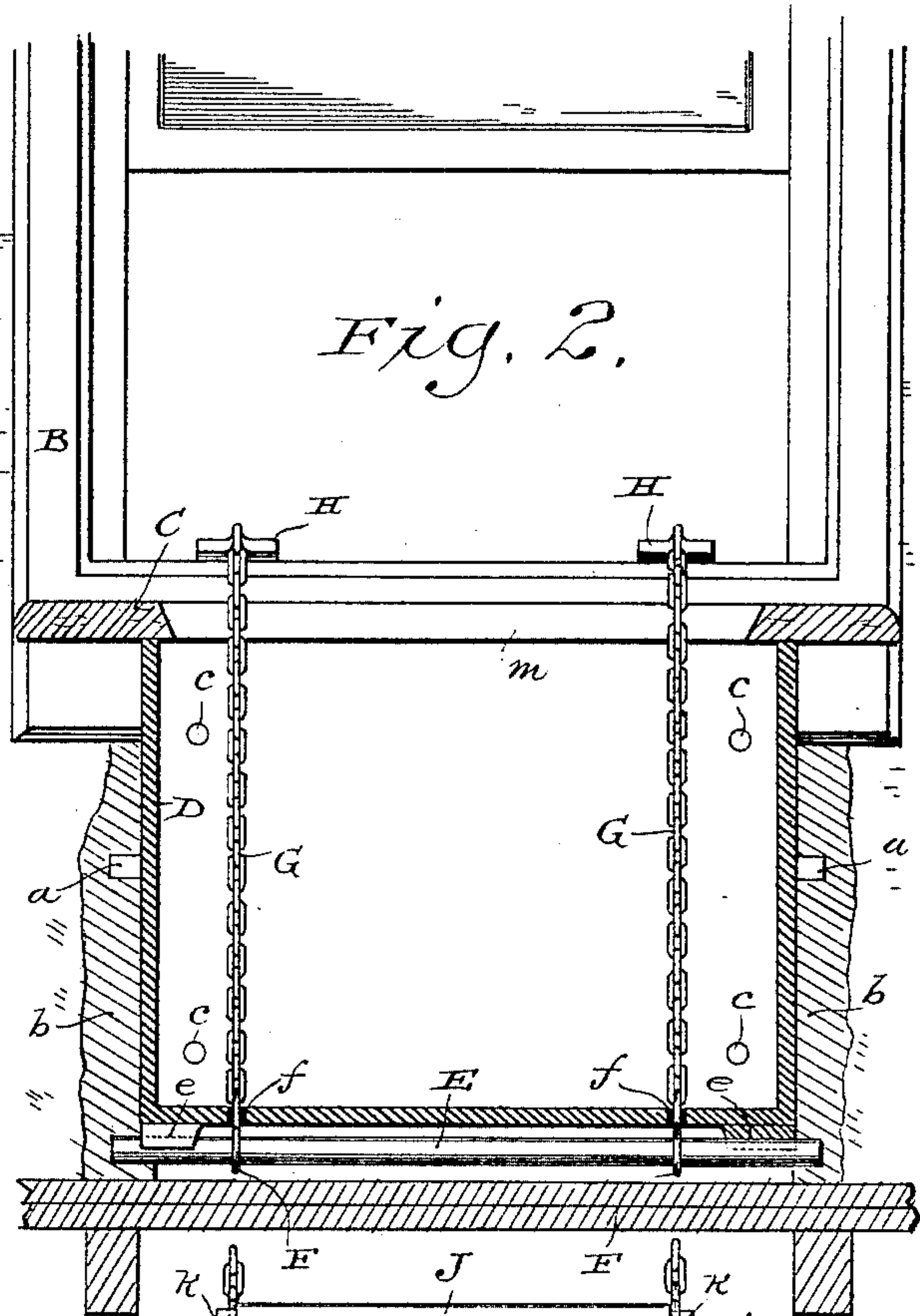


Fig. 2.

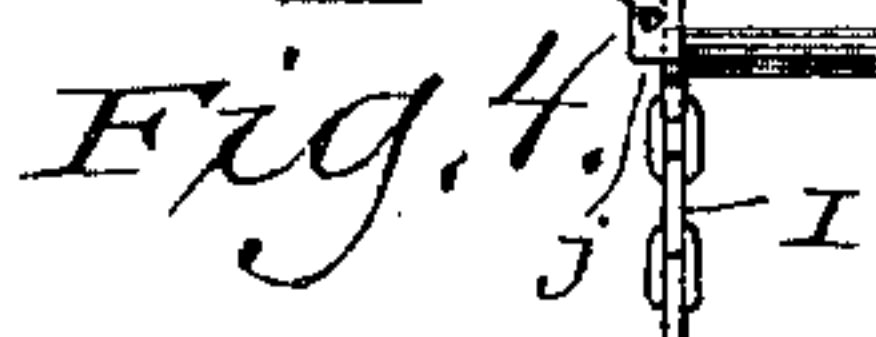


Fig. 4.

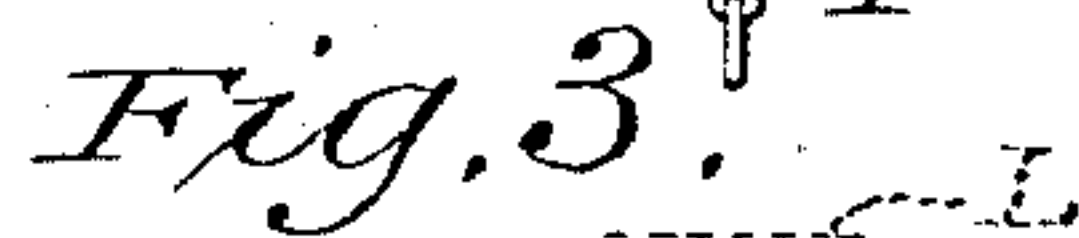


Fig. 3.

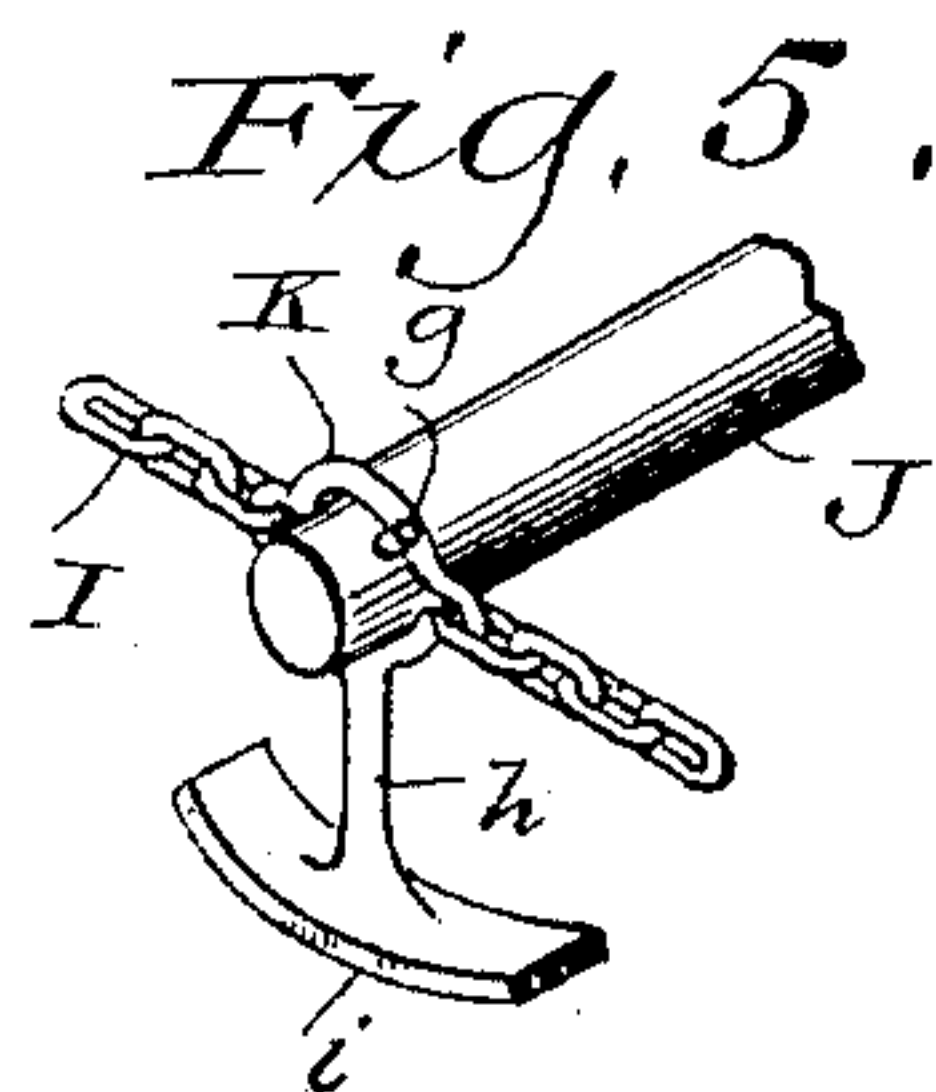


Fig. 5.

Witnesses
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UNITED STATES PATENT OFFICE.

GUSTA AARONS, OF MILWAUKEE, WISCONSIN.

WINDOW FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 433,061, dated July 29, 1890.

Application filed March 4, 1890. Serial No. 342,638. (No model.)

To all whom it may concern:

Be it known that I, GUSTA AARONS, of Milwaukee, in the county of Milwaukee, and in the State of Wisconsin, have invented certain new and useful Improvements in Window Fire-Escapes; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention relates to window fire-escapes; and it consists in certain peculiarities of construction, all as will be fully set forth hereinafter and subsequently claimed.

In the drawings, Figure 1 is a vertical transverse section of my improved device in position for use. Fig. 2 is an inner elevation of the window-sill and lower part of window-casing and a vertical longitudinal section of the parts beneath said sill. Fig. 3 is a plan view of said sill, partly broken away; and Figs. 4 and 5 are details of construction.

A represents the outer wall of a building, B a window-casing, and C a window-sill.

D is a box or casing, of wood or metal, open at the top and secured beneath the said sill (which forms the top thereof) in any suitable or convenient manner, as by trunnions or pintles *a a*, projecting into side timbers *b b*, and bolts *c c*, passed through one wall of said box or casing D and the adjacent outer wall of the building, and secured by nuts *d d*, as shown. The under side of said box or casing D is provided with rounded or other bearings *e e*, formed on or secured to it to receive a stay-rod E, of wood or metal, and the bottom of the box D is provided with openings *f f*, to receive the upper ends or shanks of hooks or eyebolts F F, the lower ends of which pass around said rod E, while their upper ends are secured to chains, cords, ropes, wires, or cables G G. These ropes or wires in turn are secured to rigid metallic or other arms H H, adapted to rest, as shown in Fig. 1, on the window-sill and to project beyond the outside vertical line of the building, and to the outer ends of said arms are secured the chains, cords, ropes, wires, or cables I I, which form, with the rods or rungs J J, flexible ladders. These rungs J may be of either wood or metal and secured in any suitable way to the flexible sides I I.

In Fig. 4 I illustrate a metal rod with reduced ends *j j*, the latter adapted to be passed

through opposing links of the two chains I I, and having holes *k k*, by means of which they may be fastened to said chains by pieces of wire.

In Fig. 5 I illustrate a wooden rod somewhat reduced at each end, to be passed through enlarged links K of the chain I and then secured by pins or bolts *g*, passed through said ends, it being understood that either form of fastening (or any other found suitable) is capable of use with either form of rung. Certain of these enlarged links K are provided with projecting shanks *h*, which have segmental heads *i*, their object being to keep the ladder a convenient distance away from the outer wall of the building when in use, as shown in Fig. 1.

The extreme ends of the ladder-chains (or ropes) are fastened to metallic weight-blocks L, transversely secured to the under side of a board M, forming a section of the window-sill C, and adapted to fit within the walls of a slot or opening *m* in the said sill. This section M is exteriorly finished to correspond to the rest of the sill, and is provided with a handle N, (preferably countersunk in a recess *n*,) on the side opposite to that carrying the weighted blocks. These blocks, when the ladder is within the box or casing D, project under the farther edge of the sill C beyond the slot or opening *m*, thereby guarding against accidental displacement of the sill-section M. Within or around the recess *n* may be inscribed any suitable warning, caution, or explanation—such as “Fire-escape,” “Fire-ladder beneath,” or “In case of fire lift this and throw it out of the window.”

The operation of my device will be apparent from the foregoing description of its construction in connection with the accompanying drawings.

To use the device the sill-section M is raised, as described, and thrown out of the window, and then the ladder (which should be just long enough to permit the weighted part M to rest on the ground) is in position for use. When not in use, it is all stored conveniently away in the box or casing D, as shown in dotted lines in Fig. 1.

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

In a fire-escape, the combination of the wall having a cavity formed beneath the window-sill, a receptacle for the ladder secured in the cavity by the bolts *c* and *E*, the chains
5 *G*, having rings at their lower ends surrounding said bolt *E*, the arms *H*, connected to the upper ends of said chains, the flexible sides *I* of the latter, the guards *h*, having segmental ends *i* and secured at intervals to the chains
10 *I*, and the weight *M*, secured to the lower ends of the ladder and serving as a panel for

the sill, and the arm *L* of said weight, all substantially as and for the purpose described.

In testimony that I claim the foregoing I have hereunto set my hand, at Milwaukee, in 15 the county of Milwaukee and State of Wisconsin, in the presence of two witnesses.

GUSTA AARONS.

Witnesses:

H. G. UNDERWOOD,

WM. KLUG.