

(No Model.)

3 Sheets—Sheet 1.

O. R. BOWIE.

FIRE ESCAPE.

No. 281,661.

Patented July 24, 1883.

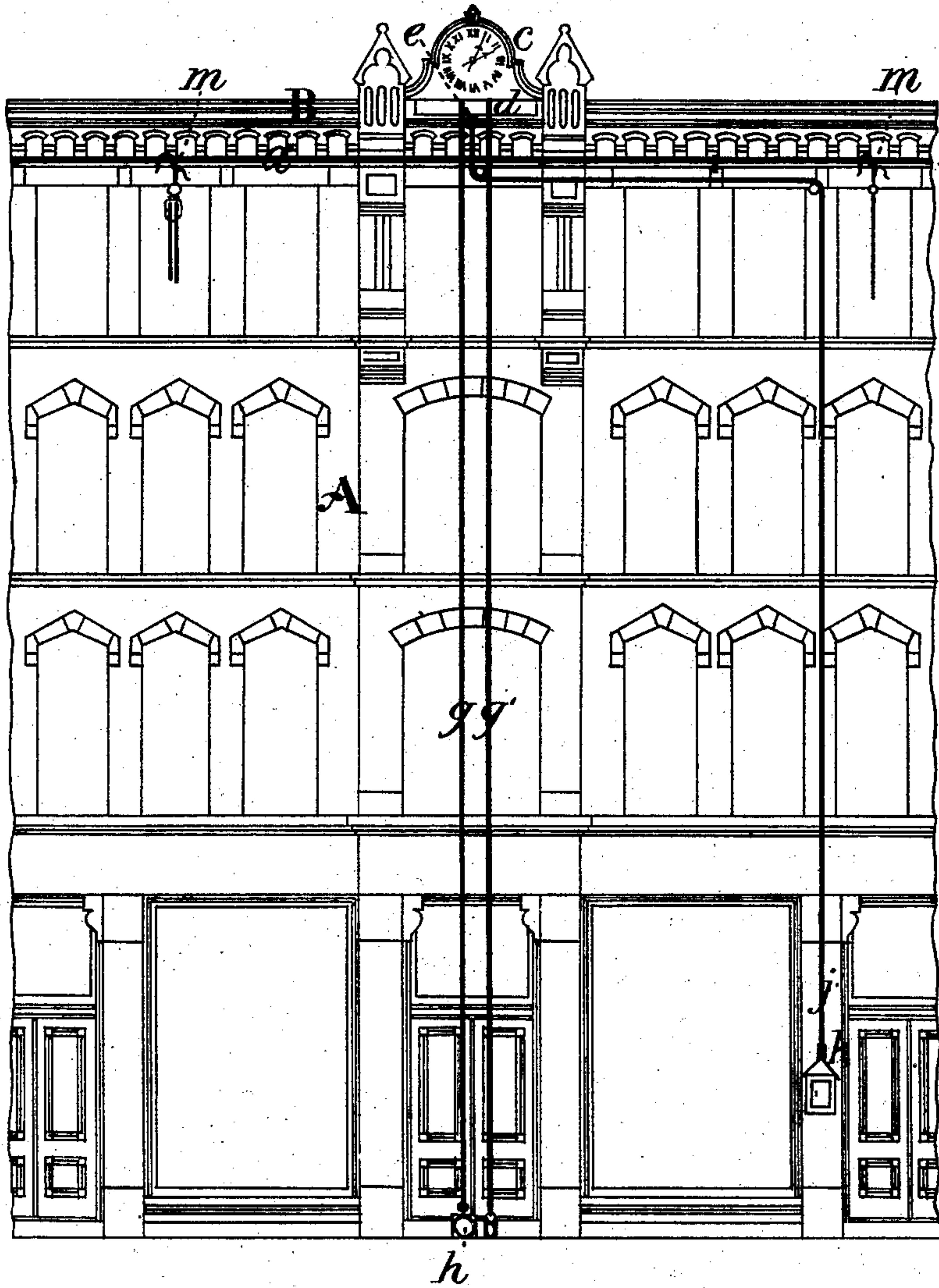


FIG. 1.

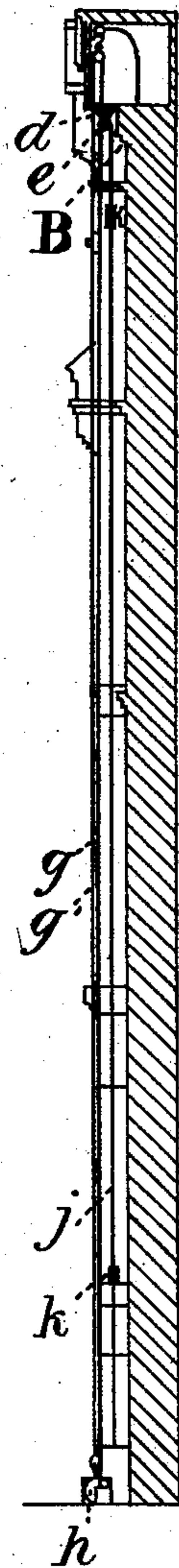


FIG. 2.

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(No Model.)

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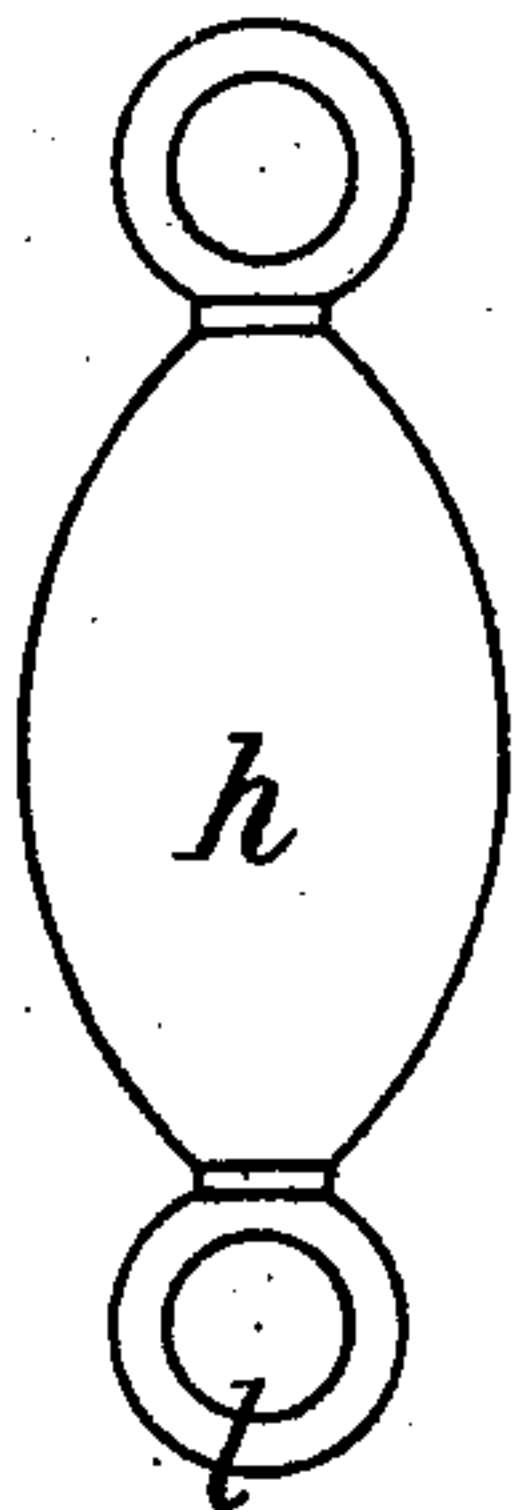


FIG. 6.

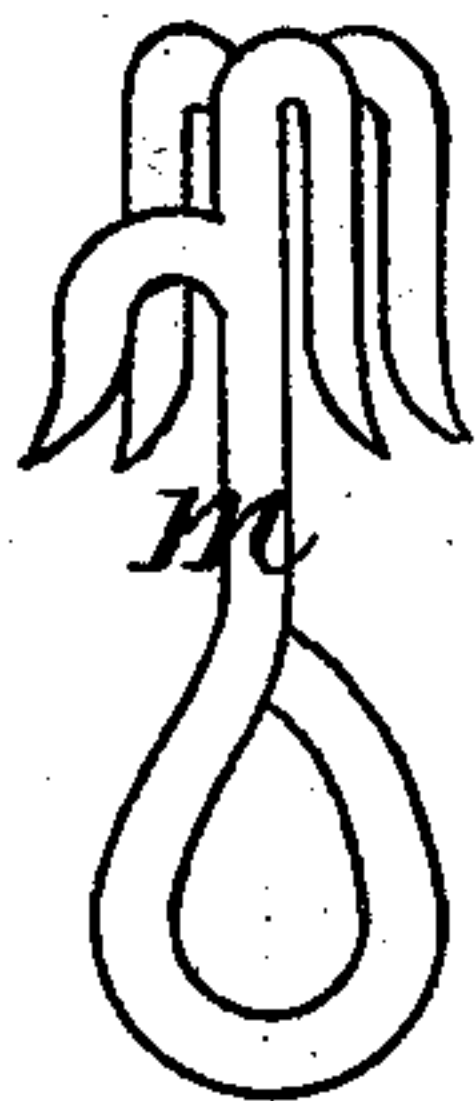


FIG. 3.

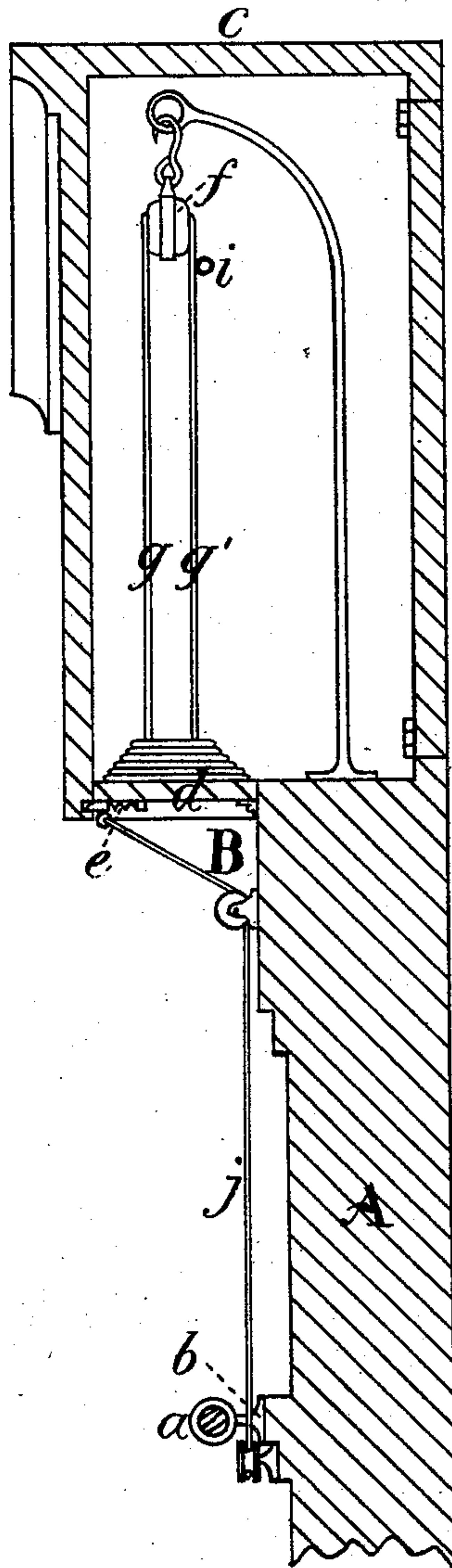


FIG. 4.

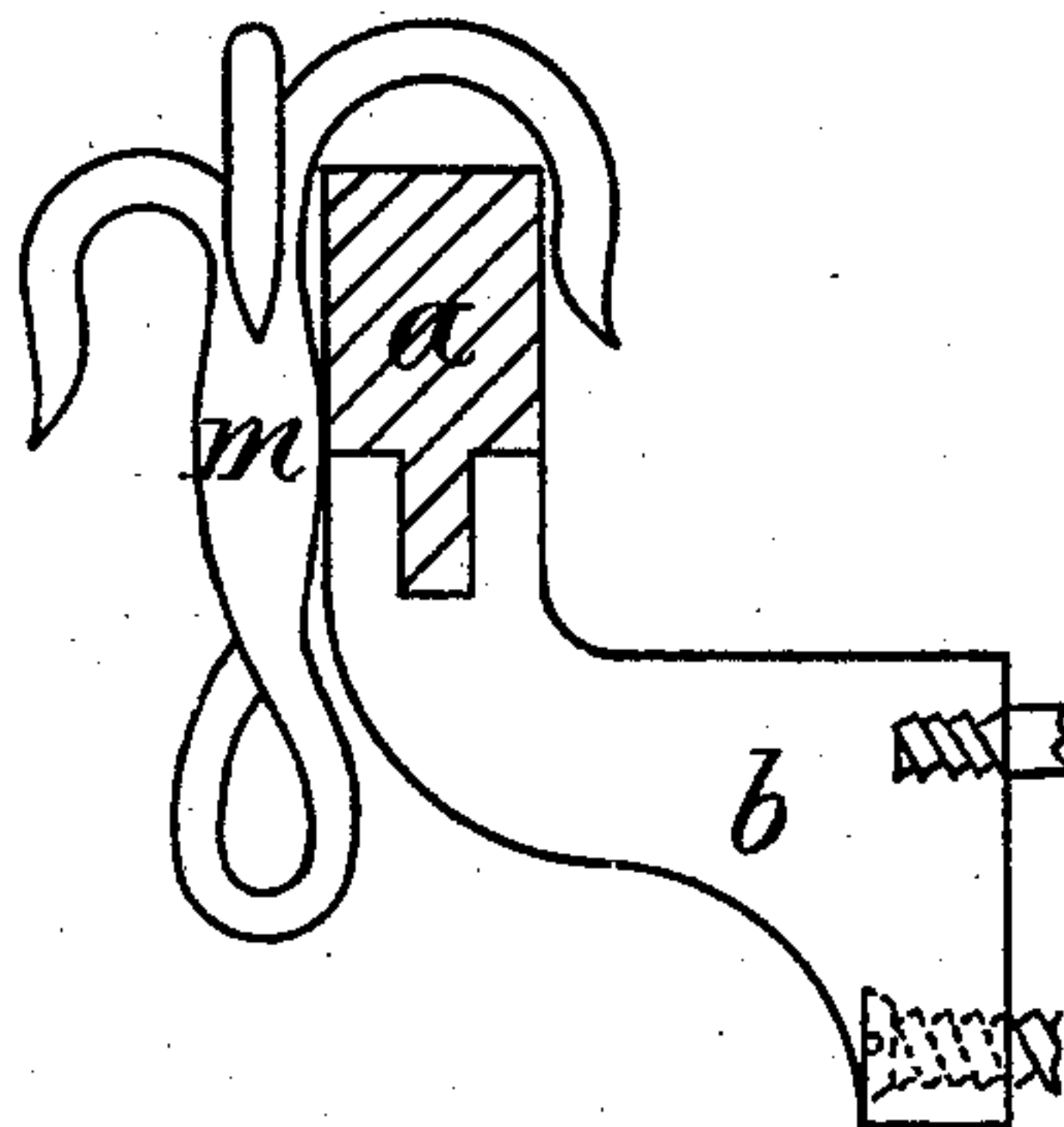


FIG. 7.

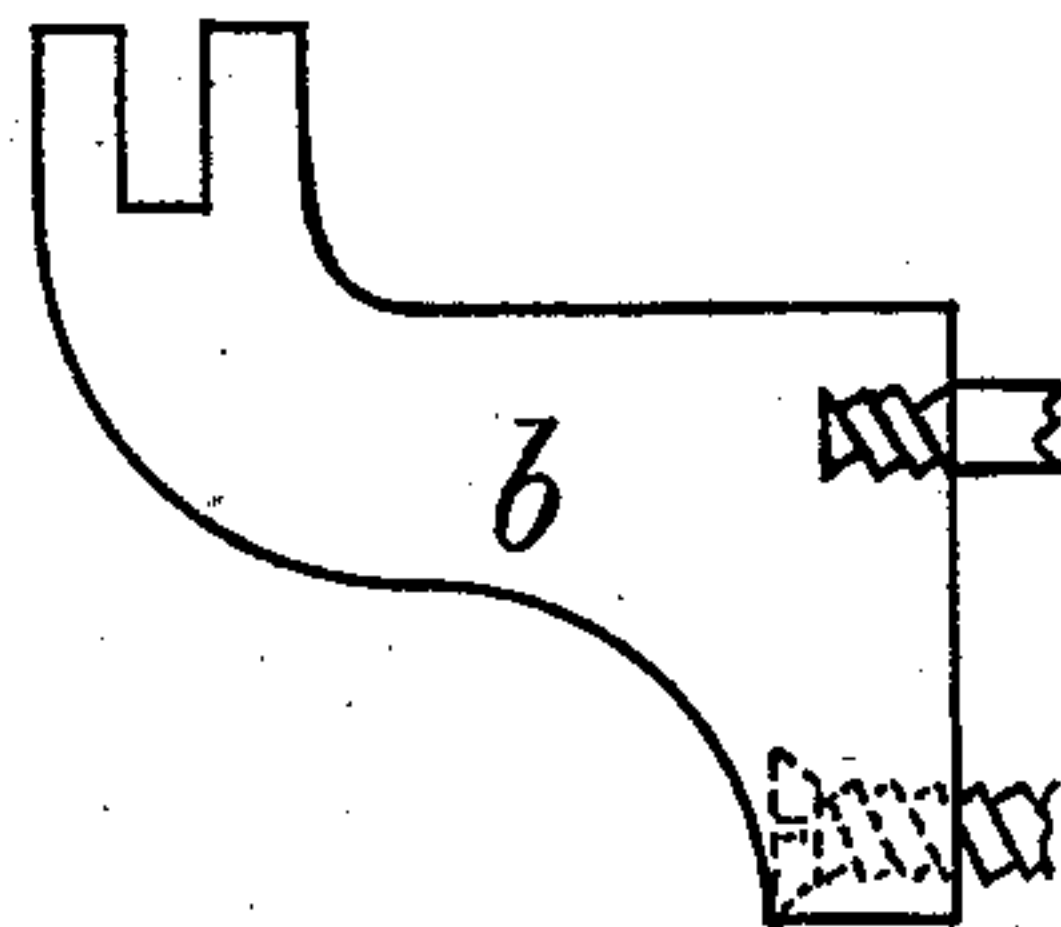


FIG. 5.

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(No Model.)

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3 Sheets—Sheet 3.

FIRE ESCAPE.

No. 281,661.

Patented July 24, 1883.

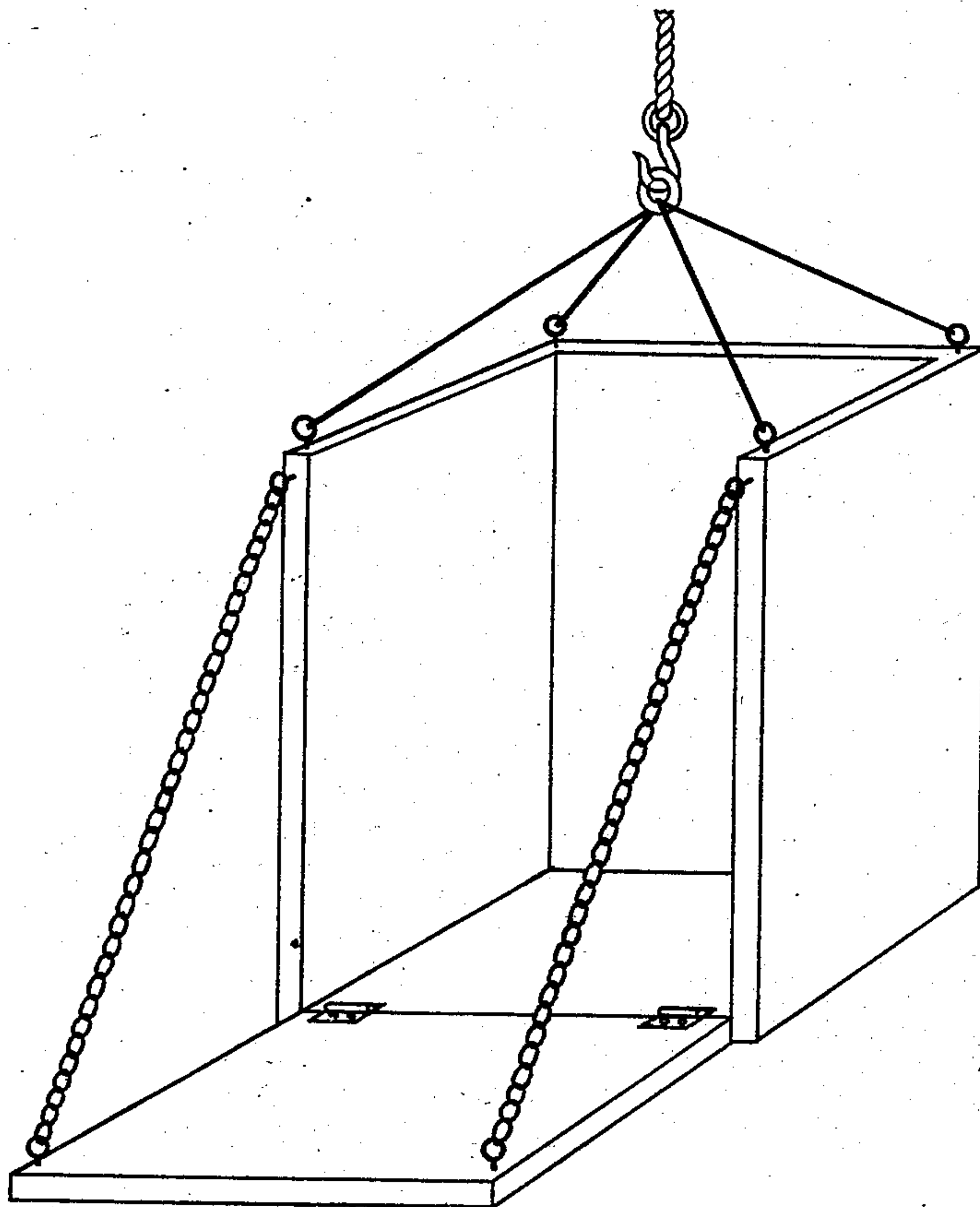


FIG. 8.

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UNITED STATES PATENT OFFICE.

ORIN R. BOWIE, OF PORTLAND, ASSIGNOR OF ONE-HALF TO ELIAS HERSEY,
OF DEERING, AND WILLIAM K. RHODES, OF PORTLAND, MAINE.

FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 281,661, dated July 24, 1883.

Application filed February 10, 1883. (No model.)

To all whom it may concern:

Be it known that I, ORIN R. BOWIE, of Portland, in the county of Cumberland and State of Maine, have invented certain new and useful Improvements in Fire-Escapes; and I do hereby declare that the following is a full, clear, and exact description of the invention, which 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 letters of reference marked thereon, which form a part of this specification.

Figure 1 is a view of the front of a building with my improvement attached thereto. Fig. 2 is a vertical section of the same. Fig. 3 is a view of the hook used to grasp the rod or bar *a*. Fig. 4 is an enlarged detail in part section of the reservoir and the wall of a building and the devices in and connected with said reservoir. Fig. 5 is a view of a bracket to support the rod or bar *a* on a building. Fig. 6 is a view of the weight attached to the weighted cord and also of the rings thereon. Fig. 7 is a view of the bracket, the rod or bar *a*, and the hook which works on the same. Fig. 8 is a view of the car.

Same letters show like parts.

My invention relates to fire-escapes.

A shows the wall of a building. B are the eaves coving or coping at the top thereof.

a shows a rod run horizontally along the edges of the eaves coping, &c., projecting slightly beyond them, so as to allow of the free passage of a hook or similar device along the said rod. This rod can be fastened to the top of the building in any well-known way—as, for instance, by projecting brackets or holders *b*. These rods are to be arranged and fastened on the building wherever it may be deemed desirable above the windows, doors, and such openings of the building. It is to be placed, however, at the top, so that a line depending from it will be attached at a point higher than any of said windows or doors.

c is a box or reservoir placed at the top of a building on the edge of the eaves coping or coving, projecting slightly over it and over and above the rod or bar *a*. It is held in position in any proper manner and by any convenient supports. It has a bottom, *d*, hinged so as to open by dropping downwardly or sliding horizontally. This bottom is held in place

when closed by any spring or catch, as *e*; but not so but that it can be easily opened and by slight force. Within the box or reservoir *c* is a pulley-block or pivot, *f*. Over this runs a cord, *g*. This cord has the weight *h* and a knot or stop, *i*. This weighted cord is kept coiled up in the box or reservoir *c* until wanted for use. It lies on the bottom piece, *d*. It is intended to drop, running over the pulley *f*, if necessary, to the ground. A stop or knot, *i'*, will prevent the other part of the cord from running through the pulley or pivot when the weighted end has reached the ground or so as to be within reach from the ground. The bottom *d* is hinged, as shown, to the lower part of the box or reservoir *c*. It is opened by a line, cord, wire, or chain, *j*, which is connected with a handle or rod, *k*, which can be worked by a person from the ground. When this rod is pulled, the bottom is dropped or moved away, and the weighted cord drops to the ground down by the wall of the building. As many of these boxes *c* as desired can be put on the top of a building.

To the weight *h* on the cord *g* is attached an eye or ring, *l*. When the weight has been released and has dropped as set forth, a hook, *m*, is entered into said eye; the weight is then drawn up by the end *g'* of the cord *g* until the hook passes over and hooks onto the horizontal rod or bar *a*. The weighted cord *g* is so suspended from the pulley, &c., *f*, as to touch the rod *a* on the outside as it moves up or down. Thus the hook *m*, when raised by the side of the horizontal rod or bar, will easily slip over it, and thus become connected thereto. To this hook *m* can be attached or connected fixed and movable blocks and pulleys. To such blocks can be connected a car or platform, which can be raised or drawn up to windows, doors, or other apertures of the building-wall, and used as a means of taking inmates from the upper stories and lowering them to the ground.

In Fig. 8 is seen a view of the car or platform for receiving persons from windows and doors of a burning building. Further, it will be perceived that the hook *m* can, by a side-wise motion of the rope or ropes attached to it, be slipped or slid along the horizontal rod or bar *a*. Thus the car or platform or rope attached to said hook can be brought into a

position in front of a window, &c., and then operated as herein set forth. The hooks *m* can have simply ropes connected with them, if desired, reaching to the ground. These might
 5 serve for men. In case of rescuing women and children from a burning building, a car or some equivalent device would be necessary. Of course any number of hooks *m* can be provided, as well as rods or bars *a*, to suit the
 10 circumstances of a building.

The box or reservoir *c* is at all times in readiness to be worked with its weighted coil within it. The handle by which it is opened near the ground can be covered with a box, if
 15 desired, like or similar to a fire-alarm. The reservoirs or boxes *c* are placed at such points along the building, cornice, &c., as may be deemed necessary. After once being used the fireman or some other person is to again coil
 20 up the weighted rope and close the bottom of the box or reservoir. My system contemplates that the firemen work the device and come to a fire ready furnished with the hooks, ropes, pulleys, cars, &c., or the proprietor of the
 25 building have them. Thus it will be seen that persons confined in a burning building and cut off from escape therefrom by fire in stories of the building lower than those in which they are can be taken out through windows, &c.

30 The ropes, cords, &c., can of course be made of materials not easily or at all destructible by fire.

One or more prongs can be made on the hook or grapple *m*.

35 The rear of the reservoir *c* is provided with

a door, which is opened when the weighted cord is to be coiled up and the movable bottom closed in order to be ready for use.

The eye on the lower end of the weight *h* can be changed into or provided with a hook
 40 to clasp the rung of a ladder to draw the same up against a building.

The movable pulleys and blocks may also be furnished and used in the same way.

What I claim as my invention, and desire to
 45 secure by Letters Patent of the United States, is—

1. The combination of the box or reservoir *c*, placed as described, with its bottom *d* operating as set forth, with the block or pulley
 50 in said box, and the weighted cord or chain *g* *g'*, and a hook, *m*, with its cord, the whole for the purpose of attaching said hook to the horizontal rod or bar *a*, as herein described.

2. In combination with said weighted cord
 55 *g* *g'*, the eye or ring *l*, a hook, *m*, with its cord, and the horizontal rod or bar *a*, placed on the cornice, &c., of a building, as described, all as herein specified.

3. In combination with the weighted cord *g*
 60 *g'* and its eye or ring *l*, a hook, *m*, and the blocks and pulleys set forth, and a car or platform, to be operated as herein described.

In testimony that I claim the foregoing as
 65 my own I affix my signature in presence of two witnesses.

ORIN R. BOWIE.

Witnesses:

WILLIAM HENRY CLIFFORD,
 WILLIAM K. RHODES.