

No. 674,584.

Patented May 21, 1901.

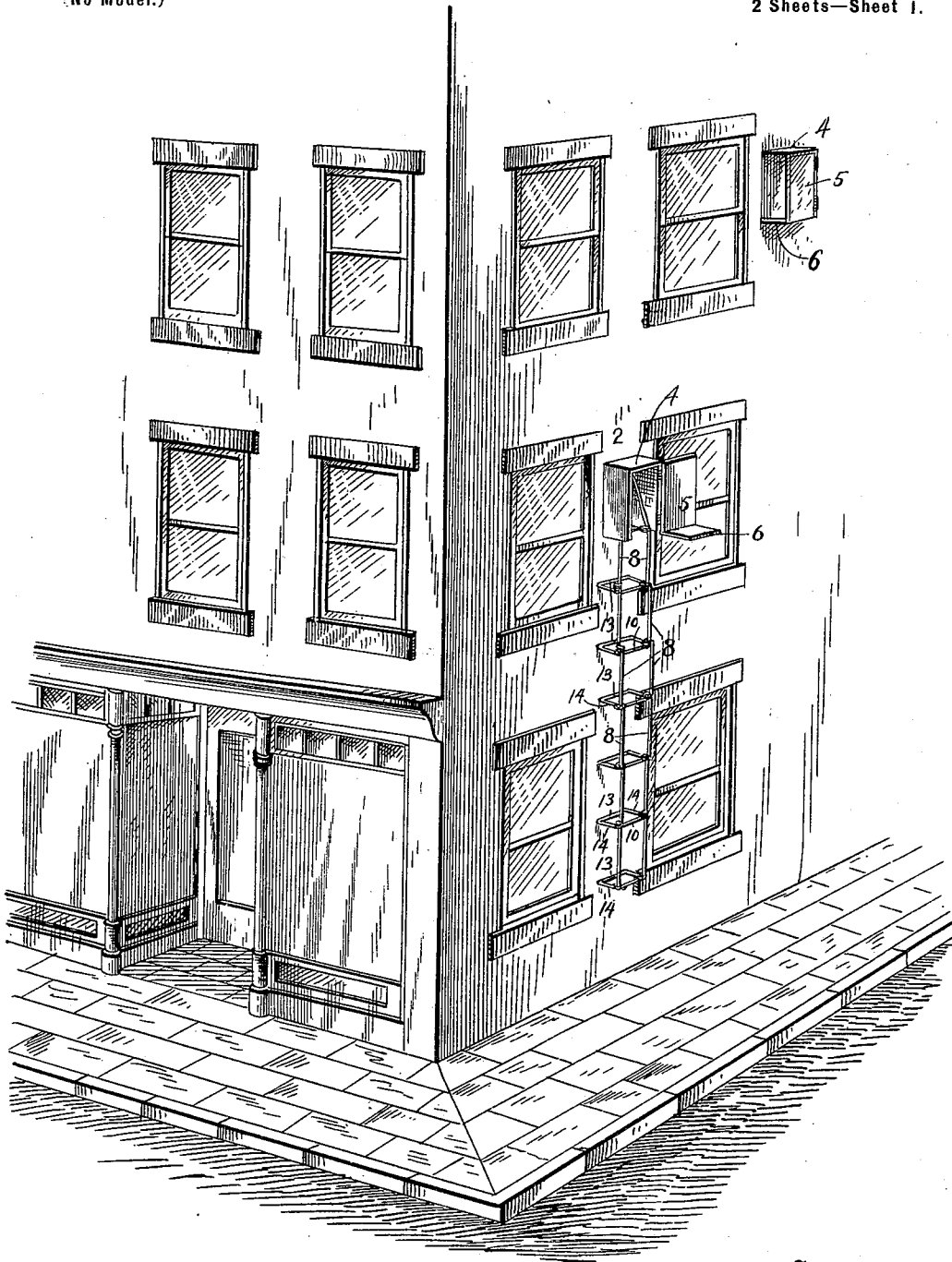
C. R. PORTER.

FIRE ESCAPE.

(Application filed Sept. 6, 1900.)

(No Model.)

2 Sheets—Sheet 1.



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Fig. 1.

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2 Sheets—Sheet 2.

Fig. 2.

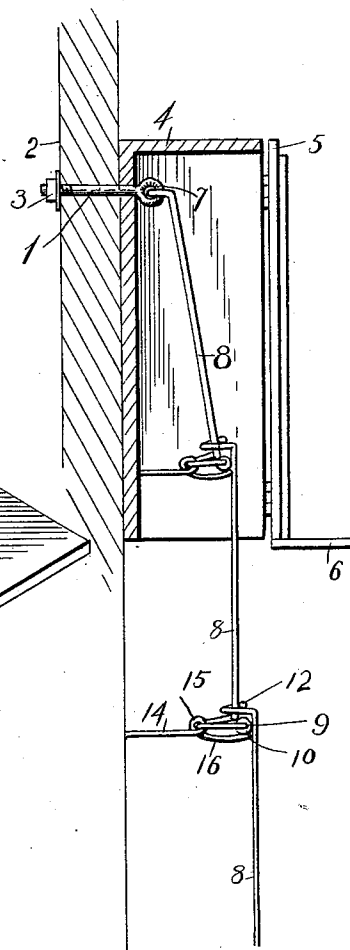
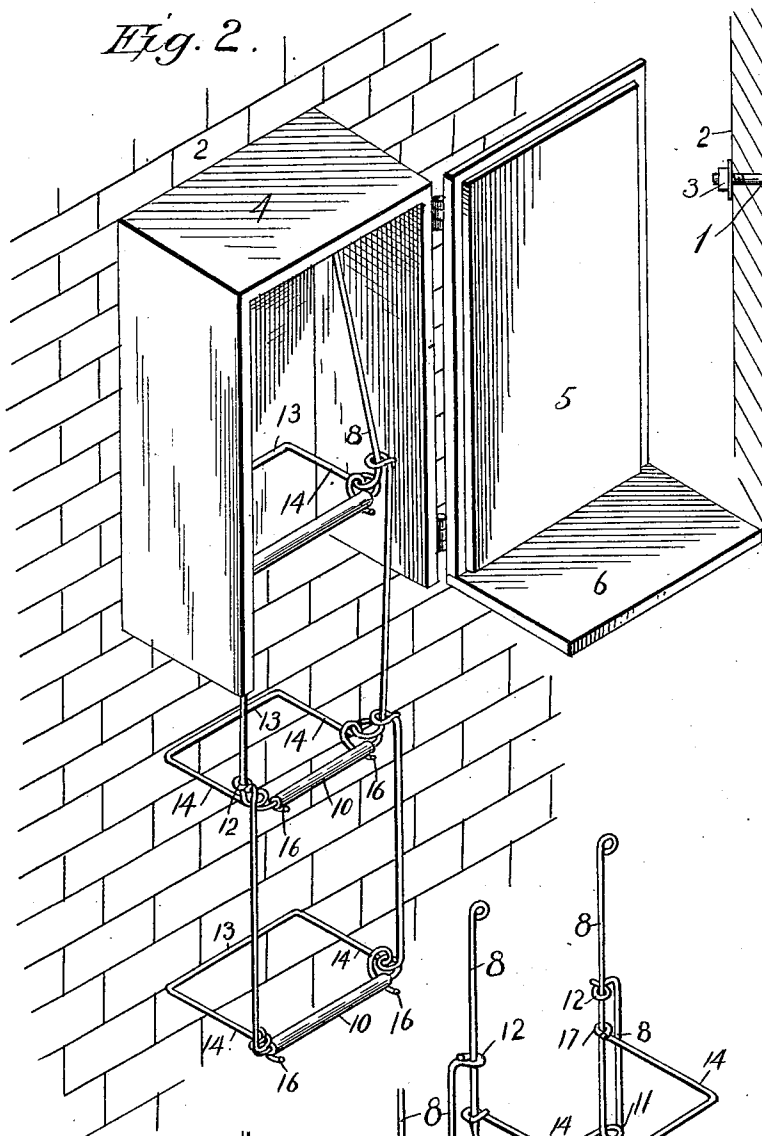


Fig. 3.

Fig. 4.

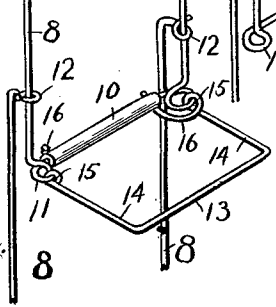


Fig. 5.

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UNITED STATES PATENT OFFICE.

CHARLES R. PORTER, OF MARION, INDIANA.

FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 674,584, dated May 21, 1901.

Application filed September 6, 1900. Serial No. 29,214. (No model.)

To all whom it may concern:

Be it known that I, CHARLES R. PORTER, a citizen of the United States, residing at Marion, in the county of Grant and State of Indiana, have invented certain new and useful Improvements in Fire-Escapes; and I do hereby 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.

My invention relates to fire-escapes; and it consists of certain novel features of combination and construction of parts, as will be hereinafter described and claimed, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view showing my invention applied to use. Fig. 2 is a perspective view showing my invention complete, upon a larger scale than that presented in Fig. 1. Fig. 3 is a side view showing a portion of the wall of a building in section and the means employed to anchor my fire-escape in position. Fig. 4 is a perspective detail of one of the joints, showing the means employed to connect the several sections. Fig. 5 illustrates a slightly-modified construction from that presented in Fig. 4 and other views.

In order to conveniently refer to the several parts of my invention and their coöperating accessories, numerals will be employed, of which 1 indicates an anchoring-bolt, which may be entered through the wall 2 of the building and properly secured, as by the nut 3, said bolt first passing through the housing or box-like compartment 4, having an open outer side provided with a door 5. The lower end of the box is also left open and the end section 6 thereof secured to the lower end of the door 5, so that when said door is moved into a closed position the end section 6 will be moved in place, thereby inclosing the parts of my fire-escape.

To the outer end or eye-section 7 of the bolt I pivotally secure the downwardly-extending branches 8, which preferably consist of a single rod bent near the middle portion thereof, so as to provide the transverse section 9, designed to form one of the rungs of the ladder, as clearly shown in Figs. 4 and 5, said rung being provided with a suitable covering of wood or other material, as indicated by the

numeral 10, thereby providing a more convenient means of grasping the same or a more secure foothold.

In bending the rod so as to provide the branches or sections 8 and 9 I prefer to bend the rod upon itself, so as to provide at each end of the section 9 or at the point of union of said section with the sections 8 the horizontally-disposed eye or rings 11, adapted to provide a seat for the ring 12, provided upon a next lower section 8. By thus forming each of the sections 8 and 9 with the rings 11 it is obvious that any number of them may be assembled together, and it is furthermore obvious that, since the ring-sections 12 loosely encircle the sections 8, all the parts may be readily telescoped or folded upon each other, thereby enabling all of the parts to be moved upward substantially parallel with the first sections 8 and disposed within the box 4, when the lid 5 may be closed and locked or otherwise secured.

In order to insure that the sections 8 and 9 will be held a proper distance from the wall of the building, and thereby dispose the sections 9 so that they will enable the person using them to readily grasp said parts, I provide the stay or anchoring sections, consisting of a single piece of heavy wire or a rod properly bent to form the members 13 and 14, the ends of the latter being bent to provide the eyes or ring-sections 15 and the branches 16, which latter are adapted to extend under the sections 9, and thereby hold said sections in a horizontal position, though permitting the same to be folded upward when it is desired to dispose the parts within the housing 4.

In Fig. 5 the branches 16 are omitted, while the rings 17 are designed to encircle the branches or members 8, and thus rest upon the ring-sections or eyes 11, intermediate said eyes, and the ring-sections 12, carried by the next lower sections 8.

By the arrangement shown in Fig. 5 the weight of the lower branches or members 8 will so act upon the ring-sections 17 that the parts 13 and 14 will be held in a horizontal plane, and thereby extend against the wall of the building and hold the rungs of the ladder outward therefrom ready to form a seat for the foot of the person using it.

The construction illustrated in Fig. 4 and

other views is my preferred construction, inasmuch as the sections 13 and 14 are held in a horizontal plane, while at the same time said parts may be readily folded upward
 5 against or parallel with the sections 8, it being understood that the ring or eye sections 15 are designed to engage the ring-sections 11, formed upon the lower ends of the sections 8.

10 It will be understood that my improved fire-escape may be used in any desired way—as, for instance, a continuous line of connection-sections 8 may extend from the top of the building to the sidewalk, or, if preferred,
 15 each floor of the building may be provided with one of my fire-escapes of proper length to reach either to the ground or to the next window below. If my fire-escape is only of sufficient length to reach to the next floor below,
 20 it will be an easy matter for the person using it to reach the next floor and then escape by the stairway in case the fire is in the upper portion of the building. If, however, the entire building is aflame, the person using
 25 it may pass from floor to floor by successively using the different sections of the fire-escape provided. When my improved fire-escape is not in use, it is an easy matter to draw up the sections 8 by grasping the rungs 9 and
 30 lifting them upward into the box 4, and when all of the sections have thus been folded the door may be closed, when all of said parts will rest upon the end sections 6 and be disposed in such a position that the mere act of
 35 opening the door will withdraw the section 6 and cause all of the parts to drop downward into their operative positions, ready for use.

The parts of my improved fire-escape may be very cheaply constructed and expeditiously assembled, and believing that the advantages and construction thereof have been made fully apparent from the foregoing specification further reference to the details thereof is deemed unnecessary. 40

Having thus fully described my invention, 45 what I claim as new, and desire to secure by Letters Patent, is—

In a fire-escape, a plurality of members 8, each consisting of a single piece of wire or rod having a horizontally-disposed eye 12 at 50 each end and bent near its middle portion to form the horizontally-disposed rings 11 and the cross bars or sections 9, each member 8 being designed to be encircled by the eyes upon the ends of the next lower member 8, in 55 combination with a suitable covering 10 for said section 9, and a staying device formed of a single piece of rod bent to form the members 13 and 14, the eyes 15 and the branches 16, the eyes 15 each being designed to engage 60 a ring 11 while the branches 16 are curved slightly inward and upward and are adapted to extend under the section 9 and thereby hold the stay substantially at right angles to the vertical plane of the ladder, though per- 65 mitting said stays to be folded when not in use, substantially parallel with the members 8, as specified and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

CHAS. R. PORTER.

Witnesses:

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 C. A. DOERING.