

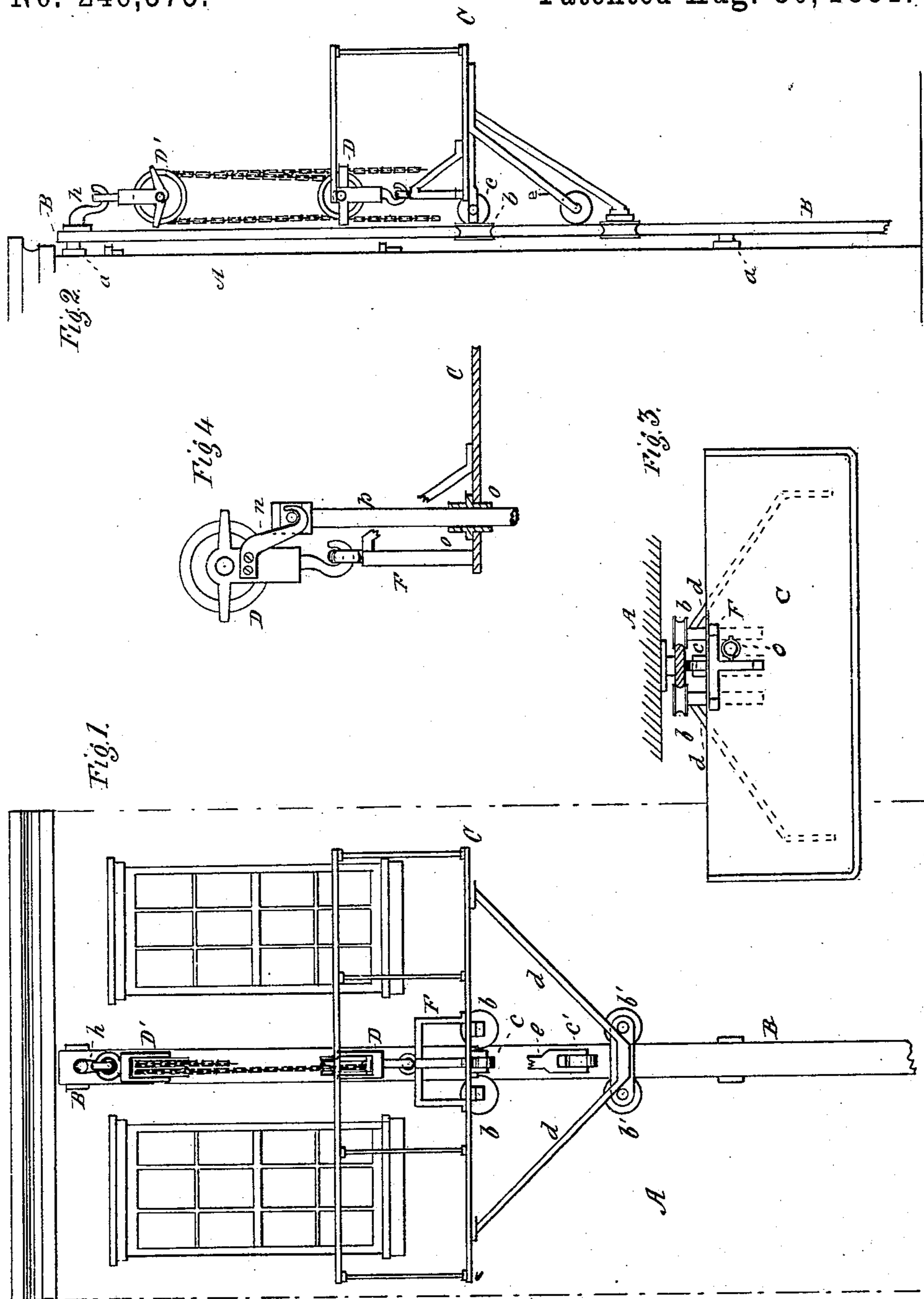
(No Model.)

J. R. DAY.

FIRE ESCAPE.

No. 246,375.

Patented Aug. 30, 1881.



WITNESSES:

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## FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 246,375, dated August 30, 1881.

Application filed April 14, 1881. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN R. DAY, a citizen of the United States, residing in the city of New York, in the county and State of New York, have invented a new and useful Improvement in Fire-Escapes; and I hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to improvements in fire-escapes, or means employed on the exterior of buildings for the purpose of rescuing the inmates thereof in case of fire; and its object is to construct and operate a fire-escape in such a manner that persons in the building may thereby be rescued without danger of personal injury in using the escape, and so that the apparatus shall not be liable to become disarranged or inoperative, but will be ready for effective service at all times, and can be easily raised and lowered by the person or persons standing thereon; and, further, to provide the fire-escape with appliances for carrying up a fire-hose to the top of the building, so as to dispense with the use of the ladders ordinarily employed for that purpose.

The invention consists in the combination, in a fire-escape, of a platform or balcony provided with friction-rollers, by means of which it is fitted to run upon a vertical rod or shaft secured to the building, and a pair of differential pulley-blocks, by which means the said platform is raised or lowered by a person standing thereon, and is held at any point without running, as hereinafter particularly set forth; also, in the combination, with the said platform constructed to run upon said vertical rod and the said pulley-blocks, of devices for carrying up a fire-hose to the top of the building, all of which is hereinafter particularly set forth and described.

I am aware that a fire-escape consisting of a platform fitted to run up and down a vertical rod or shaft has heretofore been used; but that I do not claim, broadly, as will hereinafter appear.

In the accompanying drawings, Figure 1 represents a front elevation of my improved fire-escape applied to a building; Fig. 2, a side

elevation of the same; Fig. 3, a plan view of the platform, and Fig. 4 a detail view herein-after referred to and explained.

Similar letters of reference indicate the same parts in all the several figures.

A may represent a portion of a building to which my improved fire-escape is applied.

B is a vertical rod or shaft, which is firmly secured to the exterior of the building by means of flanges *a* or other suitable means. This rod may be made of cast-iron and in sections of convenient length.

C is a platform or balcony, which forms the main body of the apparatus, and upon which the persons rescued from the building are lowered to the ground, and upon which the person who operates the escape stands. It is rectangular in form, and may be of any suitable dimensions. The rear edge is parallel with the wall of the building, and when in operation is only a few inches therefrom, so that a person stepping from a window onto the platform is in no danger of falling.

*b b* are a pair of friction pulleys or rollers, which run upon opposite sides of the rod B, to keep the platform from swerving endwise, and which are journaled upon arms secured to the under side of the platform. *c* is another friction-roller, which runs in contact with the front surface of the rod B. *b' b'* are a second pair of friction-rollers, which run upon opposite sides of the rod B at some distance below the platform, and which are journaled at the lower ends of arms *d d*, secured to the under side of the platform, near each end of the same, respectively, and toward the front thereof, for the purpose of keeping the platform in a horizontal position; and *e'*, a second friction-roller running in contact with the front surface of the said rod, which is journaled to an arm, *e*, the upper end of which is secured to the under side of the platform.

D D' are a pair of pulley-blocks suspended from the upper end of the rod or shaft B, for raising or lowering the escape. The lower block, D, is attached to a sort of tripod, F, secured to the upper surface of the platform, and the upper block, D', is suspended from a hook, *h*, secured either to the rod B, as shown in the drawings, or to the wall of the building.

The said tripod is placed near the rear edge of the platform, and therefore there is no danger of the latter being swayed so as to move away from the rod B.

5 It is not essential that the pulley-blocks should be of any particular kind; but in order that there may be no danger of the platform running by reason of its weight, I employ such as either have suitable brake devices or such  
10 as are so constructed as to hold the load at any point, and I have found that what is known as the "Weston differential pulley-blocks" are well adapted for this purpose, inasmuch as they hold the load at any point and do not run down.  
15 These said pulley-blocks have been long in use and are well known.

For the purpose of adapting this fire-escape to be used in carrying up a fire-hose to the top of the building, I provide a pair of hooks, *n n*,  
20 upon the lower block, D, and a sleeve, *o*, located in a suitable opening in the floor of the platform C. Through this sleeve the end of the hose (upon which is the ordinary coupling) is passed, and the arms or horns of the coupling are laid upon the hooks *n n*, and may thus  
25 be carried up to any particular story of the building or to the top of the same, as may be desired. This arrangement is most clearly shown in Fig. 4. In the said drawings, *p* represents the hose, which is passed through the  
30 sleeve *o* and hung upon the hooks *n*, as above set forth. These hooks *n n* may be secured

upon the lower block by any suitable means. To avoid crowding the drawings these devices are omitted from Figs. 1 and 2.

35 From the above description it will be readily seen that my improved fire-escape is very simple in its construction, easily operated by any one standing upon the platform, and not liable to become inoperative by reason of the dis-  
40 arrangement of any of its parts; also, that there is practically no danger attending its use, as it comes directly opposite the windows, and all that is necessary is to step from the window-sill onto the platform.  
45

What I claim as my invention is—

1. The combination of the vertical rod or shaft B, secured to the building, the platform C, provided with friction-rollers *b c b' c'*, by which the said platform is fitted to run on said  
50 rod, and a pair of differential pulley-blocks, D D', which will hold the load without running, as and for the purposes set forth.

2. In combination with the platform C, provided with friction-rollers *b c b' c'*, and the ver-  
55 tical rod or shaft B, secured to the building, the pulley-blocks D D', sleeve *o*, and hooks *n* for holding the end of a fire-hose, substantially as shown and set forth.

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Witnesses:

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