

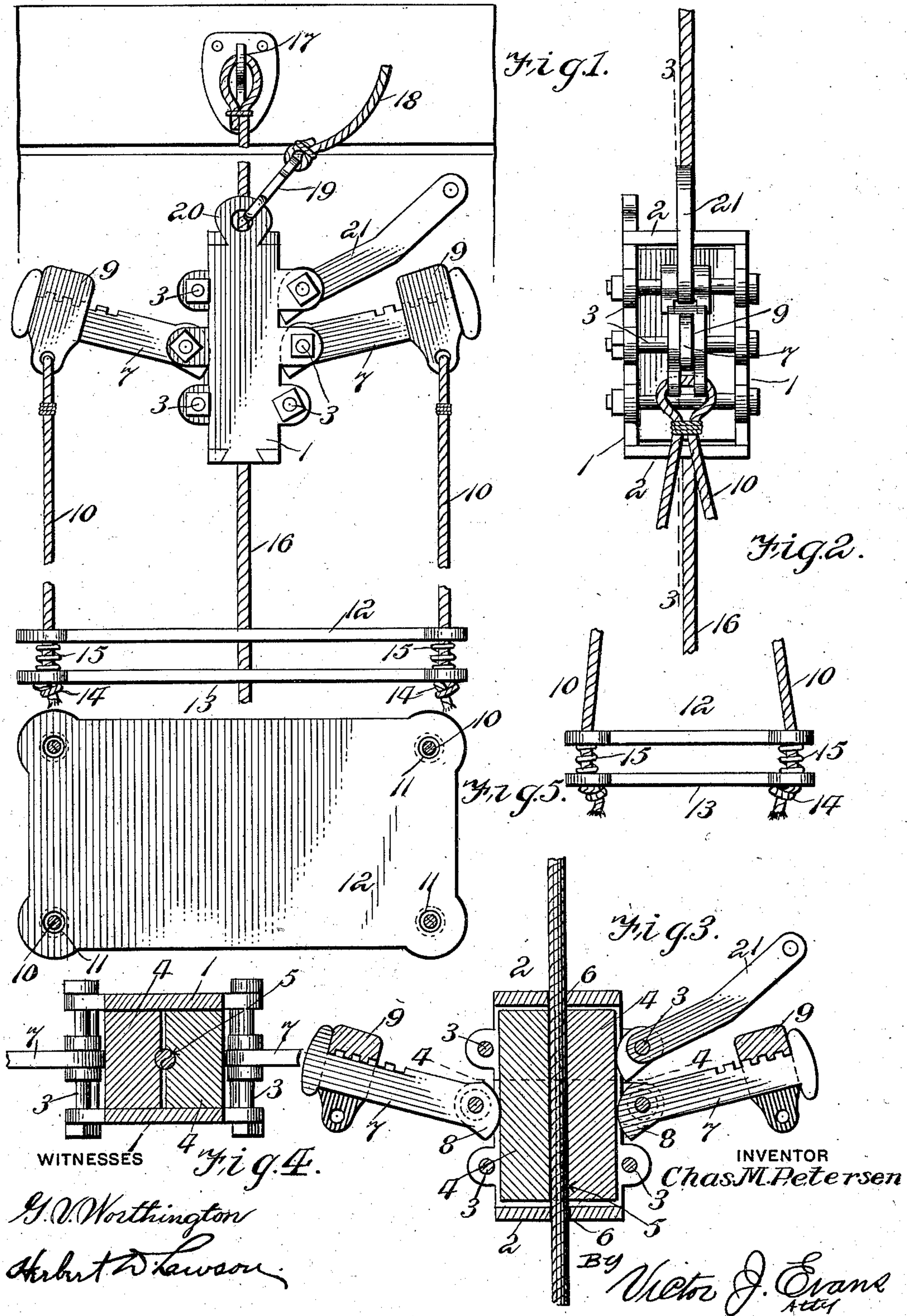
No. 748,526.

PATENTED DEC. 29, 1903.

C. M. PETERSEN.  
FIRE ESCAPE.

APPLICATION FILED JUNE 20, 1903.

NO MODEL.





# UNITED STATES PATENT OFFICE.

CHARLES M. PETERSEN, OF SHIRLEY, MASSACHUSETTS.

## FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 748,526, dated December 29, 1903.

Application filed June 20, 1903. Serial No. 162,410. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES M. PETERSEN, a citizen of the United States, residing at Shirley, in the county of Middlesex and State of Massachusetts, have invented new and useful Improvements in Fire-Escapes, of which the following is a specification.

My invention relates to new and useful improvements in fire-escapes; and its object is to provide a device of simple construction which may be readily lowered and which will carry different weights at the same speed.

Another object is to employ novel means for controlling the operation of the device.

A further object is to provide a spring-platform whereby injury by violent jarring to a person on the fire-escape is prevented.

With the above and other objects in view the invention consists in the novel construction and combination of parts hereinafter more fully described and claimed, and illustrated in the accompanying drawings, showing the preferred form of my invention, and in which—

Figure 1 is a side elevation of the fire-escape, the ropes or cables being broken away. Fig. 2 is a side elevation thereof. Fig. 3 is a section on line 3 3, Fig. 2. Fig. 4 is a section on line 4 4, Fig. 3; and Fig. 5 is a plan view of the platform.

Referring to the figures by numerals of reference, 1 1 are the face-plates of a rope-clutch, the same being connected at the ends by cross-strips 2, and all of the parts are firmly bound together by bolts 3 or in any other suitable manner. Arranged between the bolts 3 and the end strips 2 are clamping-blocks 4, having registering longitudinally-extending grooves 5 in their inner faces which are in alinement with apertures 6, formed in end strips 2. Notched arms 7 are pivoted upon the central bolts 3, and the inner ends 8 thereof are cam-shaped and bear upon the blocks 4 and serve to normally press them together. Suitable weights 9 are mounted on the notched portions of the arms 7, and these weights can be adjusted to regulate the pressure on the blocks 4 by cams 8. The weights are preferably forked, as shown in Figs. 2 and 3, and in the lower ends thereof are fastened ropes 10, which pass through apertures 11, formed in the corners of a platform 12 and

in the corners of a platform-base 13. The ends of the rope are knotted, as at 14, to prevent their withdrawal from the base 13, and springs 15 are interposed between the base and platform, as shown.

A rope or cable 16 is secured to a bracket 17, located at a convenient point, and this rope extends through apertures 6 within grooves 5 and past the platform 12 to the ground. A second or hoisting rope 18 may be secured near the bracket 17 and has a hook 19, which normally engages an eye 20, formed integral with one of the face-plates 1. Upon one of the bolts 3 is pivoted a cam-lever 21, which bears on one of the blocks 4 and is in easy reach of a person on platform 12.

To use the fire-escape, the lever 21 is pressed downward while a person is getting upon the platform 12. This lever serves to clamp the rope 16 between blocks 4, and therefore the platform will not move downward as long as this clamping operation continues. As soon as the lever 21 is released the platform and clamp will move downward on rope 16. This movement, however, will be controlled, because the weight of the person on the platform will cause the arms 7 to press blocks 4 against rope 16. As is obvious, the greater the weight on the platform the greater will be the clamping action upon the rope. Should the base 13 for any reason come into violent contact with the ground, the interposed springs 15 will act as cushions for the platform and prevent jolting.

In the foregoing description I have shown the preferred form of my invention; but I do not limit myself thereto, as I am aware that modifications may be made therein without departing from the spirit or sacrificing any of the advantages thereof, and I therefore reserve the right to make such changes as fairly fall within the scope of my invention.

Having thus described the invention, what is claimed as new is—

1. In a fire-escape, the combination with face-plates, and cross-strips connecting the same; of laterally-movable rope-clamping blocks between the plates and strips, arms pivoted between the face-plates and bearing on the blocks, adjustable weights on the arms, a base suspended from the weights, a platform, springs interposed between the plat-

form and base, and a cam-lever pivoted between the plates and normally bearing on one of the blocks.

2. In a fire-escape, the combination with  
5 face-plates; of laterally-movable rope-clamping blocks therebetween, oppositely-extending arms pivoted between the plates and having cam ends bearing upon the blocks, a cam-lever bearing upon one of the blocks, adjustable weights upon the arms, and a cushioned  
10 platform suspended from the weights.

3. In a fire-escape, the combination with face-plates; of cross-strips connecting the same having apertures therein, laterally-mov-  
15 able rope-clamping blocks between the cross-

strips and face-plates and out of alinement with the apertures, oppositely-extending arms pivoted between the plates and having cam ends bearing on the blocks, a cam-lever pivoted between the plates and bearing upon 20 one of the blocks, adjustable weights upon the arms, and a cushioned platform suspended from the weights.

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

CHARLES M. PETERSEN.

Witnesses:

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