T. O. LOFGREN.

FIRE ESCAPE APPARATUS.

APPLICATION FILED OCT. 6, 1913.

1,104,685.

Patented July 21, 1914.

2 SHEETS—SHEET 1.

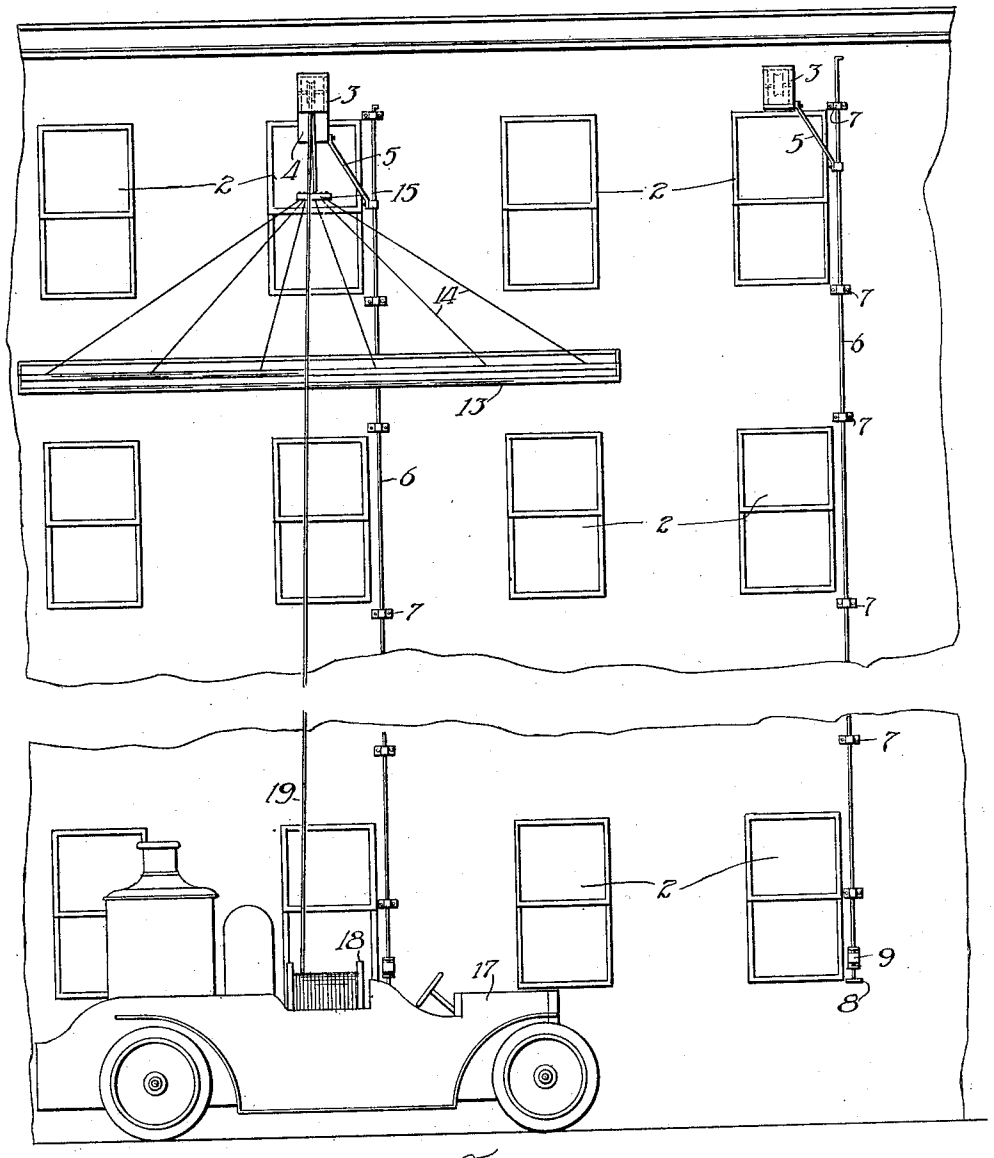


Fig. 1

Witnesses:
Robert N. Weir
Arthur W. Carlson

Inventor.
T. O. Lofgren
by H. Dunderdale
Atty

T. O. LOFGREN.

FIRE ESCAPE APPARATUS.

APPLICATION FILED OCT. 6, 1913.

1,104,685.

Patented July 21, 1914.

2 SHEETS—SHEET 2.

Fig. 2.

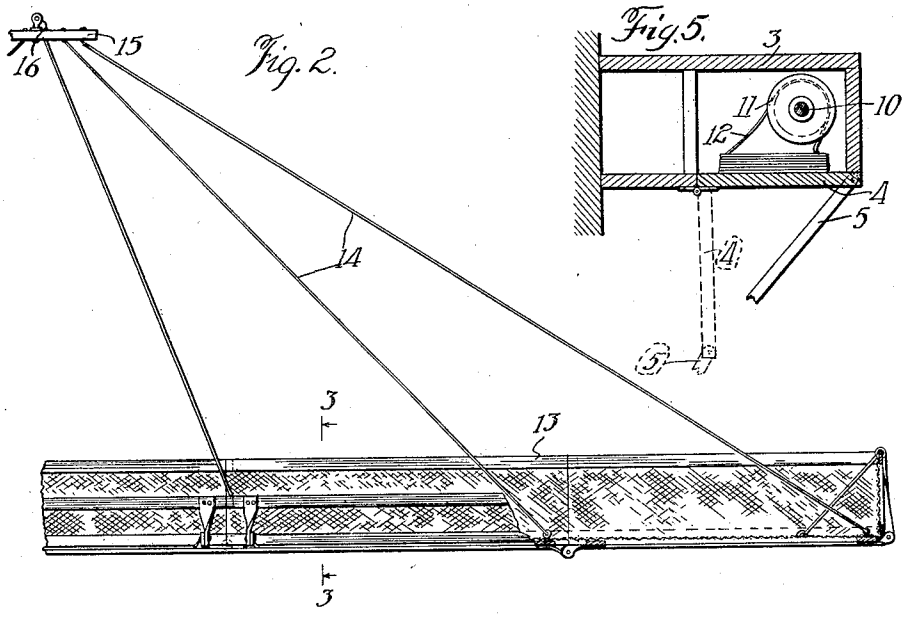


Fig. 5.

Fig. 3

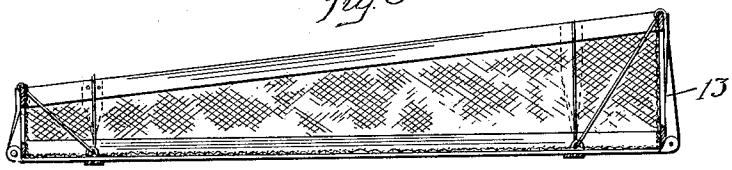
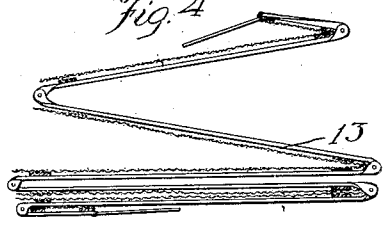


Fig. 4



Witnesses:

Robert N. Weir

Arthur W. Carlson

by

Inventor

T. O. Lofgren

H. Sanders

Atty.

UNITED STATES PATENT OFFICE.

THOR OSCAR LOFGREN, OF CHICAGO, ILLINOIS.

FIRE-ESCAPE APPARATUS.

1,104,685. Specification of Letters Patent. Patented July 21, 1914.

Application filed October 6, 1913. Serial No. 793,616.

To all whom it may concern:

Be it known that I, THOR OSCAR LOFGREN, a citizen of Sweden, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Fire-Escape Apparatus, of which the following is a specification.

This invention relates to improvements in fire escape apparatus and more particularly to apparatus of this nature comprising a folding portable platform adapted to be raised and lowered vertically beside a building and passing the windows or openings therein and in close proximity to such openings to effect the rescue of the occupants of the building. Means for adjusting, detaching, raising and lowering said platform also form a part of the invention.

With the foregoing and other objects in view the invention consists in the combination and arrangement of parts to be hereinafter fully described in the following specification, pointed out in the claims and illustrated in the accompanying drawings which form a part of said specification and in which—

Figure 1 is a front elevation of my fire escape apparatus in operation upon a building. Fig. 2 is a side elevation of a portion of the folding portable platform, partly in section. Fig. 3 is an end view of said platform taken on line 3—3 of Fig. 2. Fig. 4 is a view of the platform folded. Fig. 5 is a section through the cable box employed.

Like reference characters indicate corresponding parts throughout the several views.

The reference numeral 1 indicates a portion of the side wall of a building to which the fixed portion of my fire escape apparatus is secured, and 2 indicates the windows in said side wall. Immediately above the top window of every other vertical row of windows I secure to the side wall a box 3 having a hinged door 4 which door is connected at its non-hinged end by an arm 5 to an operating rod 6 movably retained in position against the wall of the building by brackets 7; said operating rod 6 extends from a point approximately opposite the top of the box 3 to within a few feet of the ground or base of the wall 1 and terminates in a handle 8 and is further provided with a tension device 9 for releasably locking it in an adjusted position. By releasing the tension device it is readily seen the operating rod may be moved vertically along the wall 1 thus opening or closing the hinged door 4 of the box 3. Upon an axis 10 journaled in the sides of the box 3 a pulley 11 is mounted over which a rope 12 passes that is coiled from each end upon the said hinged door as best shown in Fig. 5 and when said door is opened both ends of the rope will drop toward the ground.

13 is a folding platform formed of a plurality of hinged sections each of which is composed of a plurality of metal strips covered with wire and said platform is supplied with supporting cables 14 connected to a block 15 provided with an eyebolt 16 to receive cable by which the platform may be raised or lowered. It is my purpose to provide the fire engine houses now in use in all cities with a plurality of these folding platforms which may be kept ready for instant use in a small space and which may be transported in a special machine similar to the automobile 17 shown in Fig. 1 of the drawings. This automobile is further provided with a power controlled cable drum 18 upon which the wire cable 19 is carried and which also comprises a portion of my invention. In case of fire the alarm is turned in causing the automobiles 17 to respond and in the meantime the operating rod 6 is manually moved to open the hinged door 4 permitting the ends of the rope 12 to drop to the ground. Upon the arrival of an automobile 17 the platform 13 is opened, the cable 19 is attached at one end to one end of the rope 12 in any suitable manner and drawn over the pulley 11 by that rope; the end of the cable 19 is now fastened in the eyebolt 16 and the platform raised through the medium of the drum 18 to a position to rescue inmates of the building from the windows when it is lowered with its load and the operation repeated as often as is necessary.

What is claimed is:—

1. A fire escape apparatus comprising a box fixed to the surface of the wall of a building, said box having a hinged door, manually operable means secured to the surface of the said wall and connected to said hinged door for opening and closing the same, a pulley within said box, a flexible member associated with said pulley and coiled upon the said hinged door, a folding portable platform, and another flexible member, power controlled, adapted to be releasably secured to the first named flexible member and thereby drawn over said pulley to

engage said portable platform and to raise and lower the same.

2. A fire escape apparatus comprising a box fixed to the surface of the wall of a building, said box having a hinged door, an operating rod secured to and movable over the surface of the said wall, connection between said operating rod and the said hinged door whereby the former member is caused to operate the latter, a pulley mounted in said box, a flexible member associated with said pulley and coiled from each end upon said hinged door, a folding portable platform, and a winding drum provided with a cable adapted to be releasably secured to one end of the aforesaid flexible member and thereby drawn over said pulley to engage said portable platform and to raise and lower the same through the medium of said winding drum.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two subscribing witnesses.

THOR OSCAR LOFGREN.

Witnesses:
PAUL A. VIERSEN,
HARRY GRIFFO.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."