D. McCREE.
PORTABLE FIRE ESCAPE.
No. 440,322.
Patented Nov. 11, 1890.

Witnesses:
[Signatures]
Inventor:
[Signature] Daniel McCree
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E. A. Redick.
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The application of a model for Model. 3 Sheets—Sheet 3.

W. B. Coupland Co.
Gillips.
To all whom it may concern:

Be it known that I, DANIEL McCREE, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in a Portable Fire-Escape, of which the following is a full, clear, and exact description which will enable others to make and use the same, reference being had to the accompanying drawings, forming a part of this specification.

This invention relates to improvements in that class of fire-escapes that are adapted to be moved to different interior parts of a building; and the same consists of certain novel features in the construction, combination, and operation of the apparatus, as will be hereinafter set forth.

Figure 1 is a side elevation of an apparatus embodying my improved features, being shown in position at a window ready for use, the wall and floor of the building being shown in section; Fig. 2, a broken-away vertical longitudinal section in plane 2, Fig. 3, looking in the direction indicated by the arrow; Fig. 3, a rear end elevation; Fig. 4, a horizontal plan in plane 4, Fig. 2; and Fig. 5, a vertical section in plane 5, Fig. 2, looking outwardly, as indicated by the arrow.

Referring to the drawings, A represents a four-wheeled truck or carriage, on which the different parts of the mechanism is mounted. This truck is provided with the box X and the draft-pole A. The standards B B' are secured rigidly in position on the rear end of the carriage at each side. To the upper ends of these standards are pivoted at a the inner ends of the folding arms B' B", the outer ends of which are in turn pivoted at a' to the lower ends of the standards B' B". The shaft B' has its respective ends journalled in the upper ends of the standards B' B".

C C' are grooved winding-drum, mounted on said shaft near the ends and leave a space between said drums, as shown in Fig. 3. These winding-drum carry the wire ropes a a', the loose ends of which are fastened to the handle-brackets a a', rigidly secured to the upper inside ends of the passenger or safety cage C'.

This cage is shown in its highest position up against the horizontal arms B' B". The cleats a', secured to the outer sides and upper ends of the cage, lap over onto the sides of said arms and serve to steady the cage while being loaded. The brace-bars a' a" are fastened rigidly at their upper ends to the lower part of the standards B' B", and extend downwardly therefrom (see Figs. 1 and 2) and form a backing for the cage to prevent the same from swinging outwardly from the building while passengers are getting on. The round a" connects these brace-bars near their longitudinal centers. The upper end of the rod a" is secured in said round, while the lower end engages with the head of the eyebolt a', inserted in the back of the cage, and serves the purpose of assisting in preventing a swinging or swinging motion of the cage when in position to receive its load.

A portion of the back of the cage is broken away in Fig. 3, and parts shown in section comprising the side of the cage, the cleat, and one of the horizontal arms, which rest on the window-sill when the apparatus is in position for use. To the front end of the carriage-box are bolted the vertical brackets b b', in the upper ends of which are journalled the respective ends of the transverse hand-shaft D, on which is mounted the winding-drum D', carrying the wire rope b, the outer end of which is secured to the shafts B', and provides the means for raising and lowering the cage. A number of rounds b' have their respective ends secured in the folding arms B' B", as shown in Figs. 1, 2, 3, and 4. The wire rope b' passes alternately over and under these rounds, which act as a friction safety-brake, whereby the movement of the cage can be properly and easily controlled. The shaft D is provided with the handle or crank b'. (Indicated in dotted lines, Fig. 1). One end of the brace-rods b b' is secured to the standards carrying the rope-drum, the opposite hook ends detachably engaging with the eyebolts b' in the standards, rigidly set in the rear end of the carriage-box. These brace-rods help to strengthen and stiffen the structure, and are conveniently disengaged when the apparatus is not in use. The carriage is provided with the brake d', operated by means of the brake lever d'. A counter-weight d' is placed in the front end of the carriage-box to prevent the same from tilting.

The apparatus is shown in position ready
for use in Fig. 1, the horizontal arms, connecting the companion standards, resting on the windowsill, as at E. When not in use, the cage and other parts may be folded over onto the carriage-box, as indicated in dotted lines, Fig. 1.

The apparatus will usually be stationed in the halls of a building ready to be run into any of the rooms and used from any of the windows.

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

1. In a portable fire-escape apparatus, the combination, with the truck or carriage, of the companion standards secured rigidly in the rear end thereof, of the folding arms pivoted at their inner ends to the top of said standards, the companion standards pivoted to the outer ends of said arms, the shaft journaled in said standards, the grooved winding-drums mounted on said shaft, the cage, the wire ropes connecting said drums and cage, the hand-shaft journaled on the front end of the carriage, the drum mounted thereon, and the wire rope connecting the latter drum with the cage-shaft, substantially as described.

2. In a portable fire-escape apparatus, the combination, with the cage, of the folding arms, the cleats secured to the upper end of the cage and lapping over onto said arms, the brace-bars extending down along the back of the cage, the standards to which the upper ends of said bars are rigidly fastened, the round $a$, connecting said brace-bars, the rod 35 having its upper end secured in said round, and the eyebolt inserted in the back of the cage and with which the lower end of said rod engages, substantially as and for the purpose set forth.

3. In a portable fire-escape, the combination, with the cage, of the cage-shaft, the hand-shaft, the wire rope connecting the two shafts, the horizontal arms, and the series of rounds $b$, having their respective ends inserted in said arms, said wire rope passing alternately over and under said rounds, substantially as and for the purpose set forth.

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