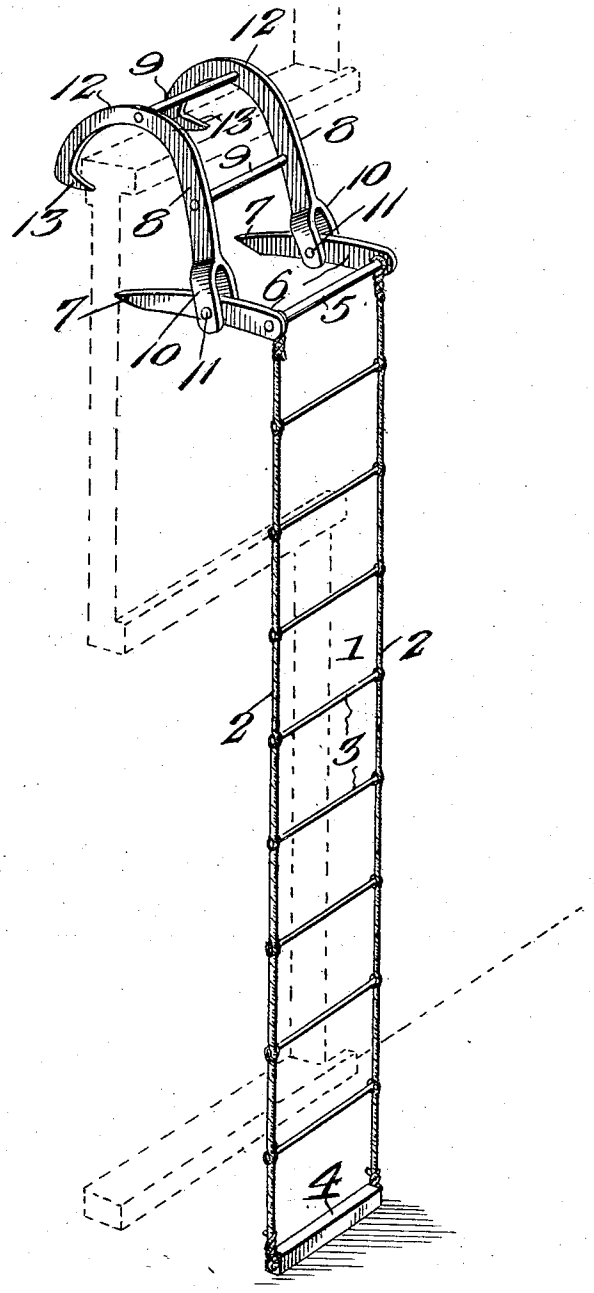
No. 869,151. PATENTED OCT. 22, 1907.

R. ZUBE.

FIRE ESCAPE.

APPLICATION FILED MAR. 29, 1907.



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FIRE-ESCAPE.

No. 869,151. Specification of Letters Patent. Patented Oct. 22, 1907.

Application filed March 29, 1907. Serial No. 365,380.

To all whom it may concern:

Be it known that I, ROBERT ZUBE, a citizen of the United States, residing at Shell Lake, in the county of Washburn and State of Wisconsin, have invented new and useful Improvements in Fire-Escapes, of which the following is a specification.

This invention relates to improvements in fire escapes of that type adapted to be folded or rolled into close compass for storage or transportation, the object of the invention being to provide a simple, efficient, reliable and inexpensive type of apparatus of this character in which improved means are provided for supporting and staying the device when in use, and which will serve to hold the device in position firmly and securely during the descent of one or more persons, thus effectually preventing any possible danger of release of the fire escape when under the strain of bearing the weight of the person or persons.

The drawing shows a perspective view of a fire escape embodying my invention, as arranged in position for use.

The device comprises a ladder 1, the sides 2 of which are preferably composed of rope or some other similar flexible material of proper diameter and strength, said sides being connected by rungs 3 arranged at desired intervals apart, and which may be composed of rods of steel or other suitable material. At the lower end of the ladder thus formed is a bottom connecting rung or bar 4, of proper form and weight to rest squarely upon the pavement or other surface and to cause the ladder to unfold by gravity when unloaded at a window or from some other suitable portion of a building for descent.

Pivotally connected with the upper rung 5 of the ladder, which rung is made of maximum strength, are holding arms or levers 6, the free ends of which are beveled or tapered to points to form spurs or holding teeth 7 to engage the side wall of the building. Employed in conjunction with said levers is a suspending frame comprising side bars or levers 8 connected and braced by cross pieces or rods 9. The lower ends of these bars are formed with yokes 10 which receive and are pivotally connected with the levers 6, as at 11, while the upper ends of the bars are arcuately curved, as at 12, to extend in a convenient manner over the sill of a window, the terminals of said upper ends of the bars being provided with outwardly and downwardly projecting spurs 13 adapted to hook under the inner edge of the sill and to sink into said sill to retain said suspending frame in position.

The construction of the device permits the ladder section to be conveniently rolled upon itself and folded in close compass with the suspending means to enable the device to be packed for storage or transportation, so that in the event of a fire the apparatus may be conveniently carried to a window or other suitable portion of the building for the escape of the occupants. In setting the device for operation, the lower or free end of the ladder is cast out from the window, the weighted bar 4 at the lower end thereof causing the ladder to unwind by gravity. The levers 6 are then set against the outer side of the side wall of the building and the grappling hooks of the suspending frame engaged with the sill of the window in the manner shown in the drawing. It will accordingly be understood that when the device is thus supported a person may grasp the rods 7 as hand holds and conveniently lower himself on to the ladder and then pass down the same to the ground, roof of an adjoining building or other point to which the ladder extends. It will also be apparent that the greater the weight of the person descending the ladder the greater the pressure upon the levers 6 and the grappling hooks, causing them to engage the portions of the building with which they contact with great force, whereby the apparatus will be firmly held in operative position.

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

A fire escape comprising a flexible ladder weighted at its lower end, holding arms or levers pivotally mounted at one end at the upper end of the ladder and having pointed free ends to engage the side wall of a building, and grappling hooks connected by rounds and forming an upper auxiliary ladder section, said hooks being pivotally connected at their lower ends to the arms between the ends of the latter, the upper ends of the hooks being arcuately curved to extend over and embrace the sill of a window and provided with spurs extending toward the pivoted ends of the hooks.

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

ROBERT ZUBE.

Witnesses:
W. B. KERR,
L. H. MEAD.