No. 663,922. Patented Dec. 18, 1900.

B. S. NEELLY.

FIRE ESCAPE.

(Application filed Apr. 2, 1900.)

(No Model.)

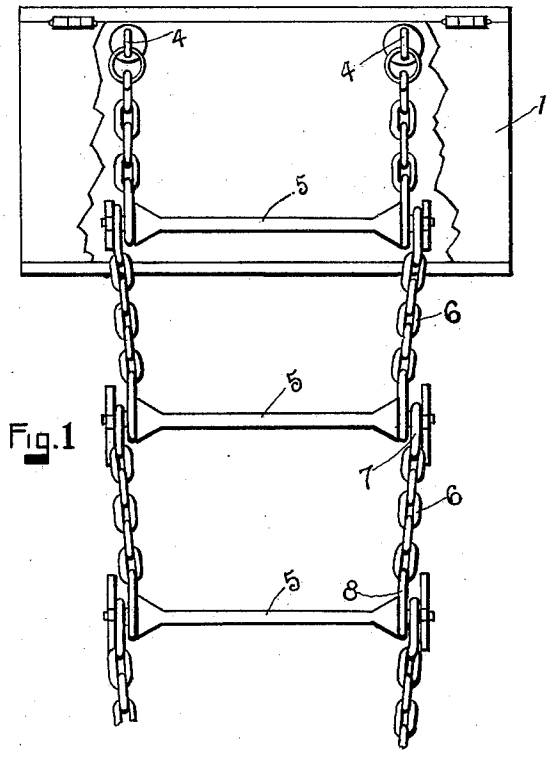


Fig. 1

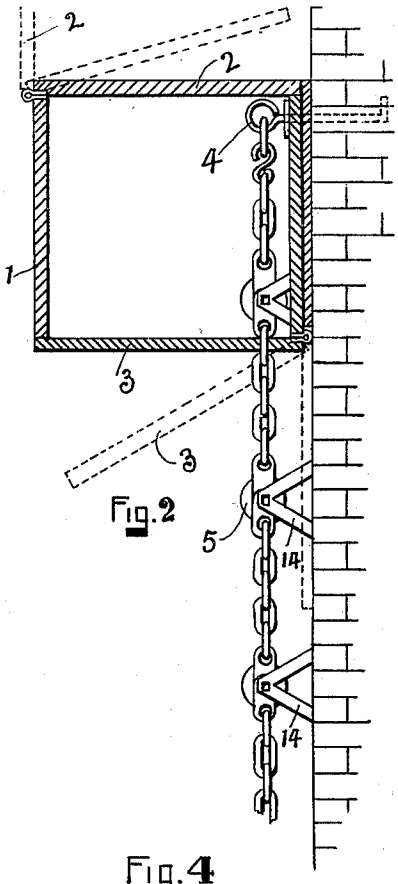
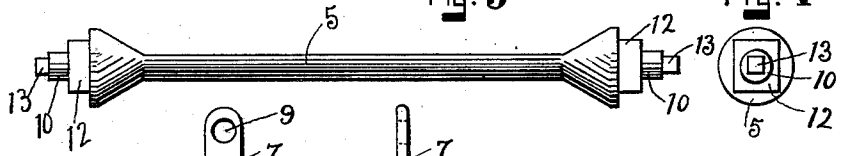


Fig. 2

Fig. 3

Fig. 4



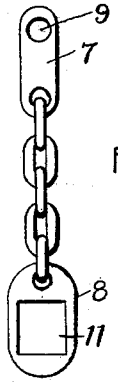


Fig. 5

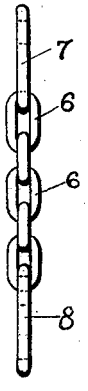


Fig. 6

Fig. 8



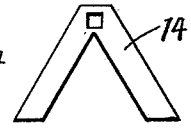


Fig. 7

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BENJAMIN S. NEELLY, OF ANDING, MISSISSIPPI.

FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 663,922, dated December 18, 1900.

Application filed April 2, 1900. Serial No. 11,130. (No model.)

To all whom it may concern:

Be it known that I, BENJAMIN S. NEELLY, a citizen of the United States, residing at Anding, in the county of Yazoo and State of Mississippi, have invented certain new and useful Improvements in Fire-Escapes, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention has relation to improvements in fire-escapes; and it consists in the novel arrangement and combination of parts more fully set forth in the specification and pointed out in the claim.

In the drawings, Figure 1 is a front elevation of the device with the front wall of the box adapted to contain the same partially broken away. Fig. 2 is a side elevation with the box in section. Fig. 3 is a detached plan view of the rung of one of the sections of the folding ladder constituting the fire-escape. Fig. 4 is an end view thereof. Fig. 5 is a side view of one of the link-sections of the ladder. Fig. 6 is a front view thereof. Fig. 7 is a side elevation of one of the retaining-brackets carried by each section, and Fig. 8 is an edge view thereof.

The object of my invention is to construct a folding fire-escape ladder which when not in use can be packed away or stored in a box or receptacle designed for its reception, the receptacle being provided with means for securing the same to the outside of a building in case of fire and with lids adapted to be swung open at the proper moment to allow the ladder to be unfolded for immediate use. In detail the invention may be described as follows:

Referring to the drawings, 1 represents a receptacle of any pattern, having an upper lid 2, adapted to open outwardly, and a lower lid 3, adapted to swing inwardly, but having its hinge-line disposed along the edge diagonally opposite the hinge-line of the lid 2. The receptacle is adapted to be secured to the outer wall of a burning building by means of eyebolts 4, from the eye of each of which the folding ladder is directly suspended. The ladder is made up of a series of folding sections comprising each a rung 5 and terminal link-chains composed of a series of intermediate links 6 and terminal links 7 and 8. The upper link 7 has a circular opening 9, adapted to receive the cylindrical stud 10 of the rung of the section from which it is immediately suspended, and the lower link 8 has a square opening 11 for the reception of the square end 12 of the rung of the next section of the ladder. The stud 10 terminates in a reduced boss 13, which is received by an opening at the vertex of a V-shaped bracket 14, the several brackets serving to retain the unfolded ladder at a suitable distance from the wall of the building.

From the foregoing it is apparent that each section of the ladder is adapted to be folded about the cylindrical stud 10 of each rung, the rung itself being held rigid and against rotation when the device is in use by the rigid connection resulting from the union of the square end 12 with the square opening 11 of the outer link of the supporting chain. The lids 2 and 3 may be locked by any form of lock, (not shown,) and when the receptacle is in place the lower lid will drop against the wall, as indicated by the dotted lines in Fig. 2, and the upper lid thrown open, as shown also by dotted lines, thereby permitting the person to manipulate the unfolding of the ladder. The brackets 14 may be removed before the ladder is folded into the receptacle.

It is apparent that minor changes may be made in the device without departing from the spirit of my invention.

Having described my invention, what I claim is—

A fire-escape ladder comprising a series of rungs, each having a square portion near each end, cylindrical studs projecting beyond said square portions, terminals projecting beyond said studs, link chains having each a link at one end provided with a circular opening for the reception of the stud of one rung, and at the opposite end having a link provided with a square opening for the reception of the corresponding portion of the next succeeding rung, and suitable V-shaped brackets having openings at one end for the reception of the terminal bosses of the successive rungs, substantially set forth.

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

BENJAMIN S. NEELLY.

Witnesses:

S. W. JOHNSTON,

C. A. COLLINS.