J. B. PATTERSON.

FIRE ESCAPE.

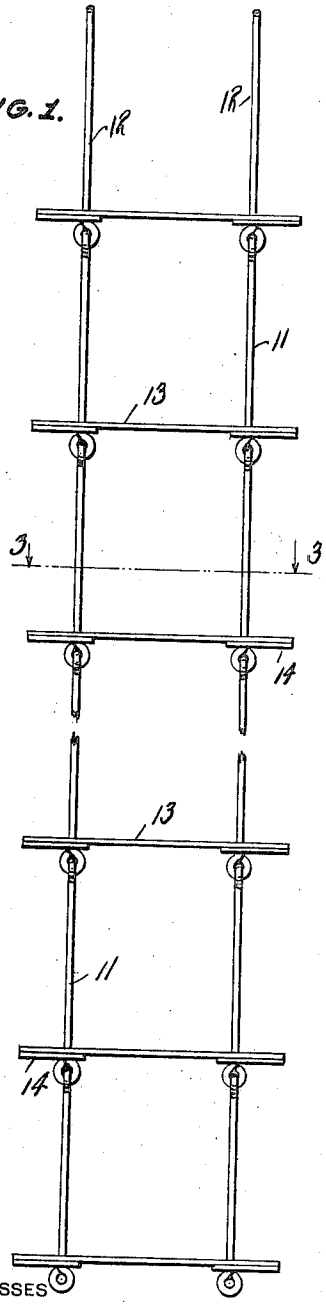
APPLICATION FILED NOV. 8, 1917.

1,301,734.

Patented Apr. 22, 1919.

2 SHEETS—SHEET 1.

FIG. 1.



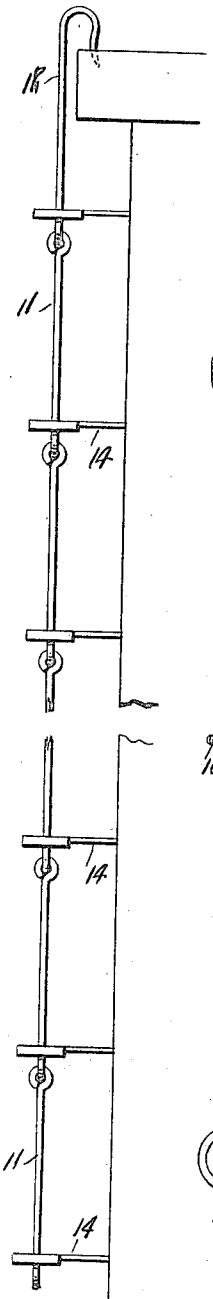


FIG. 2.

FIG. 3.

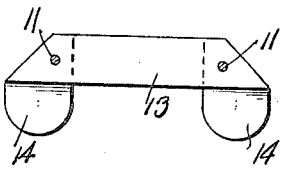


FIG. 4.

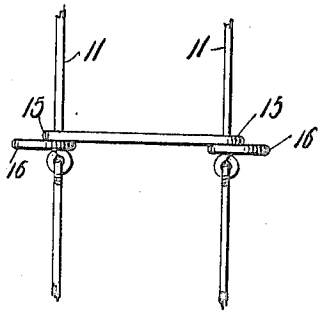
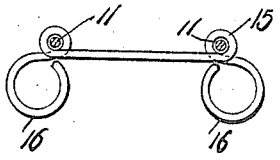


FIG. 5.



WITNESSES

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FIRE ESCAPE.

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2 SHEETS—SHEET 2.

FIG. 6.

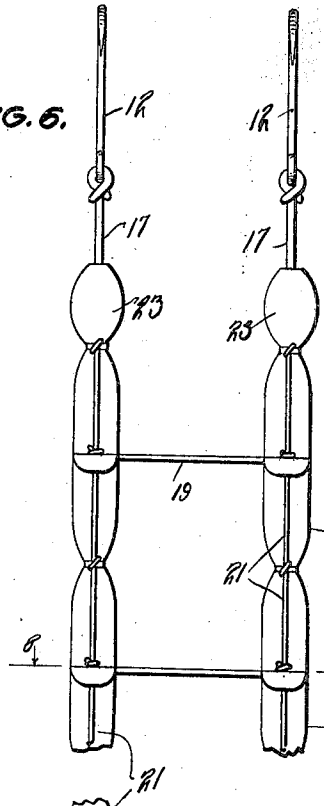


FIG. 7.

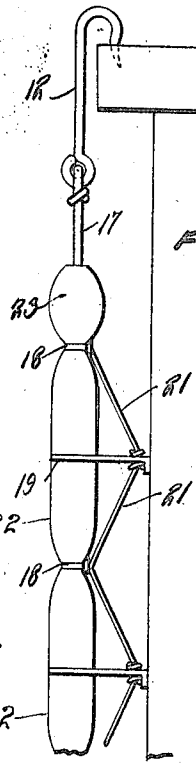
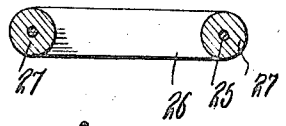


FIG. 20.



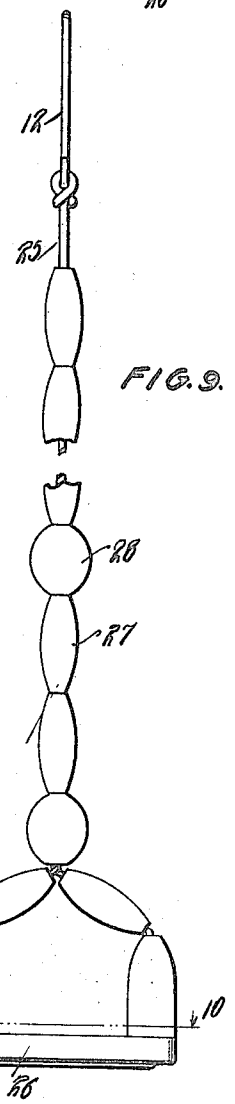
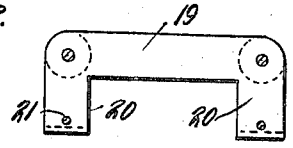


FIG. 8.



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FIRE-ESCAPE.

1,301,734. Specification of Letters Patent. Patented Apr. 22, 1919.

Application filed November 8, 1917. Serial No. 200,949.

To all whom it may concern:

Be it known that I, JOHN B. PATTERSON, a citizen of the United States, residing at Primghar, in the county of O'Brien and State of Iowa, have invented certain new and useful Improvements in Fire-Escapes, of which the following is a specification.

This invention relates generally to fire escapes, and particularly to portable fire escapes, having for its primary object to generally simplify and improve the construction and operation of devices of this character, as well as to increase their efficiency.

A further object of the invention is to provide a light, portable fire escape which may easily be packed in a hand grip or trunk, and which may be quickly and easily secured to and extended from the sill or stool of a window when occasion requires.

A further object of the invention is to provide in a fire escape of the class described, improved means for holding the escape properly spaced from the side wall of the building.

A still further object of the invention is to provide a portable fire escape which includes a support or basket for holding an infant, and which may efficiently be used by adults.

With these objects in view, together with others which will appear as the description proceeds, the invention resides in the novel formation, combination, and arrangement of parts, all as will be described more fully hereinafter, illustrated in the drawings, and particularly pointed out in the claims.

In the drawings:—

Figure 1 is a front elevation of a fire escape constructed in accordance with the invention,

Fig. 2 is a side elevation of the apparatus shown in Fig. 1,

Fig. 3 is a horizontal sectional view taken upon line 3—3 of Fig. 1,

Fig. 4 is a fragmentary rear elevation of a fire escape embodying a slightly modified form of the invention,

Fig. 5 is a sectional plan view of the device illustrated in Fig. 4,

Fig. 6 is a rear elevation of a fire escape embodying a further modified form of the invention,

Fig. 7 is a side elevation of the escape illustrated in Fig. 6,

Fig. 8 is a sectional plan view taken upon line 8—8 of Fig. 6,

Fig. 9 is a front elevation of a fire escape embodying a still further modified form of the invention, and

Fig. 10 is a sectional plan view taken upon line 10—10 of Fig. 9.

Referring now to the drawings, and particularly to Figs. 1 to 3 thereof, 11 indicates a pair of strong flexible members for supporting the weight of the person to use the escape. These members in the present instance may be formed of relatively short links, having interlooped eyes at their ends. Each of the stiles is provided at its upper end with a hook 12, which may engage the stool or sill of a window.

The stiles 11 are held properly spaced apart by foot rests or rungs indicated generally as 13. These foot rests consist of short narrow metallic plates bent at their ends, as shown at 14, so as to provide rearwardly projecting portions, and the said bent portions as well as the body of each plate is provided with an opening to receive the supporting stiles 11. Each of the sections of the fire escape comprises a pair of links and a rung or step, and the latter rests upon the looped portions of the links at the lower ends thereof. The links may be of a length equal to the distance between the rungs of an ordinary step of a ladder.

In practice, the escape may be kept in a room rolled up and in an out of the way place. When properly collapsed, the escape will occupy but a small amount of space so that it may be conveniently packed in a grip or trunk. Should it be required to use the escape, the hooks 12 are positioned upon the window sill in the manner shown in Fig. 2 of the drawings, or hooked on the window stool inside and the ladder is dropped from the window. The escape will unroll and extend to the ground, and the rearwardly projecting ends 14 of the steps or rungs will engage the wall of the building and hold the escape properly spaced therefrom and steady.

In Figs. 4 and 5 of the drawings, there is shown a slight variation in the steps or rungs. In this form of the invention, the rungs are constructed of relatively short bars, bent adjacent their ends to provide eyes 15 through which the vertically disposed stiles 11 extend, and the extreme ends of the bars are bent rearwardly as shown at 16 to provide wall engaging portions.

This latter construction enables the escape to be quickly and easily constructed, at comparatively little expense and considerably lightens the weight of the fire escape.

In Figs. 6 to 8 inclusive, I have shown a further modified form of the invention, wherein the metallic supporting members 11 are dispensed with. In this form of the invention, the ladder is composed of stiles 17, of rope or cable, and of rungs 19, provided with rearwardly extending portions 20, designed to space the ladder away from the wall of the building. These rungs are spaced apart by members 22, and above the top rung is disposed a pair of members 23 of substantially similar contour to that of the members 22. The rungs are held substantially perpendicular to the stiles by guy ropes 21, which extend from the middle portions 18 of the members 22 and 23 to the extensions 20 of the rungs, the stiles 17 have a limited sliding movement through rungs 19 and the members 22 and 23 which permit the stiles to bend slightly, so that the ladder is more easily handled. These last mentioned members, moreover, can be grasped with more comfort by the user than could the uncovered stiles 17.

Figs. 9 and 10 of the drawings disclose a further modified form of the invention, wherein only a single cable or rope 25 is used to support the person escaping from the building. The upper end of the cable 25 is equipped with a hook 12 similar to that employed in the above described forms of the invention, and the lower end of the rope may be provided with a seat or body rest 26. This seat is adapted to hold the body of an infant or adult, and the rope or cable is inclosed throughout its length by the coverings and hand grips 27 and 28 respectively.

In using the last described form of escape, the infant may be placed upon the seat 26 and tied therein, whereupon the escape may be lowered out of the window. After the hook 12 has been firmly buried in the sill or hooked inside on the window stool adults may use the single rope or cable as a means for reaching the ground.

From the foregoing it is obvious that I have provided a fire escape which will prove highly efficient in use and which will successfully carry out the ends for which it is designed. The escapes of any and all of the above described forms may be constructed at little cost, and will prove practically indestructible.

While the present is a disclosure of the preferred embodiment of the invention, it is to be understood that the invention is not limited thereto, as various changes in the minor details of construction, proportion, and arrangement of parts may be resorted to if desired without departing from the spirit of the invention as defined by the appended claims.

I claim:—

1. In a fire escape, a pair of flexible stiles, foot rests arranged in spaced relation upon said stiles, and connecting the latter, and spacing members inclosing said stiles and being arranged between said foot rests.

2. In a fire escape, a pair of flexible stiles, foot rests connecting said stiles, each of said foot rests comprising a metallic plate bent upon itself and at right angles near each end, the said bent portions and the body of said foot rests being provided with openings to loosely receive the said flexible stiles, spacing members inclosing said stiles and maintaining said foot rests in spaced relation, and the said rearwardly projecting portions providing ears for engagement with the side of a building.

3. In a fire escape, a pair of flexible stiles, foot rests connecting said stiles, each foot rest comprising a plate bent upon itself at right angles near its ends, the portions of said rests which are thus bent upon themselves being provided with apertures to loosely receive the said flexible stiles, means for holding said foot rests in spaced relation on said stiles, and the extremities of said angularly bent portions being bent at right angles to provide ears for engagement with the wall of a building.

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

JOHN B. PATTERSON.

Witnesses:
HENRY RERICK,
KENNETH H. RERICK.

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