

(No Model.)

2 Sheets—Sheet 1.

J. R. WINTERS.

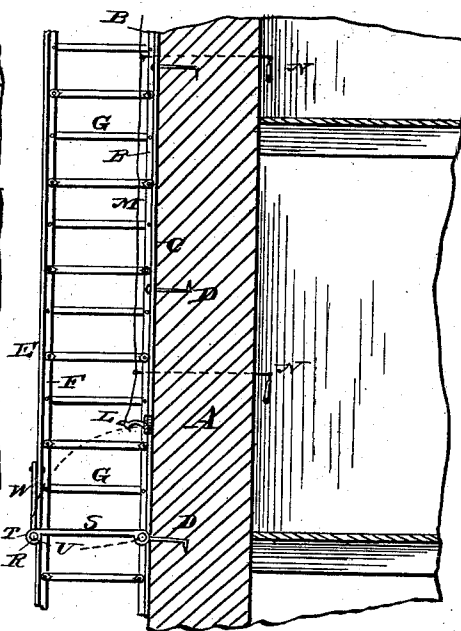
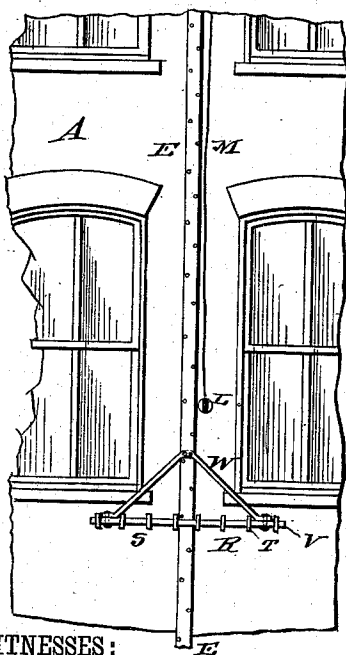
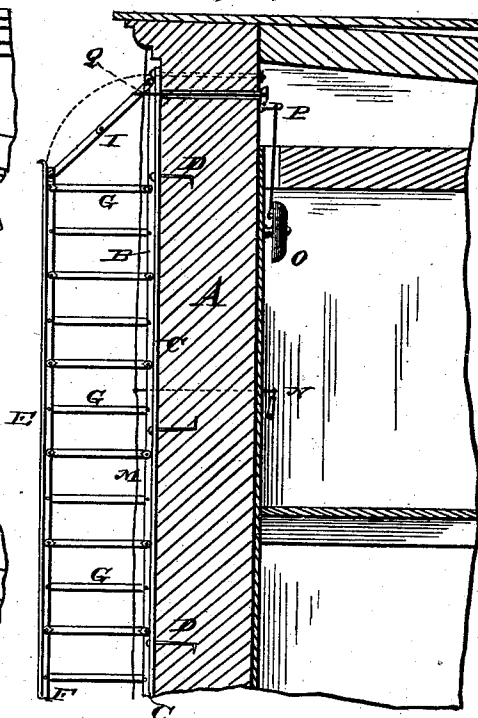
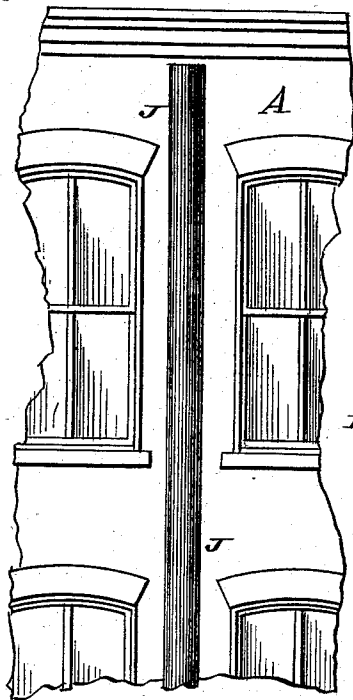
FIRE ESCAPE.

No. 258,186.

Patented May 16, 1882.

Fig. 1.

Fig. 2.



WITNESSES:

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FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 258,186, dated May 16, 1882.

Application filed March 16, 1882. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH R. WINTERS, of Chambersburg, in the county of Franklin and State of Pennsylvania, have invented certain new and useful Improvements in Fire-Escapes; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

Figure 1 is a front view of a building equipped with my improved fire-escape, part of the casing having been removed. Fig. 2 is a sectional view of the building, showing a side elevation of the escape. Fig. 3 is a perspective view, on a larger scale, of a section of the escape-ladder. Fig. 4 is a horizontal sectional view, showing the same open. Fig. 5 is a horizontal sectional view, showing the escape-ladder folded; and Fig. 6 is a plan view of the folding platform.

Corresponding parts in the several figures are denoted by like letters of reference.

This invention relates to fire-escapes; and it consists in certain improvements in the construction of the same, which will be hereinafter fully described, and particularly pointed out in the claims.

In the drawings hereto annexed, A refers to the wall of a building.

B is the inner side or rail of my improved fire-escape ladder, which is provided with flanges C C, by which it is securely attached to the wall A by means of heavy bolts D, driven through the flanges C. The outer rail, E, of the escape-ladder is likewise provided with flanges F.

G G are the rungs of the ladder, which are secured to the rails B E by means of bolts H, serving as hinges and enabling the outer rail, E, to be raised or folded to the position shown in Fig. 5 and in dotted lines in Fig. 3 of the drawings, by reference to which it will be seen that the rails are brought closely together and the rungs to a nearly vertical position. To facilitate the folding of the rungs without placing them too far apart they are placed alter-

nately on opposite sides of the sides or rails B E, as shown.

I is a jointed brace, connecting the upper ends of the rails, so as to support the outer rail, E, and capable of folding with the ladder.

J is a curved shield, screen, or casing, (which may, however, be of any suitable shape,) secured to the outer rail, so as to inclose the device when folded and protect it from the elements and render it inaccessible to burglars, children, and unauthorized persons. The edges K of said casing form handles to assist persons descending the ladder.

L is a clutch or bracket secured to the wall A near the lower end of rail B, to support the lower end of the rail E when raised or folded, thus retaining the fire-escape in its closed position.

M is a wire rope leading from said clutch to the top of the building, and having branches N' at every floor, by pulling any one of which the clutch, which may be of any suitable construction, may be disengaged from the rail E, thus causing the latter to drop down until it rests upon the ground, when the ladder is extended for use.

O is an alarm-bell, located at any suitable point in the building and operated by any well-known mechanism adapted to be started by means of a trigger, P. The latter is connected by a rope, Q, with the jointed brace or with any movable part of the escape-ladder, so as to be instantly released and cause the alarm to be sounded when the ladder is extended.

At any point upon the folding ladder, especially just below the windows adjoining which the ladder is located, platforms R may be constructed, these to consist of rungs S, provided at their ends with eyes T, by which they are hinged upon horizontal rods U V, secured respectively to the wall A and to the outer rail, E, with which they are also firmly connected by diagonal braces W. These platforms, it will be seen, fold with the escape-ladder, which, when extended, is easily accessible by these platforms to females and children. The platforms R may, however, be omitted, when desired.

From the foregoing description, taken in

connection with the drawings hereto annexed, the operation and advantages of my invention will be readily understood. It is simple, inexpensive, occupies but little space, is exceedingly strong and durable, is easily manipulated, but cannot be tampered with without sounding the alarm, which thus, in case of fire, warns the inmates of the building of danger.

I am aware of the patent to Chamberlain, No. 213,544, March 25, 1879, also of the English Patent No. 2,507 of 1866, and I claim nothing therein shown.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

1. The inner rail, B, having flanges C, and secured by means of bolts passing through said flanges, as set forth.
2. The combination of the permanent rail B, the pivoted rungs G, and the rail E, having shield or casing J, as set forth.
3. The combination, with the fire-escape ladder constructed, as described, of the shield or casing J, secured to the outer rail, E, of said ladder, and having edges K, forming handles, as set forth.
4. The combination, with the rail B, perma-

nently secured to a wall, A, of the rail E and the pivoted rungs G, arranged alternately on opposite sides of said rails, as set forth.

5. The combination of the folding ladder B E G, having shield or casing J, the support L, and the releasing-wire M, having branches N, as set forth.

6. The combination of the rail B, pivoted rungs G, rail E, horizontal rods U V, secured respectively to the wall of the structure and to rail E, the diagonal braces W, and the pivoted rungs S, forming a folding platform, as set forth.

7. The herein-described improved fire-escape, consisting of the folding ladder B G E, having shield or casing J, jointed brace I, and folding platform R, the support L, releasing-wires M N, and alarm mechanism O P Q, all combined and operating substantially as and for the purpose set forth.

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

JOSEPH R. WINTERS.

Witnesses:

WALTER R. LEGGAT,
LEWIS J. BURCHARD.