

(No Model.)

S. T. BARR.
FIRE ESCAPE.

No. 261,075.

Patented July 11, 1882.

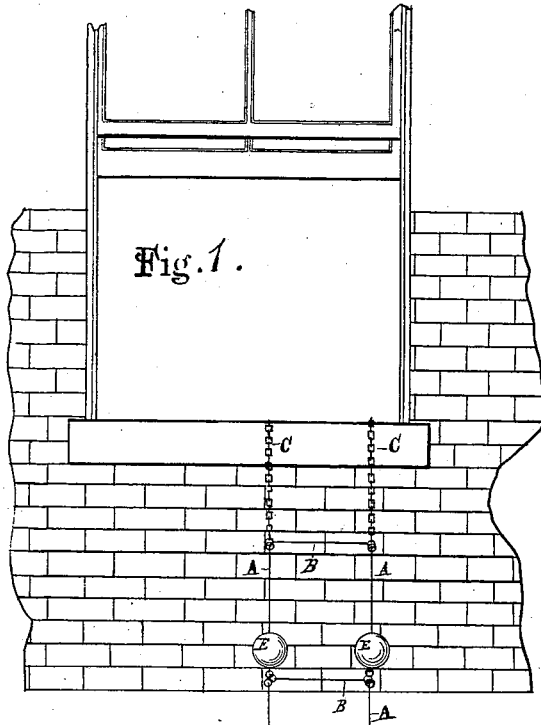


Fig. 4.

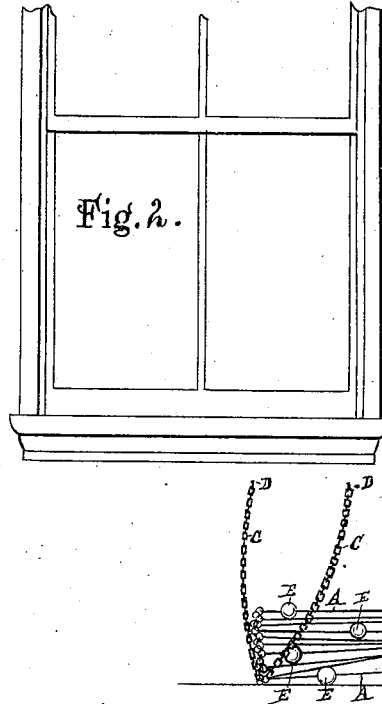
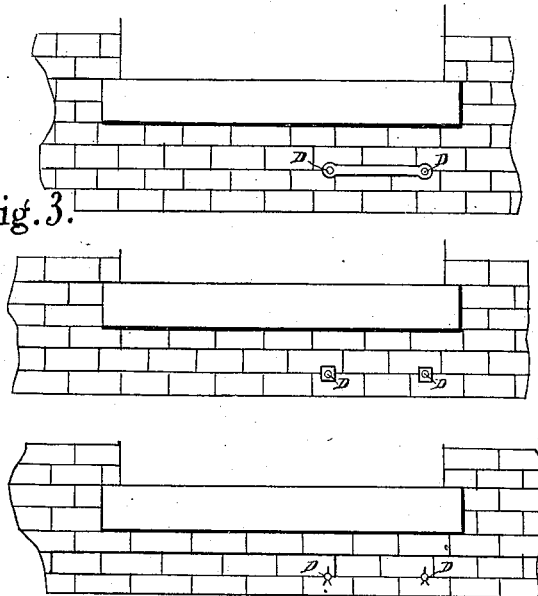


Fig. 3.



J. H. Knight
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UNITED STATES PATENT OFFICE.

SARAH TONER BARR, OF WASHINGTON, DISTRICT OF COLUMBIA.

FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 261,075, dated July 11, 1882.

Application filed February 28, 1882. (No model.)

To all whom it may concern:

Be it known that I, SARAH TONER BARR, a citizen of the United States, residing at Washington city, in the District of Columbia, have invented a new and useful Fire-Escape, of which the following is a specification.

The object of my invention is to have an easy means of escape from buildings in case of fire; first, by providing a fire-proof folding ladder; second, to have it securely fastened to its place under the windows on the inside of the building, and at the same time folded away in convenient form ready for immediate use. I attain these objects by the mechanism illustrated in the accompanying drawings.

Figure 1 is an outside view of the window with the escape attached ready for use. Fig. 2 is the inside of the window, showing how the escape is attached to the wall under the window and the escape folded up on the floor. Fig. 3 shows the fastenings on the outside of the wall, whether cross-head bolt, nuts, or keys.

The sides A A and the cross-pieces B B constitute the frame-work of the escape.

The two chains C C, fastened to the sides A A, are attached to two ring-headed bolts, D D, of sufficient length to pass through the wall of the building under the window-sills, entering from the inside. The bolts are fastened on the outside of the wall by a screw-nut, a cross-head, or a key, which may vary according to the condition of the wall.

The sides A A and the cross-pieces B B are made of iron or steel rods looped together so as to allow a complete fold at each joint. For this purpose the side bars, A A, and rounds B B are formed with loops or rings on the ends thereof, as clearly seen in Fig. 1. As there are but two meeting ends on each side where the top and bottom rounds join the side bars, the joint will be two-looped, so far as these rounds are in question, but all the other side bars and rounds will be joined together by a three-looped joint, and when the chains are fastened to the upper side bars all joints will be three-part except at the lower round. The side joints are about sixteen (16) inches long and the cross-pieces about twelve (12) inches long.

The chains C C, attached to the upper end

of the escape and to the bolts which pass through the wall, are iron or steel chains about three feet long, the length being principally regulated by the size of the window-sills, (under which the ring-headed bolts enter the wall,) over which window-sills the chains pass when the escape is set for use. These chains are of the same width apart as the side bars of the escape, thus the swaying motion from side to side will be reduced to a minimum.

Wooden balls E E, four inches in diameter, are placed on the uprights A A whenever the escape lies too close to the wall to allow a foot-rest. These balls are movable along the uprights, so as to allow the escape to fold up closely, and when the escape is set for use the balls fall to their place at the lower end of the uprights A A. The wooden balls are superior to anything I know of for keeping the ladder away from the walls. They are strong and simple, and the ladder will not tip so easily, but would rather have a swaying motion.

Fig. 4 shows a front elevation of a four (4) story building with the escape set from third and fourth story windows to show the position of the wooden balls. These balls are only necessary where the projection of the window-sills are not sufficient to keep the escape from the wall between the lower part of one window and the top of the window below it.

I am aware that prior to my invention adjustable fire-escapes have been made and patents therefore granted, also that wooden wheels have been placed upon the wooden rounds of a fire-escape to keep the same from the walls of the building; but I am not aware that the features of my invention have been used.

What I claim, and desire to secure by Letters Patent of the United States, is—

1. In a folding fire-escape, the wooden balls placed at intervals upon the side bars and movable thereon, substantially as set forth.

2. In a folding fire-escape, the side bars, A A, and rounds B B, combined together by a three-looped joint, the former having movable wooden balls thereon at intervals, as shown, and for the purpose set forth.

3. The herein-described fire-escape, consisting—

ing of the chains C C, suitably fastened to the building and joined to the ladder, so as to be the same width apart as the side bars, the metallic side bars, A A, and rounds B B, made
5 to open and close easily by having their ends constructed to form a three-looped joint, and the wooden balls E E, placed upon the side bars at intervals and movable thereon, substantially as set forth.

SARAH TONER BARR.

Witnesses:

JOHN E. BEALL,
J. M. TONER.