(No Model.)

A. J. RICH.

SECURING ATTACHMENT FOR FIRE ESCAPES.

No. 490,362. Patented Jan. 24, 1893.

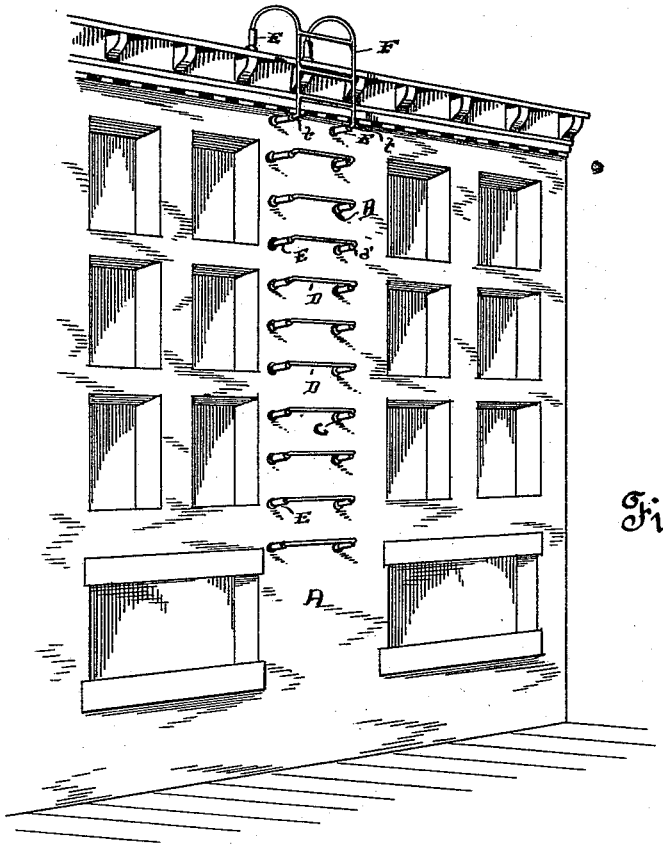

Fig. 1.

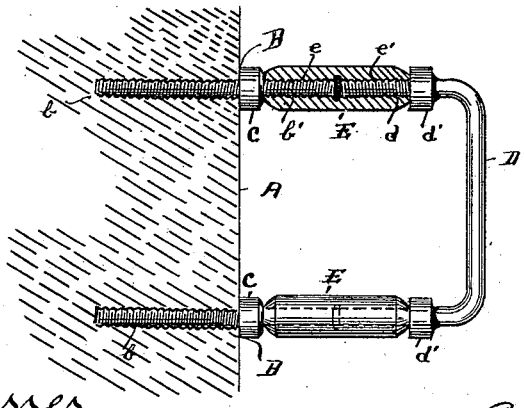

Fig. 2.

Witnesses.
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UNITED STATES PATENT OFFICE.

ALFRED J. RICH, OF SAN FRANCISCO, CALIFORNIA.

SECURING ATTACHMENT FOR FIRE-ESCAPES.

SPECIFICATION forming part of Letters Patent No. 490,362, dated January 24, 1893.

Application filed September 28, 1892. Serial No. 447,162. (No model.)

To all whom it may concern:

Be it known that I, ALFRED J. RICH, a citizen of the United States, residing at San Francisco, in the county of San Francisco and State of California, have invented certain new and useful Improvements in Securing Attachments for Fire-Escapes; and I do hereby declare the following to be a full, clear, and exact description of said invention, such as will enable others skilled in the art to which it most nearly appertains to make, use, and practice the same.

This invention relates to an improved securing attachment for fire escapes, which consists in the arrangement of parts and details of construction, as will be hereinafter more fully set forth in the drawings and description, and pointed out in the specification.

The object of my invention is to provide an attachment which will permit of fire escapes being secured to the wall, after completion of building, without defacing same, as is now the case, and in providing an attaching device which shall be simpler in construction, less expensive, and more effective in its operation than any heretofore known.

Referring to the drawings forming a part of this specification, wherein similar letters of reference are used to indicate corresponding parts throughout the entire specification and several views. Figure 1, is a front view of a building, showing fire escape attachment thereon; and Fig. 2, a detailed view of my attachment, partly in section, showing the manner in which the escape is secured to the wall.

The letter A is used to indicate the wall of the building, and B the securing pin, which is secured therein. This pin is provided with inwardly and outwardly projecting shanks *b*, *b'*, which shanks have right handed screw threads cut thereon. The inner and outer shanks I separate by means of the collar C, which collar may have the face thereof either milled or roughened in order to permit of the wrench being secured thereon, for the purpose of screwing the pin into the wall.

In Fig. 1, I have shown the escape as consisting of a series of steps or brackets D, having the ends thereof inwardly turned in order to provide a limb *d*. These limbs are provided with left handed screw threads in contra-distinction to the right handed screw threads cut in the wall pins. I also provide the step or bracket with collar *d'*, as shown, for the purpose of preventing the attaching or securing thimble running too far upon the limbs *d*. After securing the wall pins within the walls of the building, I secure the step or bracket thereto by means of the thimble E, which thimble is provided with internal right and left hand screw threads *e*, *e'*, consequently said thimble is adapted to be secured or screwed to the shank of the wall pin and limb *d*, of the bracket or step, and as turned the two are brought close together. Thus firmly locking the step or bracket of the wall to the building. The collars C, and *d'*, serve as steps for the thimble, as clearly set forth in Fig. 2. This thimble may be of any desired shape so as to allow the turning thereof readily.

In Fig. 1, I have shown the fire escape as terminating in ladder F, which projects over the roof of the building. This ladder is secured to the roof of the building and the front wall thereof in a manner similar to the step or bracket. That is to say, the upper curved portion terminates in the left hand screw-threaded ends to which thimble E secures, and the lower end thereof is provided with inwardly projecting pins *f*, which are also provided with left hand screw threads in a manner similar to the steps or brackets.

I have shown my escape as consisting of a series of steps or brackets, merely for the reason that the same permits less disfigurement to the face of the building, but, if so desired, an ordinary escape ladder may be used in place of the steps or brackets, which ladder would run the entire height of the building. In case a ladder is used, the same is provided with a series of inwardly projecting pins or limbs *f*, which pins or limbs have left handed screw threads cut thereon in order to permit of the same being engaged by the screw threads of the attaching thimble. It will thus be noticed that my attachment applies equally as well to the ordinary ladder as to the steps or brackets herein shown.

The wall pin may be secured within the building either before or after its completion, but I prefer to secure the same after the wall has been built. In this case an opening or hole is drilled into the wall of less diameter than the diameter of the pin, consequently

when the pin is secured therein, the threads thereof cut their own seat within the wall. However, if it is desired to secure the pins within the wall while the same is in course of erection, the screw threads may be dispensed with and the same firmly held in place by the layers of stone or brick placed thereon.

Having thus described my invention, what I claim as new and desire protection in by Letters Patent of the United States, is—

1. In an attaching device for fire escapes, a combination with the wall pin thereof, provided with an inner and outer projecting shank, and the screw threads cut thereon, of the step or bracket having its ends terminating in the screw threaded limbs, and the thimble for securing the steps and wall pin together, said thimble being provided with internal right and left handed screw threads.

2. In a fire escape attachment, the combination with the escape ladder provided with a series of inwardly projecting limbs, of the wall pin adapted to be secured within the wall, said pin provided with an outwardly projecting screw threaded shank, of the securing thimble for forming connection between the ladder and wall pin, said thimble being provided with internal right and left handed screw threads.

3. In an attaching device for fire escapes, the combination with the wall pin provided with inner and outer projecting shanks, said shanks having righthand screw threads cut thereon, of the collar secured upon the wall pin, of the bracket or ladder provided with inwardly projecting limbs, said limbs being screw threaded to the reverse of the wall pin shank, and of the securing thimble, said thimble being provided with internal right and left hand screw threads.

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

ALFRED J. RICH.

Witnesses:
N. A. ACKER,
J. W. KEYS.