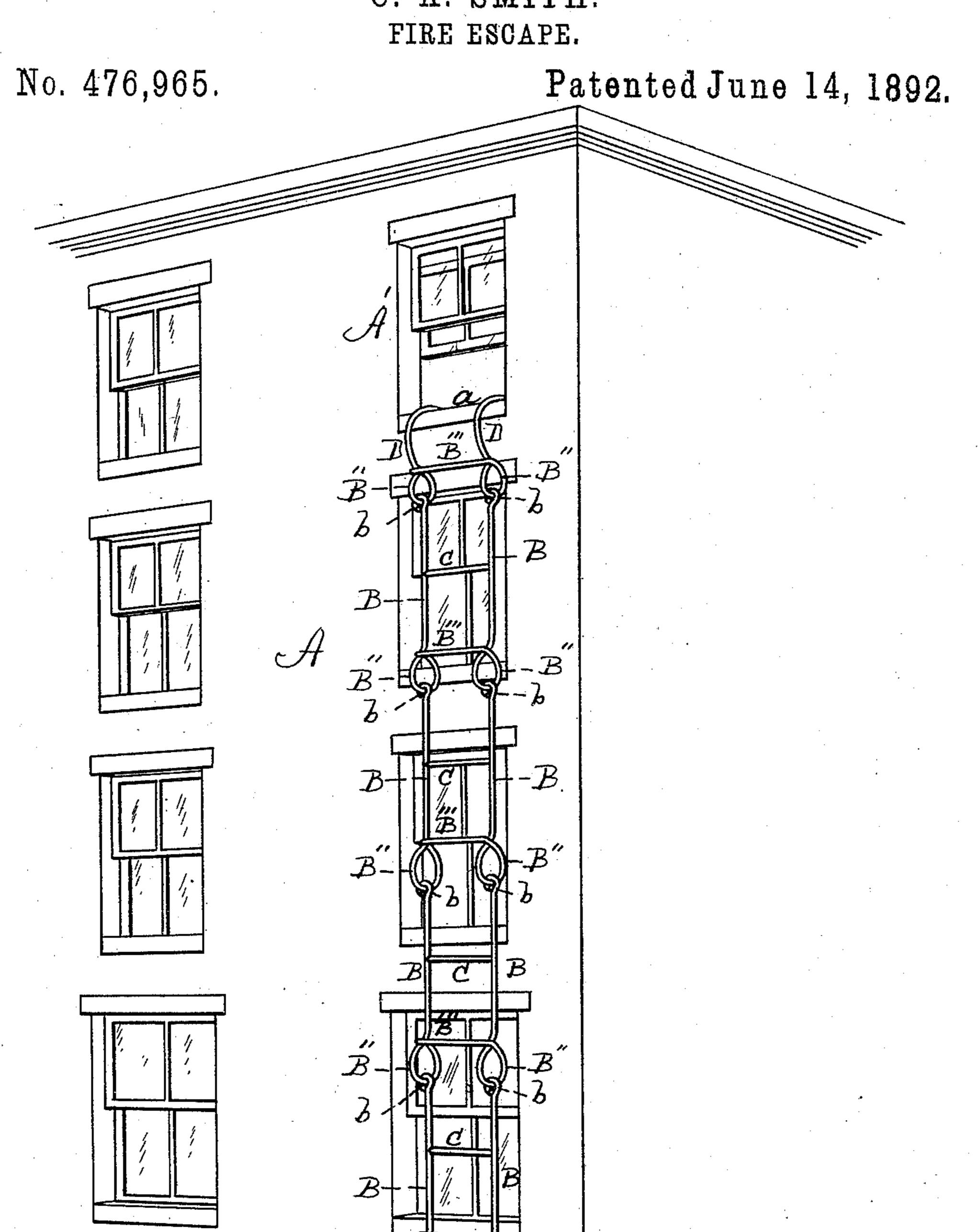
C. A. SMITH.



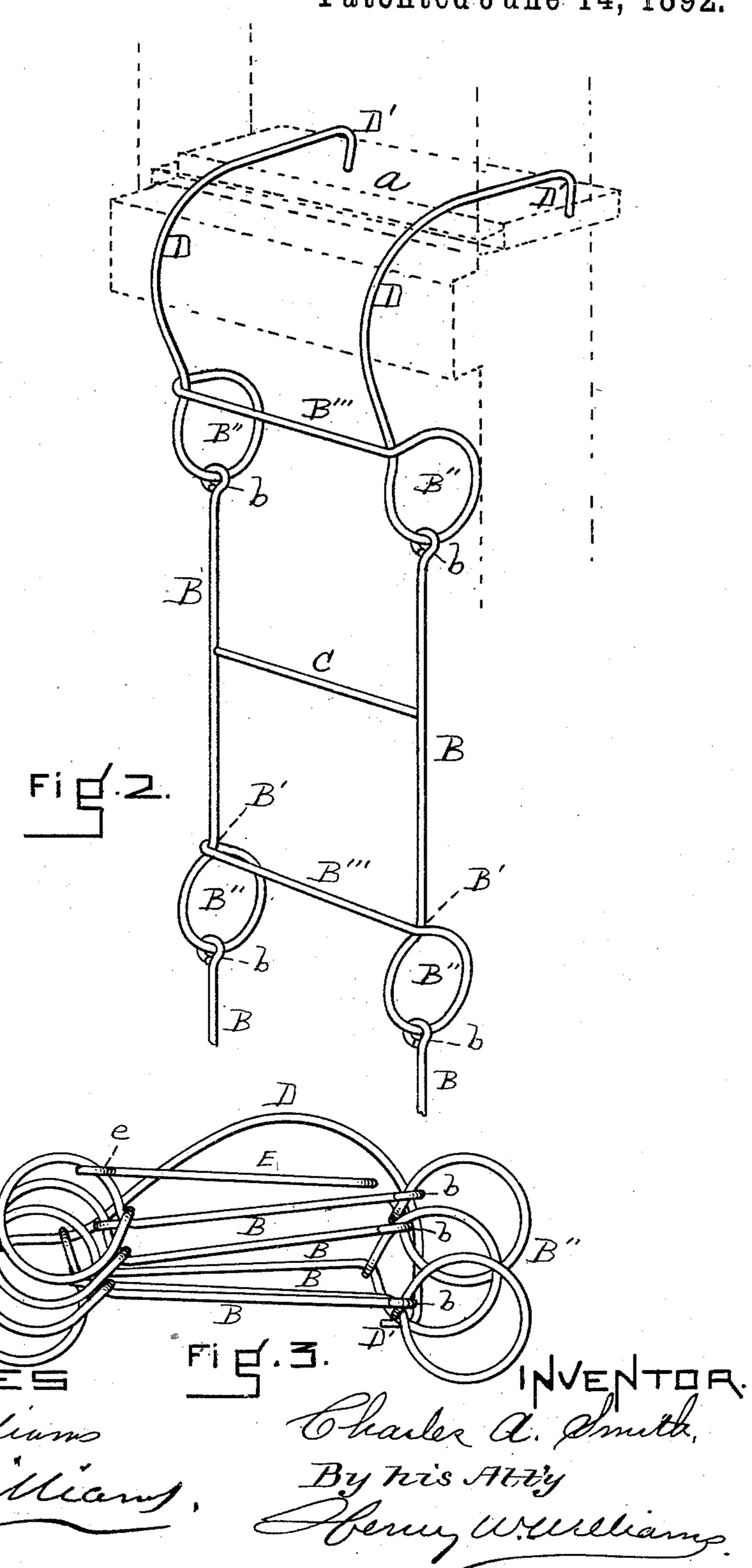
By his Atty.

By westliams

C. A. SMITH.
FIRE ESCAPE.

No. 476,965.

Patented June 14, 1892.



UNITED STATES PATENT OFFICE.

CHARLES A. SMITH, OF LYNN, MASSACHUSETTS.

FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 476,965, dated June 14, 1892.

Application filed August 6, 1891. Serial No. 401,930. (No model.)

To all whom it may concern:

Be it known that I, CHARLES A. SMITH, of | Lynn, in the county of Essex and State of Massachusetts, have invented a new and use-5 ful Improvement in Fire-Escapes, of which

the following is a specification.

This invention relates to that class of fireescapes which are adapted to be suspended from a window-sill or other portion of a build-10 ing in case of emergency, and which when not in use may remain folded up in the building, occupying but little space; and it relates particularly to the construction of the links or sections, whereby each has an integral loop, 15 made of size and shape to serve as a fender, and thereby holds the main portion of the fire-escape away from the building, thus providing a suitable space as a tread for the foot.

The nature of the invention is fully de-20 scribed below and illustrated in the accompa-

nying drawings, in which—

Figure 1 is a view of my improved fire-escape in position for use on a building. Fig. 2 is an enlarged perspective view of the up-25 per portion of my fire-escape suspended from a window, the sill of which is illustrated by I used, requiring no skill or especial presence broken lines. Fig. 3 is a view of my fire-escape folded up.

Similar letters of reference indicate like

30 parts.

A represents a building, in which A' is a

window and a the sill thereof.

The main portion of this device--viz., all but the uppermost and lowest sections—con-35 sists of a series of sections or links, each of which is constructed as follows:

B B are two straight parallel portions of a single wire. At B' B' these portions are bent into parallel coils B" B", and the central por-40 tion B" is at right angles with the portions B, connecting them and forming a step or rung. The ends of the wire are formed into loops b b. The sections are connected by each pair of loops b catching into the pair of 45 coils B" in the section next above it. When the fire-escape is suspended from a window, the parts B are vertical and the parts B"", constituting the rungs, are horizontal, while the coils B" not only serve to connect with 50 the next section, but also by resting against the building keep the parts B and B"' off from it, so that they cannot lie against the wall and embarrass the person using the fire-escape. A rung C is preferably placed cen-55 trally in each section, as shown, and is welded I

or otherwise rigidly secured horizontally to the parts B B. This rung may, however, be dispensed with if the parts B B are made short enough to allow of a person's stepping easily from one rung B" to the next. In the 60 uppermost section the parallel parts D D, which correspond with the parts B B in the other sections, instead of being straight, are curved, as shown, and are provided with hooks D'D' at their upper ends, so that they 65 can catch inside the window upon or below the sill, and thus sustain the main portion of the fire-escape. The lowest section has suspended from it a plain bail, consisting of the horizontal portion E', vertical portions E E, 70 and loops e e for catching in the coils B" of the lowest section. This bail is intended to be grasped by some person on the ground, so that the fire-escape can be held steady and firm while in use.

When the fire-escape is not in use, it drops easily into the folded position shown in Fig. 3 and occupies but little space in a room. It is simple in construction, strong, comparatively inexpensive to manufacture, and easily 80

of mind or alertness.

It will thus be seen that in addition to the collapsible and other qualities possessed by fire-escapes of this character my device has 85 for each section a fender formed by the loops B", which, without adding to the expense of the manufacture, provides a suitable tread for the foot and is an integral portion of said section.

Having thus fully described my invention, what I claim, and desire to secure by Letters

Patent, is—

In a fire-escape of the character described, a series of sections, each consisting, essen- 95 tially, of a wire bent into the parallel portions B and rung B", said wire being also formed at the points where the ends of said rung and the lower ends of said portions B meet into large loops or coils B" of size and 100 shape to constitute fenders, whereby the main portion of the fire-escape is kept off at a suitable distance from the wall of the building, thus affording a sufficient tread for the foot, substantially as set forth.

CHARLES A. SMITH.

Witnesses:

CHAS. M. REED, B. W. WILLIAMS.