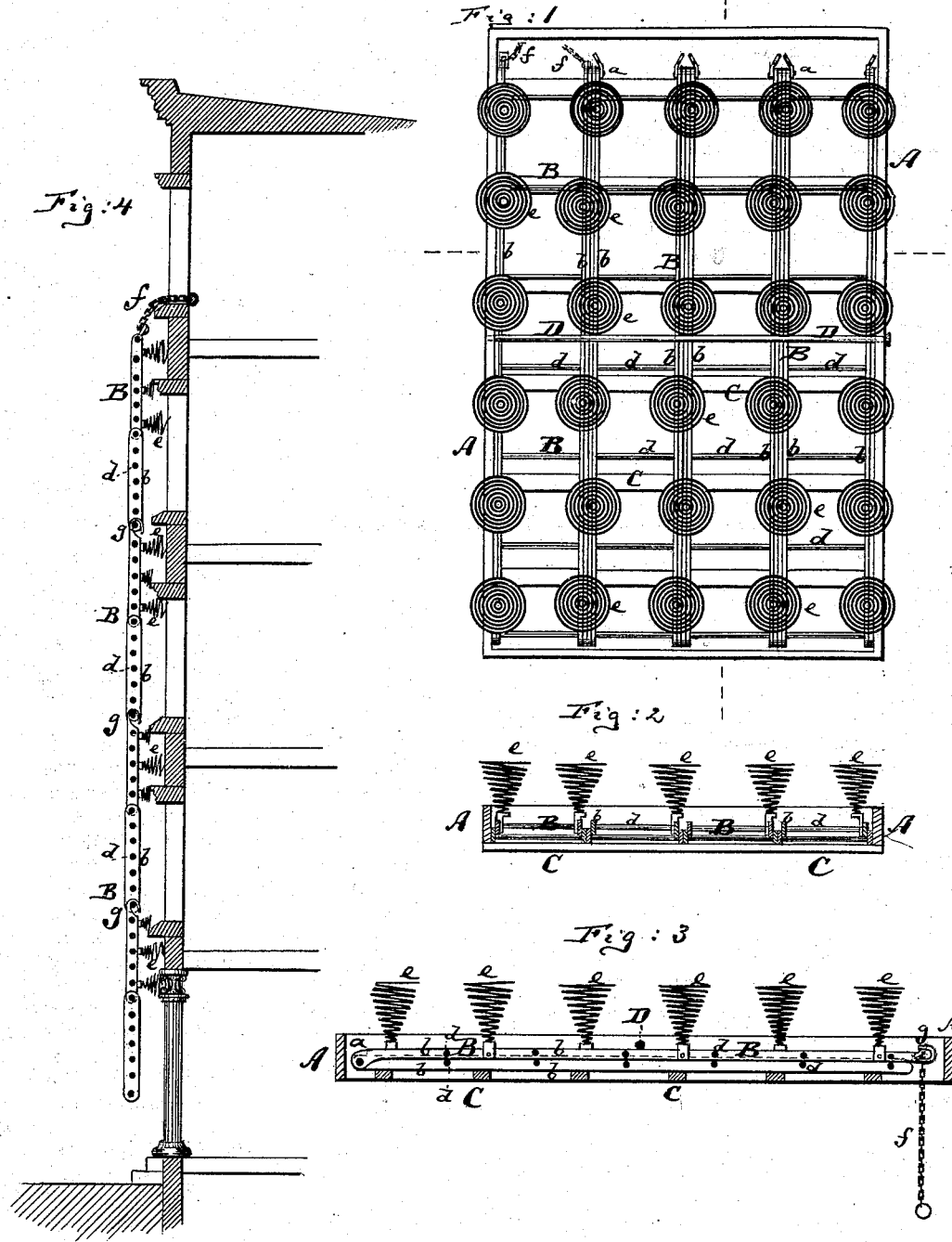


F. SWINDEN & A. BUXTON.
Bed-Bottom and Fire-Escape.

No. 211,275.

Patented Jan. 7, 1879.



Witnesses:
John G. Tunbridge
James Turk

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UNITED STATES PATENT OFFICE.

FREDERICK SWINDEN AND ALFRED BUXTON, OF NAUGATUCK, CONN.

IMPROVEMENT IN BED-BOTTOM AND FIRE-ESCAPE.

Specification forming part of Letters Patent No. **211,275**, dated January 7, 1879; application filed January 5, 1878.

To all whom it may concern:

Be it known that we, FREDERICK SWINDEN and ALFRED BUXTON, both of Naugatuck, county of New Haven, and State of Connecticut, have invented a new and useful Improvement in Combined Bed-Bottom and Fire-Escape, of which the following is a specification:

The object of this invention is to so construct the bottom of bedsteads used in large hotels, hospitals, and other frequented places that in case of fire the bed-bottoms can be readily converted into convenient fire-escapes.

The invention consists in the details of improvement hereinafter pointed out.

In the accompanying drawing, Figure 1 represents a top view of our improved bed-bottom. Fig. 2 is a vertical cross-section; Fig. 3, a vertical longitudinal section of the same. Fig. 4 is a cross-section of the front of a house to which the improved fire-escape is applied.

Similar letters of reference indicate corresponding parts in all the figures.

The letter A represents the frame of the bedstead. B B are sectional or jointed ladders, which constitute the bed-bottom, and which rest upon cross-bars C of the frame A. Each ladder B is preferably made in two sections, as indicated in Fig. 3; but it is quite evident that it may also be made of a single section, or of more than two sections.

The sections of each ladder are jointed together at one end, as indicated at *a* in Fig. 3, and they are so made that one can fold into the other, as indicated in Fig. 2, so that the height occupied by them will not exceed materially the thickness of any one section.

Each section is composed of two horizontal rods or bars, *b b*, which are connected by a series of rings, *d*.

From one of the sections of each ladder project upwardly a series of springs, *e e*, as clearly shown in Figs. 2 and 3, the same constituting the bed-springs. The ladders thus used in the bed form a spring bed-bottom, and is held in place by a cross-bar, D, which is passed through the frame A, so as to extend across the ladders, as shown in Fig. 1, and hold them down; but other means for holding the ladders in place may, if desired, be used; or suitable catches may be provided, if desired. In

fact, we believe that their weight will suffice to hold them properly in position; but we find the rod D to be convenient, more chiefly for the fire-escape.

In case of a fire, the rod D is withdrawn from the frame A, and the ladders B B are taken out and extended.

Each of the ladders has a hook, *g*, formed at one end, as clearly shown in Figs. 3 and 4, so that the several sections of ladders may be conveniently hooked onto each other until the desired length is reached. The ladders thus connected are let out through the window, and the uppermost ladder, which is or may be provided with two chains, *f f*, is finally secured to the building by passing the rod D through two links of said chains, and resting the ends of said rod against the inner side of the window-casing, as clearly indicated in Fig. 4.

A ready and convenient means of escape is thus provided, which has the additional advantage in that the springs *e* bear against the front of the building, and hold the ladder sufficiently far distant from the walls to enable a person to conveniently climb up or down on the ladders. The springs also, by bearing against the projecting cornices, lintels, sills, and capitals of the building, protect the parties from contact therewith, and from the inconvenience which would otherwise, in hanging ladders, be occasioned by these projections.

We are aware that a bed-bottom composed of ladders having helical springs, adapted to support the bedding, and serving as fenders to hold the ladder from the wall, is not new with us, and we do not claim the same; but

We do claim—

1. The combination of the rod D with the bed-frame A and ladders B B, substantially as and for the purpose specified.

2. The combination of the jointed or sectional ladders B B, having hooks *g* and springs *e*, with each other for use as a bed-bottom and fire-escape, substantially as herein shown and described.

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Witnesses:

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