Deckelmann & Spiess.

Fire Escape.

No. 27,972. Patented Apr. 24, 1860.

Fig. 1.

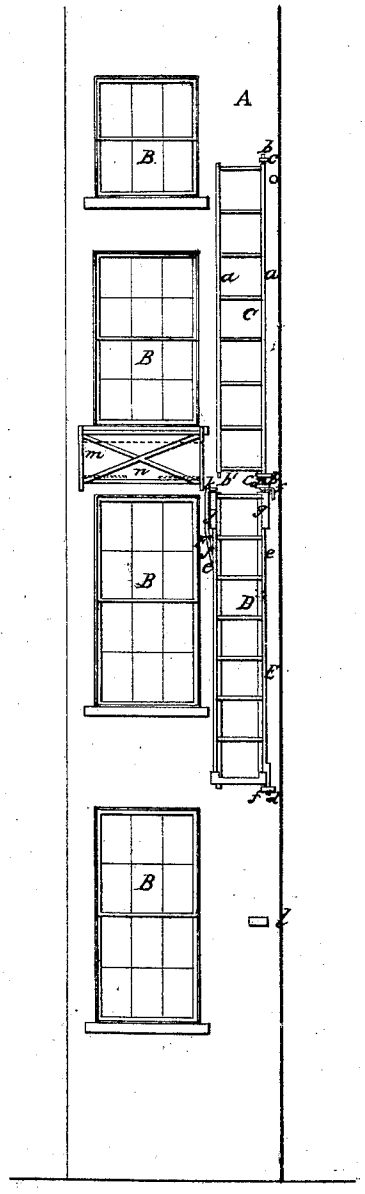


Fig. 2.

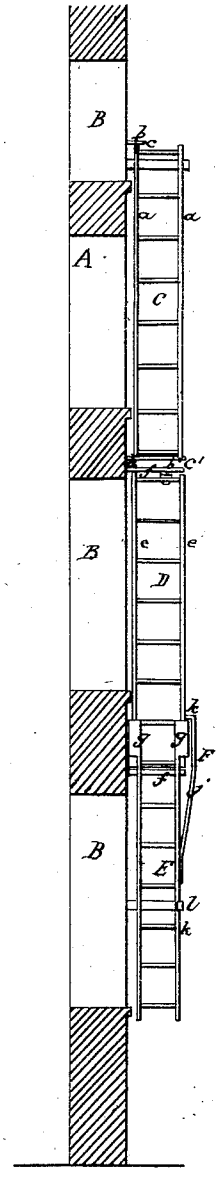
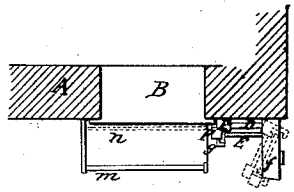


Fig. 3.



Witnesses;

M M Livingston

B L Snow

Inventors;

F. Spiess

Deckelmann

THE GRAPHIC CO. PHOTO-LITH. 39 & 41 PARK PLACE, N.Y.

UNITED STATES PATENT OFFICE.

JOHAN DECKELMANN AND F. SPIESS, OF NEW YORK, N. Y.

FIRE-ESCAPE.

Specification of Letters Patent No. 27,972, dated April 24, 1860.

To all whom it may concern:

Be it known that we, JOHAN DECKELMANN and FREDERICK SPIESS, both of the city, county, and State of New York, have invented a new and Improved Fire-Escape; and we do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a front view of our invention applied to a building and represented in a folded or closed state. Fig. 2 is a side view of the same in an unfolded state ready for use. Fig. 3 is a plan or top view of two of the ladders of the same, showing the way in which they are connected, in a folded or closed state, and released when desired for use.

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

This invention consists in attaching a series of iron ladders to the side of a building so arranged that they may be folded together, two or more of them, and turned against the building when not desired for use and readily turned out from the building, and unfolded when required for use.

The invention also consists in using, in connection with the above, folding balcony platforms, as hereinafter described.

The object of the invention is to afford a ready means of escape for the inmates of a dwelling or building in case of fire—a means always at hand and available for instant use.

To enable those skilled in the art to fully understand and construct our invention we will proceed to describe it.

A represents a portion of the elevation of a four-story building, B, the windows, and C, D, E iron ladders which are secured to the building in close proximity to the windows. The ladder C, which is the uppermost one has one of its rails *a*, provided with tenons *b*, at its upper and lower ends, said tenons being fitted in eyes *c*, *c'*, which are firmly secured in the wall of the building A. The tenons *b*, are fitted loosely in the eyes *c*, *c'*, so that they may turn freely therein, and the lower eye *c*, projects sufficiently far out from the building that it may have a hole made in it to receive a tenon *b'*, on the lower end of the outer rail *a*, and secure the ladder when desired for use in a position at right angles with the wall of the building, as shown in Fig. 2. The ladder C, has a certain degree of vertical play allowed it in order that the tenon *b'*, may be raised and lowered out from and into the hole in the bar of the eye *c'*, and the ladder C, thereby readily adjusted closely to, or out from the building as may be required. The ladder C, is so placed relatively with the two windows of the third and fourth stories that persons may pass on it from said windows by the aid of balconies or otherwise. This will be fully understood by referring to Figs. 1 and 2.

Directly below the ladder C, the ladder D, is placed and attached to the building A, in a similar manner; to wit, by means of tenons *d*, on its inner rail *e*, fitting in eyes *f*, in the building. On or to the ladder D, the ladder E, is secured, and allowed to slide freely up and down thereon. The ladder E, is secured to D, by means of clasps *g*, *g*, at the upper end of the ladder E, said clasps encompassing the rails *e*, *e*, of ladder D. To one of the rails *h*, of ladder E, a spring catch F, is attached. This catch is formed of a spring *j*, provided with a hook *k*, at its upper end, which, when the ladder E, is shoved upward on ladder D, catches over the tip end of the rails of ladder D, and retains ladder E, in a folded or closed state thereon, as shown in Fig. 1.

The uppermost eye *f*, of the ladder D, forms a projection to actuate and throw out the catch F, when the ladders D, E, are turned outward at right angles from the building. This will be fully understood by referring to Fig. 3, in which the ladders D, E, are shown in red, and the hook *k*, of catch F, just coming in contact with the eye *f*. When the hook *k*, is thrown off the top of the rail *e*, of ladder D, the ladder E, falls by its own gravity and the three ladders are then extended, and form a continuous ladder from the upper to the lower part of the building. Any number of ladders may thus be arranged, according to the height of the building and any number of guides and catches *l*, may be employed to hold the ladders in proper position, when unfolded or extended for use.

The ladders, it will be understood form a permanent fixture and may be applied to the building at the time of its erection. The device therefore will always be at hand ready for use if occasion requires.

The invention will not be an expensive one

to construct and apply to buildings, and when once applied, if properly constructed will remain for years in proper order. The folding together of the lower ladders is essential in order to prevent the ingress of improper persons, burglars, etc., when the ladders are not required for use.

If balconies *m* be used, as would of course be necessary in many cases, and desirable in all, they should be provided with a hinged platform *n*, so that the same when not required for use may be turned up against the building, and thereby not serve to obstruct the light or prevent it passing through the window below. This is an important feature, for, in large cities, a balcony platform would in many cases be too great an obstruction to light. In the drawings, Figs. 1 and 3, the platform *n*, is shown down in black and up in red.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is:—

The employment or use of a series of iron ladders C, D, E, arranged so as to fold together, all or a portion of them, and be extended as required, and also to swing out from the building, substantially as and for the purpose set forth. We also claim in connection with the above the folding balcony platforms *n*, for the purpose specified.

JOHAN DECKELMANN.
FR. SPIESS.

Witnesses:
W. DECKELMANN,
JOHANNES GÅNOL.