

C. HINKLE.
Fire-Escapes.

No. 206,787.

Patented Aug. 6, 1878,

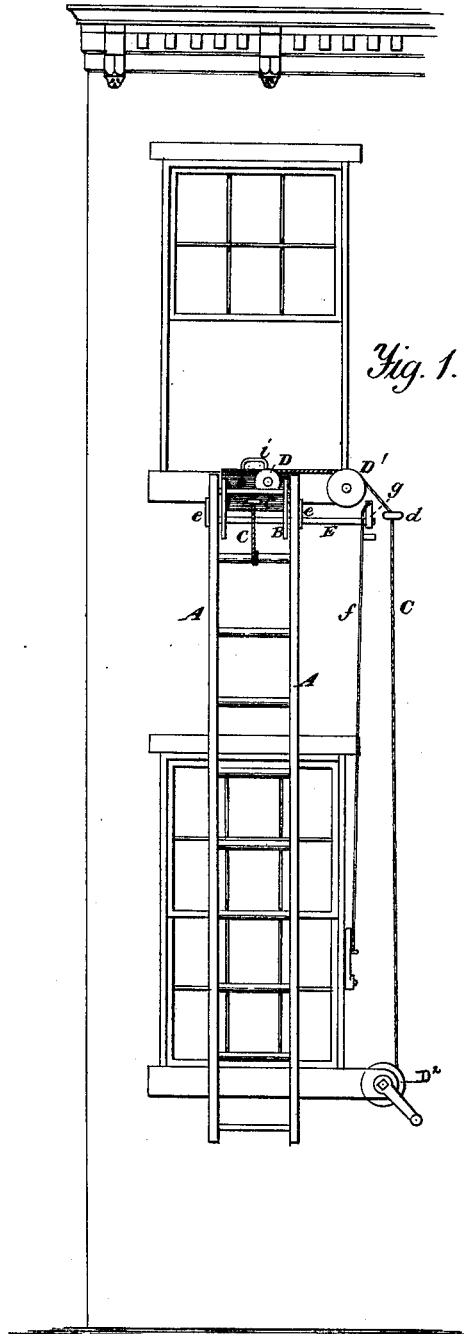


Fig. 1.

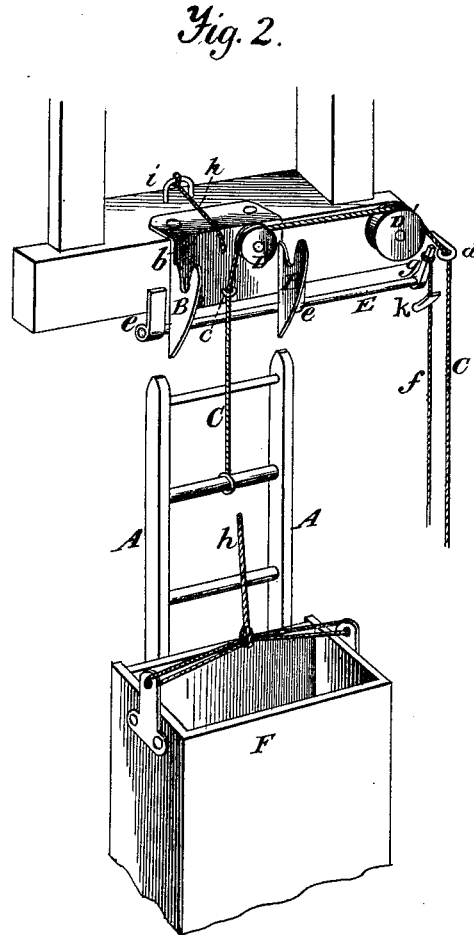


Fig. 2.

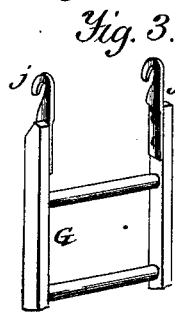


Fig. 3.

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UNITED STATES PATENT OFFICE.

CHARLES HINKLE, OF WINFIELD, IOWA.

IMPROVEMENT IN FIRE-ESCAPES.

Specification forming part of Letters Patent No. 206,787, dated August 6, 1878; application filed January 7, 1878.

To all whom it may concern:

Be it known that I, CHARLES HINKLE, of Winfield, in the county of Henry and State of Iowa, have invented certain new and useful Improvements in Fire-Escapes; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification, and in which—

Figure 1 is a view of my fire-escape ladder elevated in position to the sill of a window. Fig. 2 is a perspective view of the same and a receptacle being elevated; and Fig. 3 is a similar detached view of the ladder itself.

Corresponding parts in the several figures are denoted by like letters.

This invention appertains to certain improvements in fire-escape ladders; and it consists in the employment, in connection with a ladder, of hooks attached to the window-sill of a building and a detaching device, substantially as hereinafter more particularly set forth.

In the annexed drawing, A refers to an ordinary ladder. B B refer to hooks preferably secured to a plate, *b*, fastened to the window-sill. The ladder is suspended in position upon the hooks B B by causing one of its rounds to rest therein.

The ladder is elevated by a rope or wire, C, fastened to one of its rounds and passing up through an eye or guide, *c*, in the plate *b*, and over two pulleys, D D¹, both being attached to the plate *b*, in practice elongated for that purpose, and thence down through an eye or guide, *d*, and around a windlass or drum, D², which is provided with a ratchet and pawl to prevent the unwinding of the rope or wire from the drum or windlass.

When the ladder is elevated in position to the window-sill it is readily detached or cast off by means of a device consisting of an axis or rod, E, resting in eyes or hangers fastened to the plate *b* and provided with arms *e e*, which, as the ladder is raised above the hooks

B B, and the rod or axis E is rotated by drawing upon the rope or wire *f* fastened to a lever-arm, *g*, thereof, will be brought against the side pieces of the ladder and force the round of the ladder out from the hooks B B, and thus permit its detachment from the said hooks.

A receptacle, F, may be suspended from the rope *h*, when desired, to remove articles of clothing or persons from the burning building, the said rope passing once around and through the staple *i* fastened to the window-sill and caught by the person within the house to permit the lowering and raising of said box or receptacle.

The ladder-hoisting rope or wire is preferably connected to a windlass provided with a ratchet to hold it at any given point for its convenient manipulation.

G is an additional ladder or ladders, having hooks *j j* for use in connection with ladder A when occasion may require. *k* is a stop, against which the lever-arm *g* strikes and limits the outward movement of the arms *e e* of the detaching device.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The detaching device E *e*, arranged in relation to the hooks B so as to detach a ladder lifted sufficiently to clear the same, substantially as described.

2. In a fire-escape, the hooks B B and detaching device E *e e*, in combination with the ladder A, hoisting rope or wire C, and pulley or pulleys D D¹, substantially as and for the purpose set forth.

3. The combination of the hooks B, detaching device E *e*, lever *g*, cord *f*, and stop *k*, substantially as shown and described.

In testimony that I claim the foregoing as my own I hereunto affix my signature in presence of two witnesses.

CHAS. HINKLE.

Witnesses:

W. C. BRYANT,
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