

J. C. MOORE.
FIRE-ESCAPE.

No. 172,147.

Patented Jan. 11, 1876.

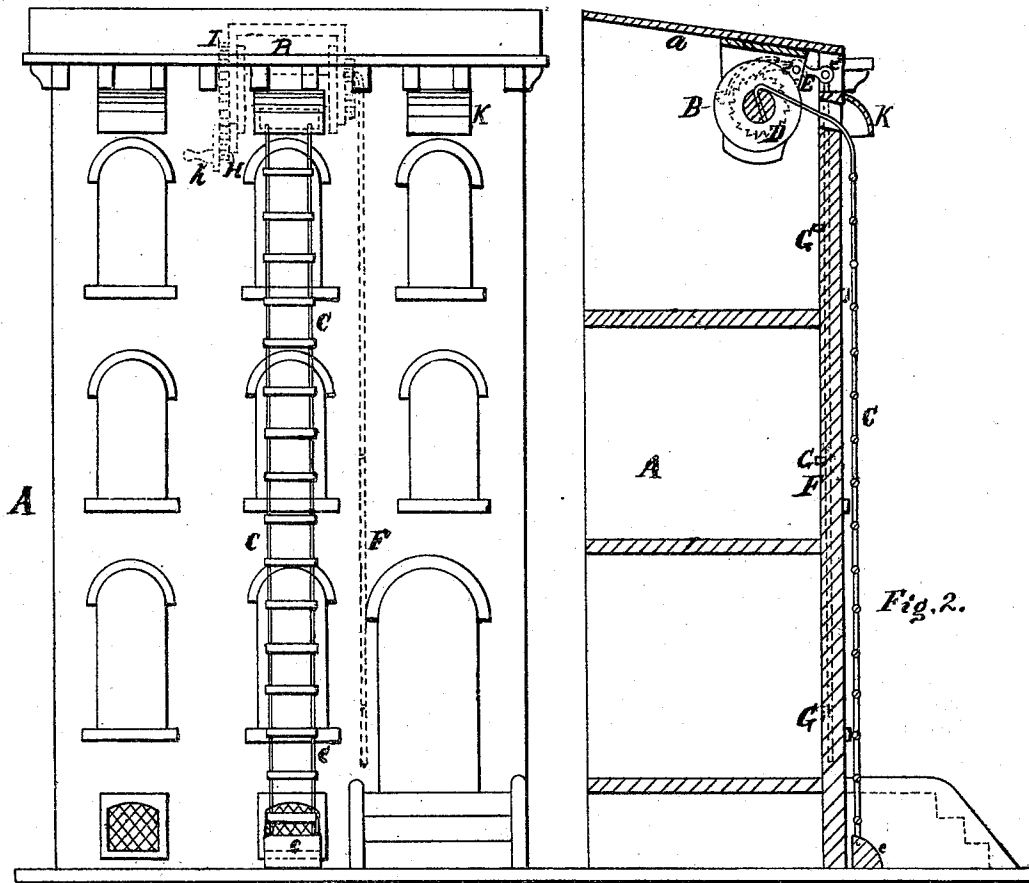


Fig. 1.

Fig. 2.

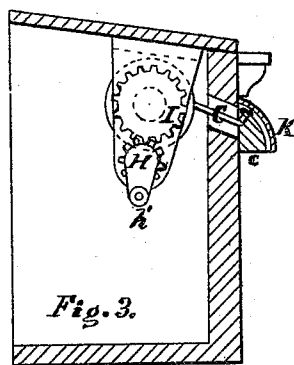


Fig. 3.

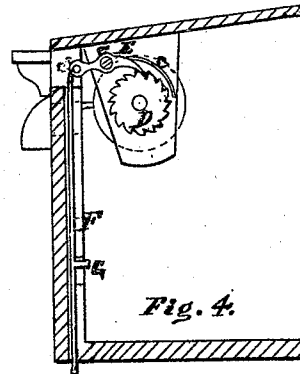


Fig. 4.

Witnesses

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JAMES C. MOORE, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN FIRE-ESCAPES.

Specification forming part of Letters Patent No. **172,147**, dated January 11, 1876; application filed June 18, 1875.

To all whom it may concern:

Be it known that I, JAMES C. MOORE, of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Fire-Escapes; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification, in which—

Figure 1 is a front elevation, and Fig. 2 a vertical section, of a building with my improvements applied. Figs. 3 and 4 are detail views.

The object of my invention is to provide means whereby a fire-escape composed of a wire or rope ladder, wound on a drum or cylinder at or near the roof of a house, may be caused to unwind and fall into position by the occupant of any lower story of the house.

My invention consists, essentially, in the combination, with a weighted fire-escape ladder, of a rod or other equivalent means for liberating the drum on which said ladder is rolled, so as to permit the latter to unwind and take position accessible from any part of the house, said rod extending from the drum to any or all of the lower stories, so that it may be operated by any of the occupants thereof.

Referring to the accompanying drawing, A shows a house or store to which my improved fire-escape has been applied. B is a drum or cylinder, mounted in suitable bearings just below the roof *a*. C represents a rope or wire ladder, one end of which is securely attached to the drum B, its other end being provided with a weight, *c*, to cause said ladder to unwind and run down to the ground when the

drum is free to revolve. D represents a ratchet fast on the drum-shaft, and E a pawl engaging therewith and held down by a spring, *e*. The pawl is pivoted at *e*¹, and connected at *e*² with a rod or other equivalent attachment, F. The rod F extends downwardly, as shown, through the various floors and ceilings of the tenement, being bent to form or provided with handles G G, by which it may be drawn down by any of the occupants of the various stories. H represents a pinion, having a winch or handle, *h*¹, and gearing with a cog-wheel, I, on the drum, by means of which the ladder may be wound up. Ordinarily, the ladder remains wound on the drum, the weight *c* reposing from view beneath a projecting hollow sill or cornice, K. When a fire occurs the ladder may be instantly unwound by the occupant of any of the floors by drawing down upon the rod F by means of any of the handles G G. The downward motion of the rod F releases the pawl E from engagement with the ratchet D, when the gravity of the weight causes the ladder to unwind and run down to the ground, as shown in Figs. 1 and 2.

What I claim as my invention is—

The rod F, extending through the various floors and ceilings, so as to be accessible from any of the stories, in combination with the drum B, for holding the ladder C, said drum having a spring-pawl, E, and ratchet or equivalent retaining device, substantially as shown and described.

In testimony that I claim the foregoing I have hereunto set my hand this 9th day of June, 1875.

JAMES C. MOORE.

Witnesses:

JOS. B. CONNOLLY,
CHAS. F. VAN HORN.