

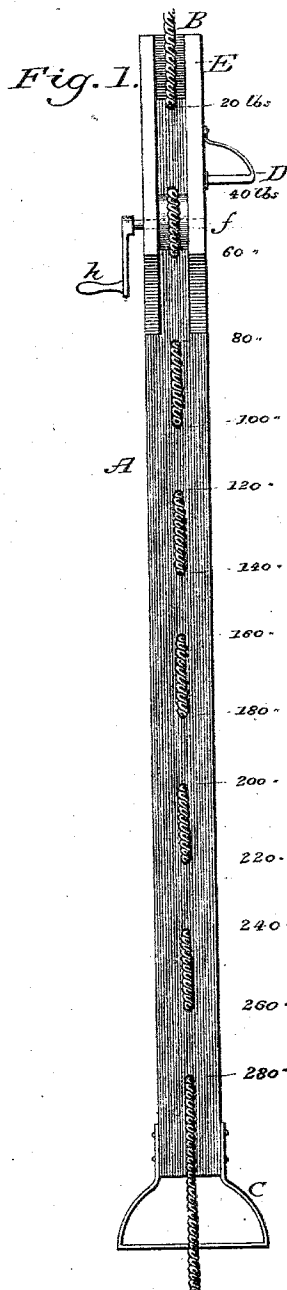
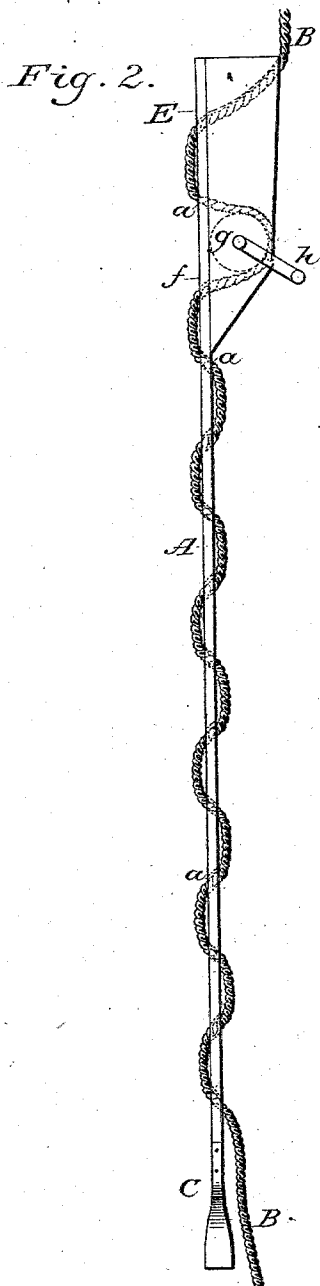
(No Model.)

D. L. GARVER.

FIRE ESCAPE.

No. 289,080.

Patented Nov. 27, 1883.



Witnesses:

Cyrus B. Stearns
E. E. Quincy

Inventor:

David Garver

UNITED STATES PATENT OFFICE.

DAVID L. GARVER, OF HART, MICHIGAN.

FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 289,080, dated November 27, 1883.

Application filed June 30, 1883. (No model.)

To all whom it may concern:

Be it known that I, DAVID L. GARVER, a citizen of the United States of America, residing at Hart, in the county of Oceana and State of Michigan, have invented a new and useful Improvement in Fire-Escapes, of which the following is a specification, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form part of this specification.

My invention relates to that class of fire-escapes by which a person or persons may descend from a burning building by a single rope, and the object is to provide additional safeguards for those who are exposed to the perils of burning buildings.

In the accompanying drawings, Figure 1 is a front vertical view of my single-bar fire-escape, with the rope B attached and adjusted to a brackage of two hundred and eighty pounds. Fig. 2 is a side elevation of the bar, illustrating more fully the manner of adjusting the rope B.

C is a stirrup for both feet of one person or one foot each of two persons. This stirrup is firmly attached to the lower end of the upright bar A, thus keeping the feet in proper position.

D is a handle attached near the upper end, to which the operator can hold with one hand. The guide-block E, attached to the upper end, for the rope to slide over, is essential in keeping the fire-escape and the person in a vertical position.

The scale of numbers *d* is important to the convenience and safety of the person in adjusting the rope; the holes *a* being at an angle of forty-five degrees, producing a brackage of just twenty pounds for each hole, which enables us to make a scale of numbers, *d*, on the multiples of twenty, by which a fire-escape can be made large or small to carry any number of pounds desired, commencing at the upper end of the machine, and placing the number *d* opposite each hole, indicating the number of pounds resistance that each hole adds as we descend.

Near the upper end of the bar A is attached

a roller, *f*, which turns upon a shaft, *g*, with the crank *h*. This pulley controls the number of pounds over the multiple of twenty used.

In operating my machine the person commences at the upper end, passing the rope back and forward through the holes until arriving at the number that indicates the heft of the person, then attaches the upper end of the rope to a hook, which should always be kept attached to the upper portion of the window-frame. The rope should be long enough to reach to the ground. Now, the person steps both feet in the stirrup, takes hold of the handle with one hand and the crank with the other, and by turning the crank goes down with entire safety and with but little physical exertion. When two or more persons wish to descend at the same time, they adjust the rope to their combined weight, as indicated by the numbers; then, putting one foot of each person in the stirrup, they may go down by one turning the crank.

I am aware that fire-escapes have been constructed with two upright bars, with round cross-bars for the purpose of a brake, and that there are also fire-escapes with pulleys provided with spikes or teeth to prevent the rope from slipping. I therefore do not claim these; but

What I do claim as my invention, and desire to secure by Letters Patent, is—

1. In a fire-escape, the combination of the single bar A and the scale of numbers *d*, the angling holes *a*, the stirrup C, and handle D, and the guide-block E, constructed and arranged substantially as set forth.

2. A fire-escape with the single upright bar perforated with numerous holes to pass a rope through, combined with a scale of figures indicating the number of pounds brake or resistance that each hole adds when the rope is passed through it, for the purposes herein set forth.

DAVID L. GARVER.

Witnesses:

BENJAMIN S. GARVER,
EDWIN S. PALMITER.