

W. McCord.

Fire Escape.

N^o 28,880.

Patented Jan. 26, 1860.

Fig. 2

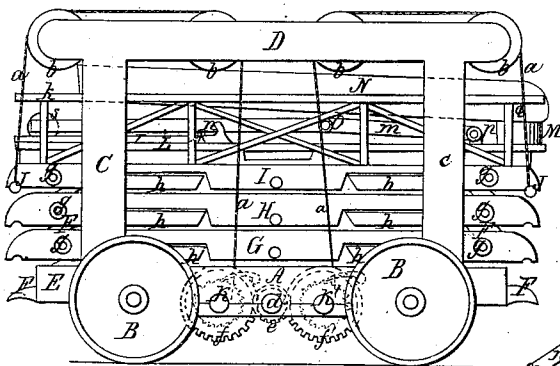
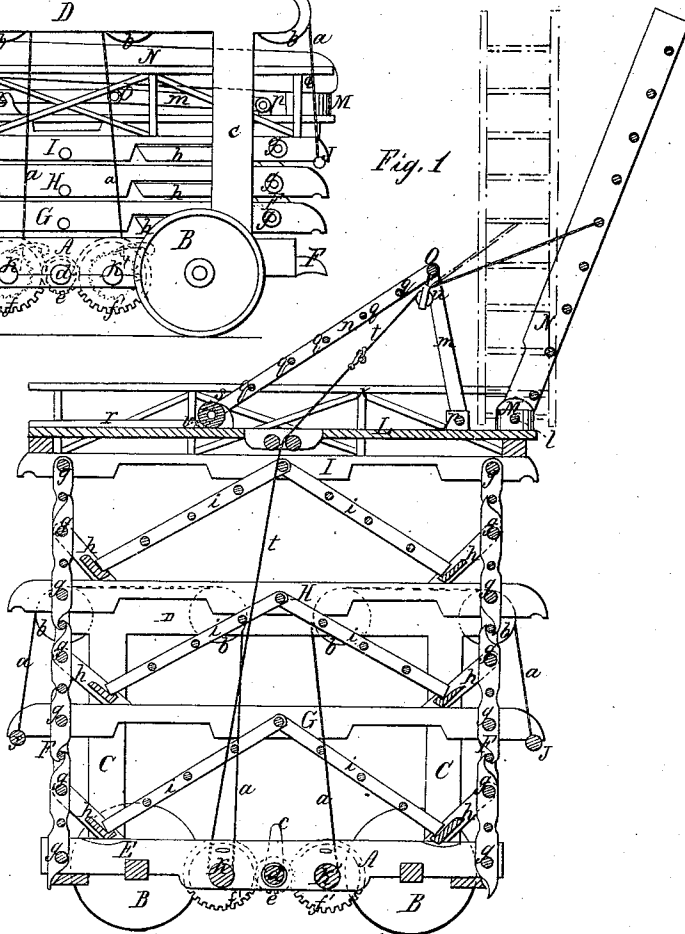


Fig. 1



Witnesses
Jm Thompson
Mm Thompson

Inventor
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UNITED STATES PATENT OFFICE.

WILLIAM McCORD, OF SING SING, NEW YORK.

FIRE-ESCAPE.

Specification of Letters Patent No. 28,880, dated June 26, 1860.

To all whom it may concern:

Be it known that I, WILLIAM McCORD, of Sing Sing, in the county of Westchester and State of New York, have invented a new and Improved Fire-Escape; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1, represents a longitudinal vertical section of this invention, when elevated and ready for use. Fig. 2, a side elevation of the same, when it is compressed, and ready for transportation.

Similar letters of reference indicate corresponding parts in both figures.

This invention consists in arranging a series of rising and falling frames on links supported by self-acting braces, and operated by two windlasses in combination with a platform in such a manner that by raising one frame after the other the platform can be elevated to a considerable height, convenient for the firemen to reach the fire in a building or to assist the persons inclosed in a burning building to escape.

It consists also in arranging the links which support the rising and falling frames, and also the braces themselves with rounds, in such a manner that said links and braces form the means to go up to and down from the platform; and it consists further, in combining with the platform on the top of the rising and falling frames, a ladder, which is united with said platform by a universal joint in such a manner that it can readily be turned either way, and inclined to any angle, thereby affording the means to reach persons in the upper stories or on the top of a burning building, in such cases even where it is impossible to bring the apparatus close up to the building; also in controlling the motion of said ladder by means of a derrick on the top of the platform and by a rope secured to one of the rounds of said ladder, and operated by one of the windlasses, which serve to elevate the platform.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation with reference to the drawings.

A represents a truck supported by four wheels B, and provided with four posts C, which support the longitudinal timbers D.

Between the posts C, and pivoted to the inner sides of the bottom timbers E, of the truck are the links F, which support the rising and falling frames G, H, I. Three such frames are represented in the drawing, but the number of the same might be increased at pleasure. These frames are elevated by means of cross-bars J, which are attached to ropes or chains *a*, running over rollers *b*, in the longitudinal timbers D, and secured to windlasses K, K', which are attached to the bottom timbers E, of the truck. These windlasses are operated by a crank *c*, on an arbor *d*, and pinions *e*, on this arbor and gearing into the cockwheels *f*, *f'*, on the arbors of the windlasses, serve to impart motion to said windlasses in opposite directions. The links F, are hinged together by rounds *g*, extending all the way across the width of the truck and serving as steps to ascend or descend, if the apparatus is elevated. The form of these links is such that when the same are stretched to their full extent, their ends, by striking against the rounds above and below, prevent them from collapsing in one direction, and traps *h*, which are hinged to the sides of the links, together with braces *i*, that are hinged to the centers of the frames G, H, I, serve to keep the links rigid, when the apparatus is elevated. The braces *i*, are made in the form of short ladders, and as the frames G, H, I, are elevated, the traps turn down and the braces or ladders *l*, adjust themselves in such a position, that the whole structure is rendered perfectly firm.

The top frame I, supports the platform L, and when the apparatus is elevated, access can be had to the same by means of the rounds *g*, which unite the links F, on the outside, or by means of the ladders or braces *i*, from the inside of the apparatus. The platform is furnished with rails *k*, on its sides, and it serves to give to the fireman directing the hose an elevated position, or to facilitate the egress of persons from a burning building.

Arranged on one end of the platform is the swivel M, to which the ladder N, is united by the bottom round *l*, thus forming a complete universal joint, and allowing the ladder to be turned in either direction. When this ladder is not used, it is turned down flat on the platform, and a derrick O, assists in elevating said ladder. This derrick consists of two pairs of arms *m*, *n*,

which are united by a pivot *o*. The arms *m*, are pivoted to a head *p*, that is rigidly fastened to the platform, and the arms *n*, which are united by rounds *q*, in the form of a ladder slide on ways *r*, a roller *s*, being provided to facilitate their motion. Said derrick is elevated by a rope *t*, which extends down to the windlass *K*, and which is hooked into one of the rounds that unites the arms *n*, by turning the windlass, the derrick is drawn up to a position shown in Fig. 1, and it is retained in this position by stops *v*, at the ends of the ways *r*. The rope *t*, is now drawn over the roller *u*, in the top of the derrick and it is fastened to one of the rounds of the ladder *N*, and this ladder is turned out to a position shown in Fig. 1. The inclination of the ladder can be governed by the rope *t*, and said ladder can be turned on the swivel *M*, into any desirable direction, thus affording the means of escape for persons in the upper stories, or on the top of a burning building even in such cases where it is impossible to approach closely with the apparatus to said building. This apparatus may also be used with advantage by painters or by other mechanics or work-

ing men in every case where a scaffolding is needed.

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

1. The arrangement and combination of the rising and falling frames, *G*, *H*, *I*, (more or less) links *F*, braces *i*, and platform *L*, constructed and operating substantially as and for the purpose specified.

2. Arranging the links *F*, and braces *i*, with rounds, substantially as described, so that the same form the means to go up to, and down from the platform *L*.

3. The combination with the platform *L*, of a ladder *N*, and swivel *M* constructed and operating substantially as and for the purpose specified.

4. The arrangement of the derrick *O*, and rope *I*, to operate in combination with the ladder *N*, and swivel *M*, substantially as and for the purpose described.

WM. McCORD.

Witnesses:

WM. THOMPSON,
M. M. LIVINGSTON.