

UNITED STATES PATENT OFFICE.

O. F. BURTON, OF NEW YORK, N. Y., ASSIGNOR TO HIMSELF AND M. H. HOVEY, OF
SAME PLACE.

FIRE-ESCAPE.

Specification of Letters Patent No. 29,542, dated August 7, 1860.

To all whom it may concern:

Be it known that I, OSCAR F. BURTON, of the city, county, and State of New York, have invented a new and Improved Fire-
5 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 drawing, forming a part of this specification, in which—

10 Figure 1, is a longitudinal vertical section of my invention, when the ladders are elevated and ready for use. Fig. 2, is a side elevation of the same when the ladders are down.

15 Similar letters of reference in both views indicate corresponding parts.

This invention consists in connecting the ladders with each other and with the two trucks in such a manner that by pushing
20 the trucks together the ladders are elevated, and pushing the trucks apart the ladders are lowered; and also in arranging the trucks with circular platforms which project beyond the sides of the wheels and which form the
25 guides for the rings to which the pivots are secured which form the bearings for the lower ends of the ladders, thereby forming a good and substantial basis for the ladders, and at the same time allowing the trucks to
30 turn, independently of the ladders.

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

35 The two ladders A A', are connected by pivots *a'*, which are firmly secured in the sides of the ladder A', and which work in loops *a*, attached to the edge of the beams of the ladder A. The distance of the pivots
40 and loops from the lower ends of the ladders may be more or less, according to the length of the ladders and to the inclination which they are intended to receive, and according to the size of the trucks to which the ladders
45 are to be attached. The lower ends of the ladders are made wider than their upper portion, and they are attached to rings B, B', by means of pivots *b*, *b'* as clearly shown in Fig. 2. The rings B, B', rest on the trucks
50 C, C', which are provided with circular platforms *c*, *c'*, which are supported from the axles of the wheels D, D', and which form the guides for the rings B, B'. Small hooks or lips, overlapping the edge of the
55 rings may be attached to the platforms, in

order to keep the rings more secure. By these means the rings are held stationary by the ladders, while the platforms with the wheels and draft poles are allowed to turn in either direction, so that the ladders, 60 whether elevated or lowered, can be carried to any place. The platforms at the same time give sufficient room for the firemen to work upon and by making the lower end of the ladders sufficiently wide to embrace the 65 rings B, B', and by giving to these rings a pretty large diameter, the wheels of the trucks can be brought sufficiently far apart to give steadiness and firmness to the whole apparatus. An additional ladder E, is 70 hinged to the ladder A', near to its upper end and a hose may be attached to the ladders A' and E, as shown in red outlines in Fig. 2, so that the former on reaching the 75 top of the ladder, can play on the fire without delay.

The ladders A, A', are elevated by pulling the two trucks C, C', together and this operation is facilitated by a windlass F, which is secured on the top of the ring B, 80 and which connects by means of a rope *d*, with a hook *e*, that is secured to the ring B'. After the ladders A, A', are elevated by forcing the two trucks together, the additional ladder E, is raised, which operation 85 may be facilitated by a rope *f*, and the position of the ladders is now strengthened by ropes *g* *g'*, and guy-ropes *h*, which are attached to the sides of the ladder A, serve to steady the whole while the men are at 90 work. The rope, *g'*, serves at the same time to assist in lowering the ladder E. After the ladders have been elevated, a bracket F', may be secured to the rope *f*, for the purpose of letting down children or infirm persons. 95

In order to lower the ladders the additional ladder E, is first hauled in and the trucks are now removed from each other, until the ladders A, A', sink down on the 100 standards *i*, *i*, which are secured to the rings B, B', and the whole apparatus is now in such a condition that it can readily be carried into an engine house, or in any other place for shelter. 105

This machine is very strong and durable, it can not easily get out of order, and it is easily handled with but very little experience.

Having thus fully described my inven- 110

tion, what I claim as new and desire to secure by Letters Patent, is;

1. Combining the ladders A, A', with each other, and with the trucks C, C', substantially in the manner herein described so that
5 by pulling the trucks close up together, the ladders are elevated, and by pushing the trucks apart, the ladders are lowered.

2. The arrangement of the rings B, B', in
10 combination with the hinged ladders A, A',

constructed and operating substantially as and for the purpose set forth.

3. The combination of the circular platforms c, c', of the trucks, with the rings B, B', substantially as and for the purpose
15 specified.

O. F. BURTON.

Witnesses:

J. F. BUCKLEY,

W. HAUFF.