Mickle & Carville.

Fire Escape.

No. 27,820. Patented Apr. 10, 1860.

Fig. 1

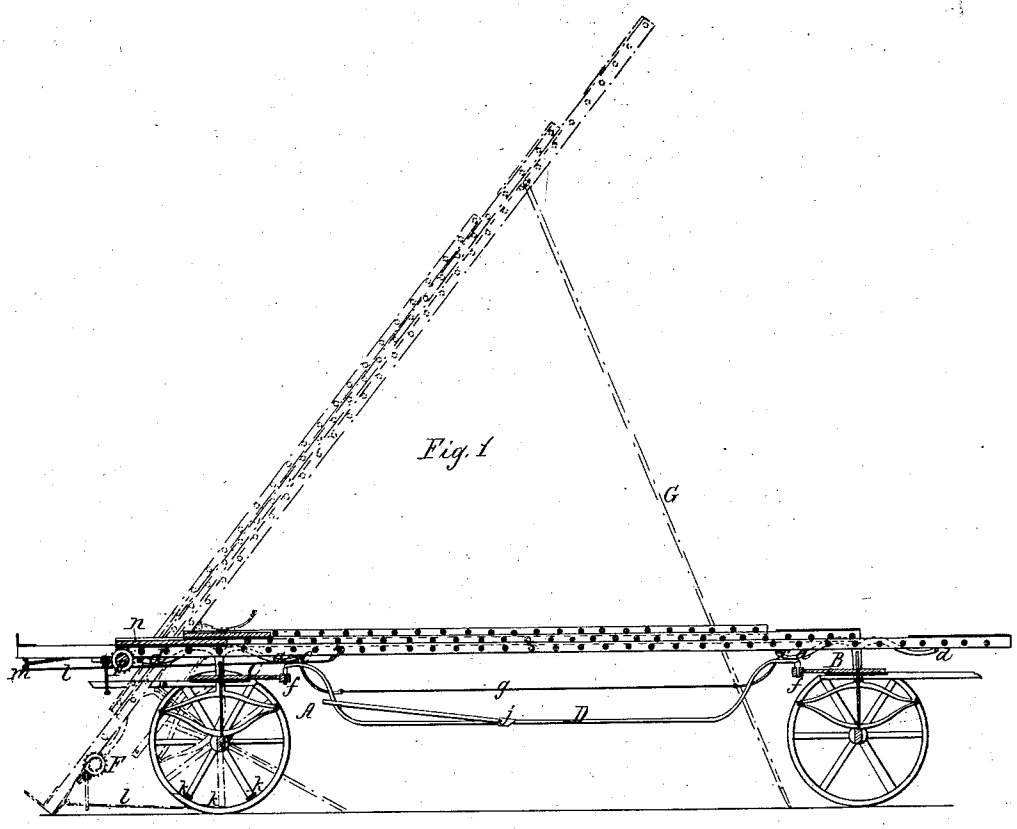
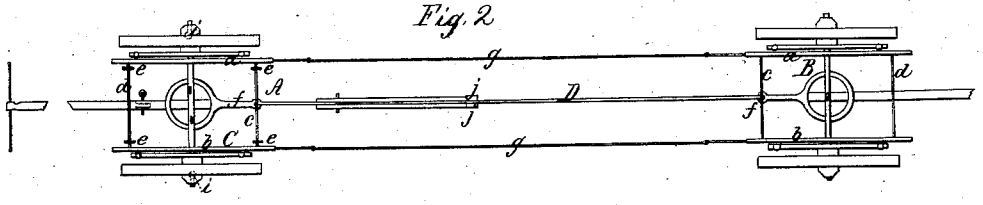


Fig. 2



Witnesses

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UNITED STATES PATENT OFFICE.

GEO. B. MICKLE AND J. M. CARVILLE, OF NEW YORK, N. Y.

TRUCK FOR FIRE-LADDERS.

Specification of Letters Patent No. 27,820, dated April 10, 1860.

To all whom it may concern:

Be it known that we, G. B. MICKLE and J. M. CARVILLE, both of the city, county, and State of New York, have invented a new and Improved Truck for Fire-Ladders; and we 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—

Figure 1 represents a longitudinal vertical section of our invention. Fig. 2, a plan or top view of the same.

Similar letters of reference in both views indicate corresponding parts.

The object of our invention is to construct a truck that will facilitate the manipulations of the ladder or ladders, and it consists, first, in arranging the two parts of the truck with suitable sockets to receive the ends of the connecting beam or perch, so that the latter can be disconnected from one or both parts of the truck at pleasure; second, in arranging the wheels of the front part of the truck with suitable sockets in the hubs, and with loops on the rims, or on the extreme ends of one of the spokes, in such a manner that by inserting suitable bars into said loops and sockets, the wheels are prevented from turning, keeping the front part of the truck from slipping while the ladder or ladders are raised or lowered; third, combining a windlass at the lower end of the ladder or ladders, with the front part of the truck, in such a manner that by means of the windlass, and by the aid of the truck, the ladder or ladders, are raised and turned in any direction, with comparatively little power, and with the greatest facility.

To enable those skilled in the art to make and use our invention, we will proceed to describe the same with reference to the drawing.

The truck A, consists of two parts B, C, each part containing two wheels connected by an axle in the usual manner. Each part is also furnished with its own draft pole, and both are provided with platforms to receive the ladders. Said platforms consist simply of four bars, *a b*, *c*, *d*, two, *a*, *b* being arranged in a longitudinal direction, and the two others *c*, *d*, in a transverse direction, and in order to guide the ladder or ladders, and to facilitate the motion of the same, said bars *c*, *d*, are constructed with flanges *e*, and they are made to rotate on the longitudinal bars *a*, *b*.

The part B, of the truck is intended to support the upper, and the part C, to support the lower end of the ladder or ladders, and both parts are connected by a perch D. The ends of this perch fit into sockets *f*, in such a manner that it can easily be removed and the two parts of the truck are further connected by ropes *g*, as clearly shown in Fig. 2. The wheels of the front part, C, of the truck, are furnished with loops *h*, and their hubs are provided with suitable sockets *i*, to receive the ends of cross bars E, which are usually secured in sockets *j*, alongside the perch, as clearly shown in the drawing, and one of the spokes of each of said wheels is provided with a collar *k*, to prevent the end of the rope which serves to raise the ladder or ladders, from slipping. The ladder or ladders are furnished with a windlass F, near to their lower end and ropes *l* extend from said windlass over blocks *m*, which are secured to the lowest end of the ladder.

The operation is as follows: In case of fire, and if it is desired to raise the ladders and to bring them up to a certain house and window, the truck is drawn to the spot, and the rear part B, of the same is disengaged by releasing the ropes *g*, and one end of the perch D, and the draft pole of the front part *c* of the truck is taken out. The crow bars E are now inserted into the loops *h*, and sockets *i*, in the wheels of said front part, and the wheels are turned until the ends of the crow bars touch the ground as shown in red outlines in Fig. 1. The ends of the ropes *l*, are now hooked into those spokes of the wheels, which are furnished with collars *k*, and power is applied to the windlass. Pins *n*, which bear against the crossbar *d* of the platform of the front part of the truck, prevent the ladder or ladders slipping, and as the ropes *l*, wind on the windlass, the truck assumes an inclined position, and the ladder or ladders are raised. By taking hold of the braces G, of the ladder, the men can now assist in raising and turning the ladder or ladders to the proper position.

The facility with which this truck can be handled, and the ease with which by its aid the ladders are raised and brought to the proper position, is unsurpassed, and it

recommends itself to the fire department as well as to the public as the best and readiest means for the purpose of saving life in case of fire.

What we claim as new, and desire to secure by Letters Patent, is—

1. The arrangement of the sockets *f*, at the two parts B, C, of the truck, in combination with the perch D, constructed and operating substantially as and for the purpose described.

2. The arrangement of the loops *h*, and sockets *i*, on the wheels of the front part of the truck, to operate in combination with the crow bars E, substantially in the manner and for the purpose specified.

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Witnesses:
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