

UNITED STATES PATENT OFFICE.

JOEL MOULTON, OF BOSTON, MASSACHUSETTS.

EXTENSION-LADDER.

Specification of Letters Patent No. 24,044, dated May 17, 1859.

To all whom it may concern:

Be it known that I, JOEL MOULTON, of Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful or Improved Fire-Engine-Hose Supporter and Extension-Ladder, which I do hereby declare is fully described and represented in the following specification and the accompanying drawings, of which—

Figure 1 denotes a front elevation of it; Fig. 2, a side view, and Fig. 3, a vertical and longitudinal section of it in an extended state, while Fig. 4 is a side view of it as it appears when contracted.

In the said drawings, A, B, and C, represent three long beams or bars arranged with respect to one another as shown in the drawings, they being so applied together as to enable one to slide freely on another in longitudinal directions. In other words, the two bars B, and C, are furnished with guide rails *a, a*, projecting respectively from their opposite sides and being spanned or embraced by projections or holders *b, b*, extending from the upper ends of the bars A, and B, and clasping the sides and edges of the rails. Furthermore, the bars A, and B, are furnished with dovetailed grooves *c, c*, for the reception of small dovetailed tongues or projections *d, d*, extending from the lower part or ends of the bars B, and C. Furthermore, the opposite side of each of the bars B, and C, is provided with a groove *f*, extending longitudinally through its middle. A chain or rope D, is attached to the lower end of the upper bar C, and from thence is carried upward around a sheave E, placed within the upper part of the bar B. From thence the said chain or rope is carried downward within the groove in the front part or portion of the bar B, thence around another sheave F, at or near the foot of the bar B, thence around a pulley or sheave H at or near the head of the bar A, thence downward and to the barrel of a windlass I, applied to the lower part of the bar A, as shown in the drawings.

Each of the bars A, B, and C, is furnished with a series of foot pins or handles *h, h, h*, extended from its opposite sides and at equal distances asunder as shown in the drawings. Furthermore a platform K, is affixed at the head or upper end of the bar C, and supported by three braces *i, k k*; each of these braces projects above the platform, the two marked *k k*, being provided with friction rollers *l, l*, arranged at their upper ends respectively. These rollers serve to support

the apparatus against the side of the building and enable it to move easily on the same. Furthermore, the brace *i*, having the form as shown in the drawings has a bent hose attachment, pipe or stream director L, suspended from it in such manner as to enable such pipe or director to be moved horizontally by two lines M, N, carried in opposite directions from its front end and respectively through the braces *k, k*, and thence downward as shown in the drawings. This pipe or stream director may serve of itself when attached to a hose to direct a stream of water into the window of a building on fire, or it may have the discharging pipe of a hose screwed into its front end while the hose may lead from its rear end down the ladder and to a fire engine or other means of forcing water through it.

By means of the handles or foot rests of the bars A, B, and C, firemen, or other persons can easily ascend or descend the apparatus while it may be placed against a building. So by means of the windlass and chain or rope applied to the three bars A, B, and C, the extension or contraction of the apparatus can readily be effected so as to place its platform at any desirable elevation within the limits of its motion.

An apparatus so constructed is of great use while a building is on fire, as well as for various other purposes.

I claim—

1. The improved extension ladder hose carrier constructed substantially in manner and with its parts arranged and applied together as described, viz., with a series of single ladder bars A, B, C, connected together and provided with pins or handles and having not only an extension line and sheaves connected with and arranged in them (the said bars) as explained, but a supporting platform and guide braces arranged at the upper part of the upper bar as described.

2. I also claim the combination and arrangement of the water conduit or hose pipe director and its guiding lines with the extension ladder constructed essentially in manner and to operate substantially as described.

In testimony whereof, I have hereunto set my signature.

JOEL MOULTON.

Witnesses:

R. H. EDDY,
F. P. HALE, Jr.