J. DAVENPORT.

FIRE-ESCAPES.

No. 195,747. Patented Oct. 2, 1877.

Fig. 1.

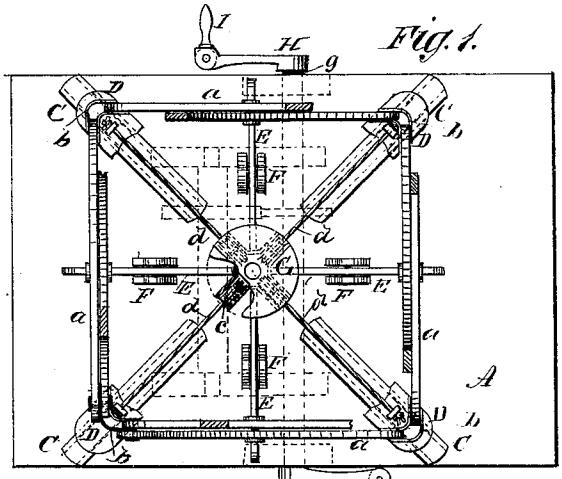
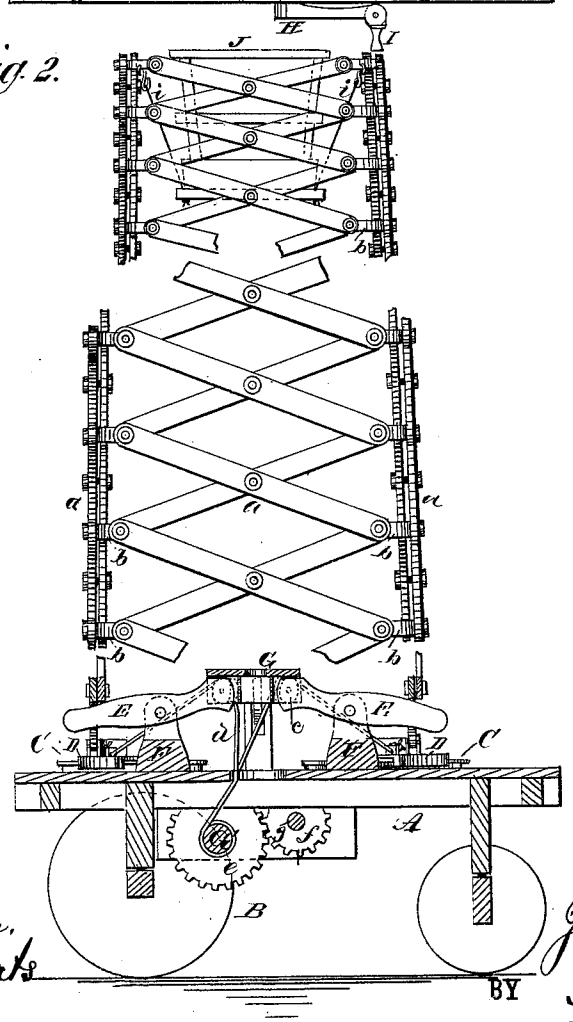


Fig. 2.



WITNESSES:

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UNITED STATES PATENT OFFICE.

JOSEPH DAVENPORT, OF MASSILLON, OHIO.

IMPROVEMENT IN FIRE-ESCAPES.

Specification forming part of Letters Patent No. **195,747**, dated October 2, 1877; application filed July 9, 1877.

To all whom it may concern:

Be it known that I, JOSEPH DAVENPORT, of Massillon, in the county of Stark and State of Ohio, have invented a new and Improved Fire-Escape, of which the following is a specification:

Figure 1 is a plan view of my improved fire-escape. Fig. 2 is a side elevation, partly in section.

Similar letters of reference indicate corresponding parts.

The object of my invention is to provide a fire-escape by means of which persons and goods may be rapidly lowered from the upper portions of buildings.

Referring to the drawing, A is a platform supported upon a truck, B, which may be of any ordinary construction. Upon the platform A four T-shaped guides, C, are secured, which are placed at right angles to each other, and upon each of which a head or slide, D, is placed.

Four sets of bars, *a*, are jointed together to form the well-known lazy-tongs, and are secured together at their outer joints by the curved pieces *b*, which are apertured at their ends to receive the bolts of the joints. The bars of each series thus united diminish in length toward the top of the series, so that all, when united, form a structure of pyramidal shape.

E E are levers, that are pivoted in standards F attached to the platform A, and extend outward under the central joint of the lower bars *a*, and inward under a plate, G.

Pulleys *c* are journaled between ears projecting from the under surface of the plate F. Ropes or chains *d* are attached to the slides D, and run over the pulleys *c*, and downward to a windlass, G′, under the platform A, to which windlass they are attached.

The windlass G′ has upon it a spur-wheel, *e*, that is driven by a pinion, *f*, on the shaft *g*, which is journaled to the truck-frame, and is provided with cranks H, having a jointed handle, I, that may be folded up when not in use. The said handle is provided with shoulders that are engaged by a spring-key when the handle is either open or folded.

At the top of the device a basket, J, is suspended by cords *i* from the corner curved pieces *b*, that connect the upper bars.

By turning the windlass G′ the rope or chain *d* is drawn over the pulley *c*, and the slides D are drawn toward the center of the platform A, and at the same time the plate G is drawn downward, carrying with it the inner ends of the levers E, the outer ends raising and carrying with them the lower pairs of jointed bars, causing the four series of bars to move upward, carrying with them the basket J. The basket is lowered by reversing the operation.

The platform A may be provided with screws, by which it may be inclined so as to throw the fire-escape toward the building when required.

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

1. The combination of the windlass G′, plate G, carrying pulleys *c*, levers E, the platform A, having guides C, and the bars *a*, jointed together, as described.

2. The combination of the levers E, having their front ends under plate G pivoted to standards F, and extended out under the central joint of bars *a*, with a lazy-tongs fire-escape, as and for the purpose specified.

JOSEPH DAVENPORT.

Witnesses:
THOMAS BLACKBURN,
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