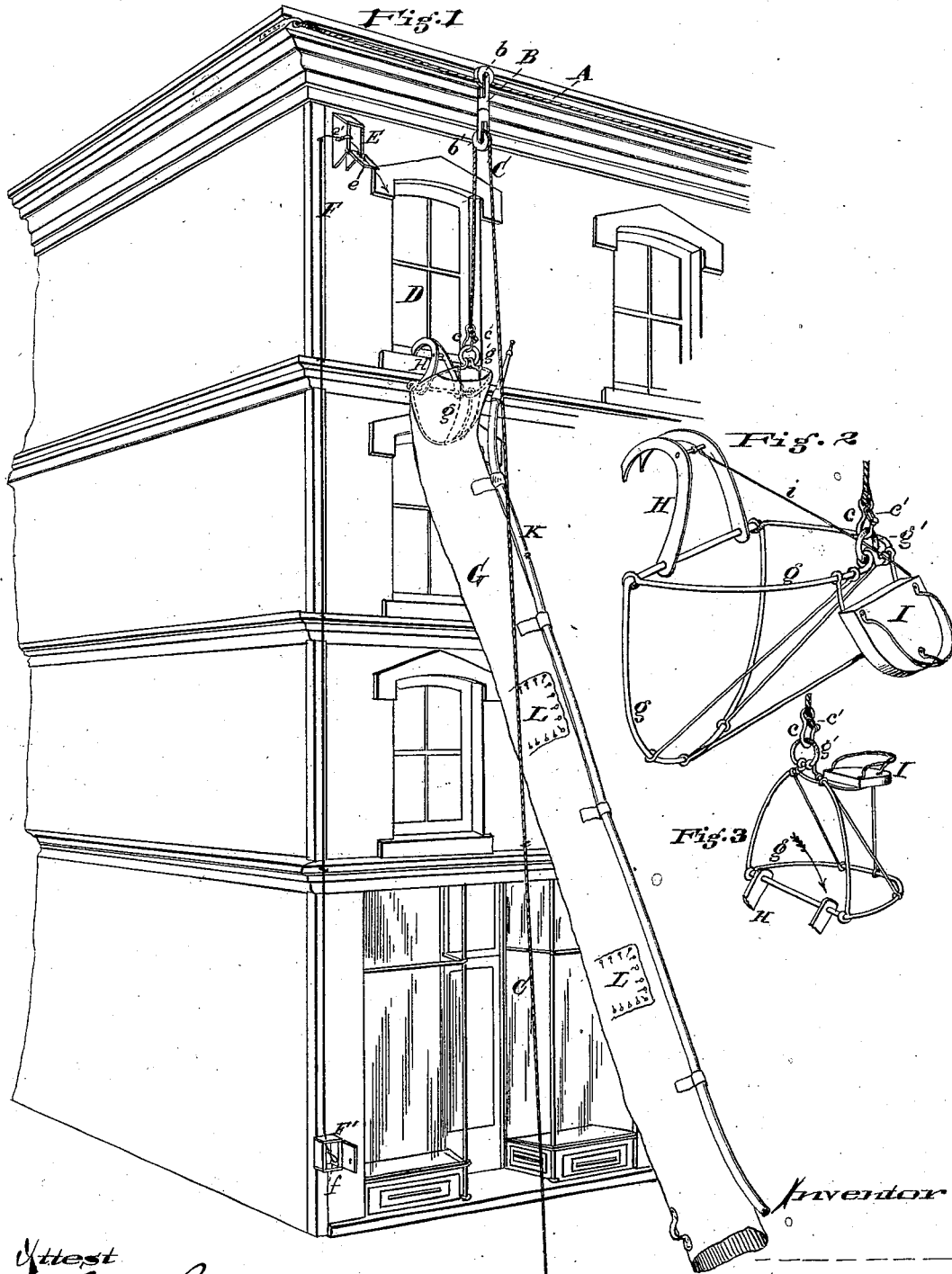


V. WOHLMANN.
Fire-Escape.

No. 208,944.

Patented Oct. 15, 1878.



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VALENTINE WOHLMANN, OF CINCINNATI, OHIO.

IMPROVEMENT IN FIRE-ESCAPES.

Specification forming part of Letters Patent No. 208,944, dated October 15, 1878; application filed May 14, 1877.

To all whom it may concern:

Be it known that I, VALENTINE WOHLMANN, of Cincinnati, Hamilton county, State of Ohio, have invented an Improvement in Fire-Escapes, of which the following is a specification:

My invention relates to a fire-escape in which a tube is used, through which persons and goods may be safely lowered to the ground from the upper stories of a burning building.

My improvement consists in combining with the escape-tube a fireman's seat and hose-pipe, by which the fire in a room may be operated upon while the occupants thereof are making their escape.

In the accompanying drawing, Figure 1 is a perspective view of a building with my fire-escape in the process of elevation for use. Fig. 2 is an enlarged view of the frame at the upper end of the tube, tilted over to show its construction. Fig. 3 is a view of the same frame in the proper position for use, with the arms of the grappling-hook hanging down, from which position it is raised by the man on the tube for engagement over a window-sill.

For the purpose of elevating the canvas tubes of my construction, and moving them from window to window, any known means may be used—for instance, such as I have shown in the drawing, consisting of the following parts:

A is a rod or cable, permanently secured at the ends to the cornice of the building. Upon this rod or cable the sheave-block B moves, having a sheave-wheel, *b*, to ride the rail or cable, and a sheave-wheel, *b'*, to receive the hoisting-rope C. This rope has at one end a flexible hook, *c*, and a loop, *c'*, adapted to spring over the end of the hook, so that when the other end of the rope is tied to the hook the loop will so secure it in place as that the rope doubled may be wound on a spool, and placed by a person from window D into the box E, for safe keeping until a fire occurs. This box has an inclined bottom, and is closed by a gravitating door, *e*, hinged at the bottom, and secured when shut by a bolt or catch, *e'*. A wire, F, is attached to this bolt or catch, whose lower end is inclosed in a locked box, F'. A handle or slide, *f*, is affixed to the end of this wire F in box F', so that when the box is open the wire may be pulled and the door *e*

consequently dropped, and the spool and rope thus allowed to fall to the ground. The loop *c'* may then be disengaged and the hook attached to the eye of the escape-tube, the other end of the rope being then ready for use in elevating the tube.

G is the tube. It is made of canvas or other suitable material, with a frame, *g*, at top, having an eye, *g'*, by which it is elevated. A grappling-hook, H, is also hinged to the frame *g*.

The parts so far described are all believed to be old.

One feature of my improvement consists in securing a seat, I, to the frame *g* of the tube for a fireman to ride on. The fireman from this seat, with the aid of rope *i*, may raise the hook H into the position shown in Fig 1, ready, when the window is raised or broken in, to be placed over the sill to support the tube G properly, so as to render it safe for the escape of a person by sliding through it from the window.

As another feature of my improvement, I also attach flexible hose K to the tube G, for the purpose of conveying water for the fireman to use at the top of the tube, so that while a person is escaping through the tube the fireman may be busy extinguishing the fire in the room, or on the person of the occupant, or around the window, so that the escape with the least possible injury of the occupant is provided for.

It is not expected to use a plain nozzle having a large hole, as it would be too powerful, generally, if used against the bodies of persons escaping; but I expect to use a sprinkle-nozzle, adapted to shower water.

In escaping, the person or persons enter from the window into the mouth of the tube, and slide through onto a mattress placed below, and this may be in very rapid succession; and the tube may be long enough to curve at the bottom near the ground, so as to ease up the fall before the person reaches the mattress.

It will thus be seen that a great number of persons may escape in a very short space of time; and, more than this, trunks, valises, and other valubles may be passed through in the same way, the manner of transit being such that no shock or conflict in the tube can occur. The tube may be moved from window to window by the side pulling of the same

rope that elevates it, the sheave-wheel *b* rolling freely on the cable *A*, and the fireman may be provided with a hooked pole, which he may hook over a window-sill, and by it draw the mouth of the tube close to the window, so as to put the grapple-hook over the sill.

Opening flaps *L* may be provided in the tube, adapted to be opened in the street to let persons out when the tube, after being used full length from the uppermost window, has been lowered to the windows below. This provision prevents the necessity of the persons passing the whole length of the tube when they come from lower windows.

I make no claim to the hoisting and shifting

mechanism, nor to the arrangement for storing and dropping the hoisting-rope, believing that these means have been known before my invention.

I claim—

In combination with the tube *G*, the seat *I* and fire-hose *K*, substantially as and for the purpose specified.

In testimony of which invention I hereunto set my hand.

VALENTINE WOHLMANN.

Witnesses:

JOHN E. JONES,

J. L. WARTMANN.