(No Model.)

G. W. LOONEY, Sr.

FIRE ESCAPE.

No. 280,937. Patented July 10, 1883.

Fig. 1.

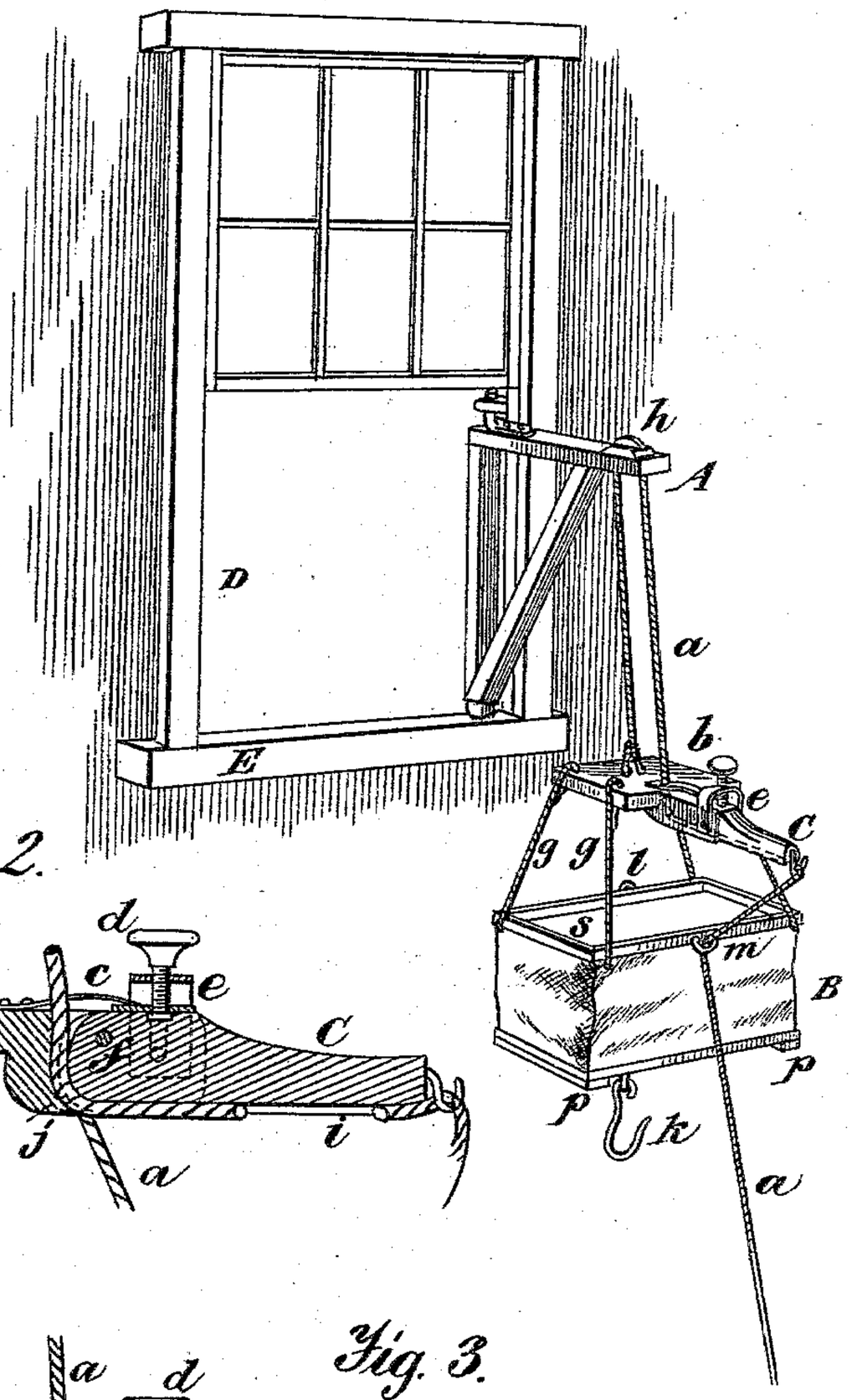
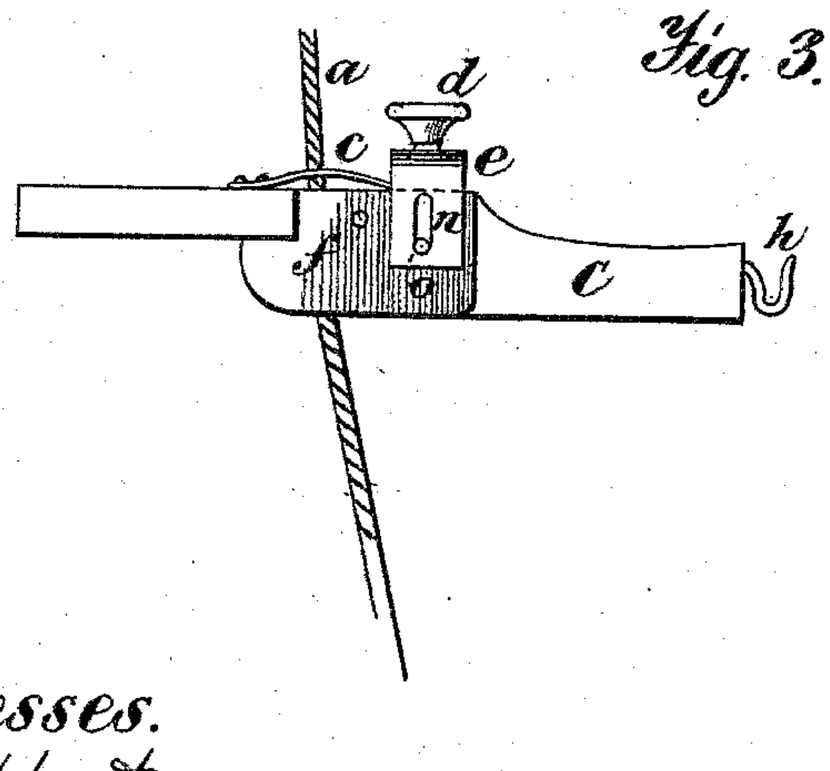


Fig. 2.

Fig. 3.



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UNITED STATES PATENT OFFICE.

GEORGE W. LOONEY, SR., OF RUSHVILLE, INDIANA.

FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 280,937, dated July 10, 1883.

Application filed March 16, 1883. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. LOONEY, Sr., a citizen of the United States, residing at Rushville, in the county of Rush and State of Indiana, have invented certain new and useful Improvements in Fire-Escapes, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to certain new and useful improvements in fire-escapes, and more particularly to that class constructed to operate from the windows of a building to convey the inmates from the upper floors of burning buildings to the ground.

The principal object of my invention is to construct a fire-escape that can be easily operated by the party descending with the same, and can at any desired point be held at rest. Another object is to so arrange the device that the basket or transporting-box can be occupied inside the building before the actual descent is begun. Another object is to arrange the appliances and parts of the device in such a manner that the same can be manipulated by parties on the ground independent of the occupants of the basket or transporting-box. I attain these objects by means of the construction and arrangement of the various parts, which will be more fully pointed out and described in the specification and claims, reference being had to the drawings accompanying this application and forming part of this specification, in which—

Figure 1 is a perspective view of my improved fire-escape, showing the open window, the swinging crane, rope connections, and basket. Fig. 2 is a detail sectional view of lever-arm, tension device, and rope. Fig. 3 is a plan view of lever-arm, tension device, and rope.

Similar letters refer to similar parts throughout the drawings.

Referring to the drawings, A represents a swinging crane, hinged or pivoted at top and bottom of its inner end to the inside of the casing and window-sill of the window D, located in any of the upper rooms of a building. The swinging crane A, together with all of its attachments, is arranged to swing inward against the wall of the room when not in use.

To the outer end of the extended arm of crane A is secured a loose pulley, *h*, over which passes rope *a*. The inner end of said rope *a* is secured to the center of stay-block or supporting-block *b*. To the outer corners of said block *b* are secured the upper ends of ropes *g g g g*, the lower ends of said ropes being secured to the upper frame of basket B. Depending from the sides and ends of said frame are flexible walls, of wire-cloth or other suitable material. The lower extremities of said walls are attached to frame *p*, that is covered with a floor of wood, metal, or other suitable material.

From the upper inner face of frame *s* hangs rope *e*. To the outer end of said rope a metal hook, *k*, is secured, the purpose of which is to hook into the inner side of the window sill or jamb and hold the basket at any window or opening below the crane A while any inmate of the burning building is being removed into the basket.

To the outer edge of frame *s* is secured a staple, ring, or pulley, *m*, through which rope *a* passes to the ground, and by means of which the basket B is held away from the building during its descent or while ascending to the crane A.

The outer edge and lower face of supporting-block *b* is formed with a slotted extension, *j*, the inner end of said slot being curved or rounded in form to receive rope *a*. Between the inner faces of said slot is pivoted the lever-arm C, as shown in Figs. 2 and 3. The outer end of arm C is provided with a hook, *h*, over which passes rope *a*, and the lower edge of said arm is grooved to receive the rope *a*. The inner end of said arm is rounded to conform to the shape of the inner end of the slot in projection *j*. Said arm is perforated near its inner and upper edge to receive the pivot-pin *f*, on which it moves. An adjustable slotted clip, *n*, passes over the top and down the sides of the projection *j*, and is held in place by pin *o*, as shown in Fig. 3. Said clip is adjusted by means of set-screw *d*, the lower end of said set-screw resting against the upper edge of lever-arm C, and by turning said set-screw to the right the clip *n* is raised against the pin *o*, thereby depressing the lever-arm C and causing its inner end to impinge sharply against the rope *a*, that passes between said end and

the inner edge of the slot in projection *j*. A flexible spring, *c*, is secured at its inner end to the upper edge of the supporting-block *b*, and is formed with a perforation through which rope *a* passes. The free end of said spring rests against the under face of clip *n* and operates against the pressure of screw *d* to lift the clip when the screw is turned to the left.

The operation of the device is as follows: When ready for use, the fire-escape occupies a place inside of a room on the upper floor, the crane swung back against the wall, with basket or cage underneath. When a fire occurs in the building in which the escape is located, the lower sash of the window is raised, persons embark or step in the basket before it is swung out or after it is swung out by the hinged crane, when the hook at the end of the rope is engaged with inner edge of the window-sill to hold the cage steady. When the operator or operators are in the basket or cage, the rope *a* is thrown out. When its lower extremity reaches the ground and is grasped by attendants, the operator either takes hold of the rope *a*, the outer end of lever-arm C, and by more or less pressure causes the inner end of lever C to press against the rope *a*, passing between the same and the inner end of the slot in projection *j*, and thereby descends safely to the ground, the attendants paying out on rope *a*, and at the same time holding it taut enough to pull the basket or cage away from the building. By means of the screw-nut and clip the basket can be stopped at any desired point opposite a window, when the grappling-hook *k* is caused to engage with window-sill, when a person can be safely transferred from the window to the basket or cage, after which, by releasing the rope *a* from hook *k*, the basket can readily be returned by operating the rope from the ground.

Having thus described my invention, what I desire to secure by Letters Patent is—

1. A brake for regulating the speed in descending box or basket in a fire-escape, the supporting-block *b*, having extension *j*, the lever C, formed at its inner end to press against rope *a*, the spring *c*, clip *e*, screw *d*, and hook *k*, all arranged and operated substantially as shown and specified.

2. The combination of the crane A, pulley *h*, rope *a*, supporting-block *b*, tilting lever C, with ropes *g g g g*, basket B, staple *m*, rope, and hook *k*, substantially as shown and specified.

In testimony whereof I affix my signature in presence of two witnesses.

GEORGE W. LOONEY, SR.

Witnesses:
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ALFRED B. FLINN.