

(No Model.)

J. FISHER.
FIRE ESCAPE.

No. 374,244.

Patented Dec. 6, 1887.

Fig. 1.

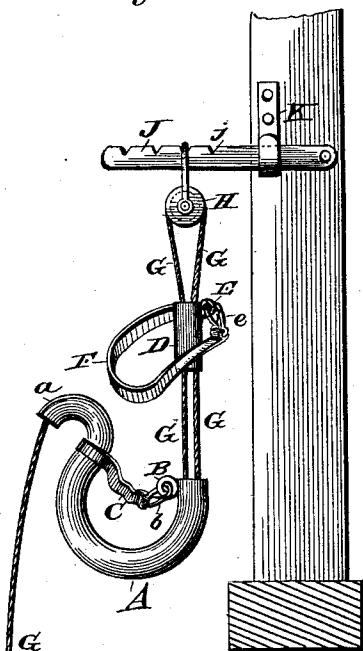


Fig. 2.

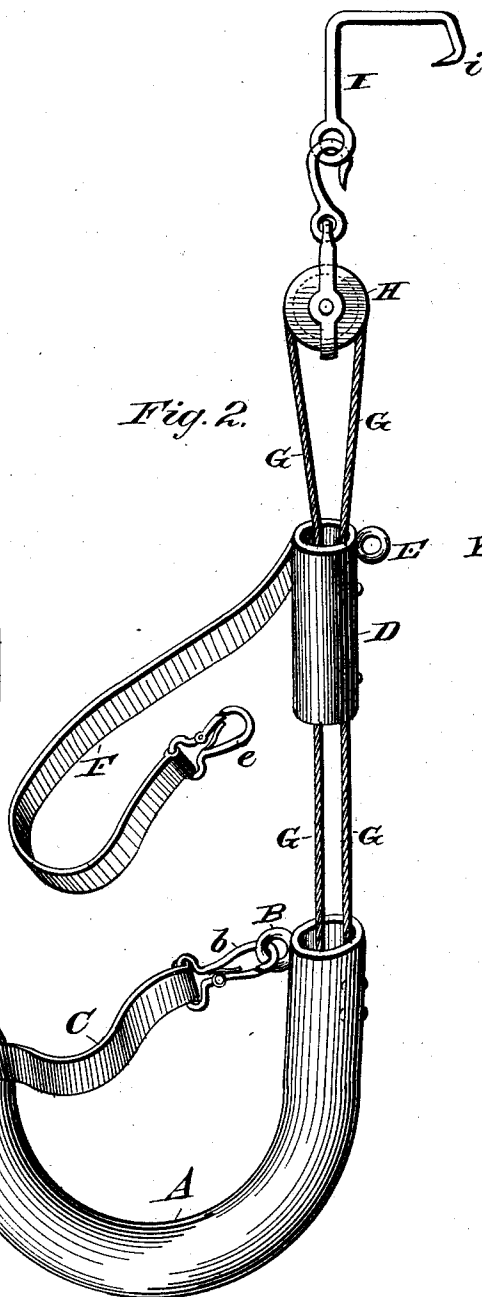


Fig. 3.

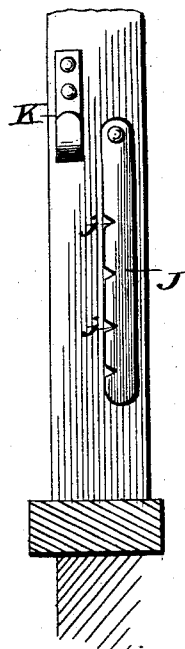
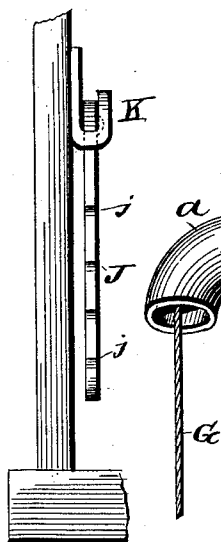


Fig. 4.



WITNESSES

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JACOB FISHER, OF SOUTH BEND, INDIANA.

FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 374,244, dated December 6, 1887.

Application filed June 16, 1887. Serial No. 241,523. (No model.)

To all whom it may concern:

Be it known that I, JACOB FISHER, of South Bend, in the county of St. Joseph and State of Indiana, have invented certain new and useful Improvements in Fire-Escapes; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification, in which—

Figure 1 is a detail side view of my improved fire-escape in readiness for use. Fig. 2 is an enlarged view of the same detached. Figs. 3 and 4 are details of the adjustable supporting-bar for the escape proper.

This invention relates to improvements in friction hand fire-escapes or devices for permitting persons to lower themselves rapidly and safely from burning buildings or other points from which other means of ready or safe descent is not provided; and it has for its objects to provide a light and durable device which can easily be transported and occupies but little room; and to these ends the invention consists in the novel construction and arrangement of parts hereinafter described, illustrated in the drawings, and particularly designated in the annexed claims.

Referring to the drawings by letter, A designates a piece of flexible tubing or hose, made preferably of stout canvas. This tube has secured to one end, which is its top, a ring or hook, B. Near the opposite or lower end of tube A is secured the end of a strap or band, C, which is shorter than the distance between the hook B and the point of its fastening to tube A. This strap C has at its free end a buckle, or, preferably, a snap-hook, *b*, which is adapted to be engaged with hook B, the flexibility of tube A permitting this, and when so engaged the tube A is necessarily bent or looped, as shown. The end *a* of tube A below the fastening of strap C thereto serves a purpose hereinafter explained.

D designates a short tube similar to tube A and attached to the upper end of the latter by means of a rope or cord, G, hereinafter referred to, the lower end of said cord being rigidly secured to the top of tube A, as shown. If desired, the tube A may be extended sufficiently above its ring B to form the part D;

but they are preferably united as described, for the purpose of lightness and flexibility.

To the tube D, at a suitable point thereon, is attached a ring or hook, E, and to another point thereof a strap, F, similar to strap C, but longer than the latter, and similarly provided with a snap hook, *e*, for engaging its free end with ring E. The rope G, uniting parts A and D, as described, passes up from part A to and over a pulley, H, hereinafter referred to, then down from said pulley through tubes D and A to the ground when the device is in use.

The pulley H is journaled in a suitable block, by which it is hung to a proper support. In the drawings I have shown two supports therefor, that shown in Fig. 2 being employed when the device is to be transported or carried about by its owner, and which consists of an angled hook-bar, I, provided at one end with a suitable eye for engaging the pulley-block, and at its upper end with a grappling-hook point, *i*, by which it can be secured to a window sill or sash, as is evident. The other supporting device (shown in Figs. 1, 3, and 4) consists of a bar, J, pivoted at its inner end to a suitable point on the window-frame and adapted to be swung upward and engaged and held in proper horizontal position by a hook or latch-piece, K, secured to the window-frame in horizontal line with the pivot of bar J, outside thereof, as shown. This supporting device is to be employed in places (such as hotels) where the escapes are permanent.

The bar J is provided on its outer upper edge with a series of notches, *j*, by which the pulley-block can be hung on the bar at varying distances from the window-sill or face of the building.

The operation of the device is as follows: In case of fire, a person wishing to descend by means of the device attaches pulley H to the bar J, or supports the same by hook I. He then attaches tube A, by means of strap C, around one leg, as shown, and passes strap F around his body below the arms, and hooks it to ring E. Then grasping tube D in one hand and part *a* of tube A in the other he swings off. The bend in tube A and weight of the person descending thereby causes sufficient friction on rope G passing therethrough to prevent too rapid descent of the person, and

he can control his descent or entirely stop it by tightening his grasp on part *a*, as is evident. It will be observed that the greater the weight of the person descending the greater will be the friction on the rope G passing through tube A. Consequently the device is in a measure automatic in action. The device can also be controlled by a person below pulling slightly on rope G. By reason of the attachment of rope G to the device the same can be readily returned or hoisted to any point on the line of the descent after the person has descended by pulling upon rope G, as is evident.

It is obvious that the device can be readily packed into small space for transportation, and that it is very light, durable, and efficient.

Having described my invention, I claim—

1. The combination, with the flexible tube A, provided with ring B, fastening-strap C, and extension *a*, of the rope G, secured to the upper end of the tube and passing thence over a suspending pulley, and thence back through the tube and portion *a* to the ground, all substantially as and for the purpose specified.

2. The combination of the flexible tube A, its ring and strap, with the short tube D above tube A, its ring and strap, and the rope G, uniting the tubes A and D and passing thence over a proper supporting device back through

said tubes to the ground, all substantially as and for the purpose described.

3. The combination, in a fire-escape, of the flexible tube A, its ring B, and strap C for engaging ring B, with the flexible short tube D, its ring E and engaging-strap F, flexibly united to the upper end of tube A, and the rope G, secured to said tubes at one end and playing freely through the same by its remaining portion, and the pulley H and supporting device, all constructed and arranged substantially as and for the purpose described.

4. In a fire-escape, the combination, with the supporting-bar J and keeper K, of the flexible tube A, its ring and strap and extended portion *a*, the short tube D, united to the upper end of tube A and provided with a ring and strap, and the cord G, secured to tubes A and D at one end and passing up over a pulley, H, supported upon bar J, and thence down through both tubes to the ground, all constructed and arranged substantially in the manner and for the purpose described.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

JACOB FISHER.

Witnesses:

JAMES DUSHANE,
JEANIE ANDERSON.