

W. KEGG.
Fire-Escapes.

No. 138,410.

Patented April 29, 1873.

Fig 1

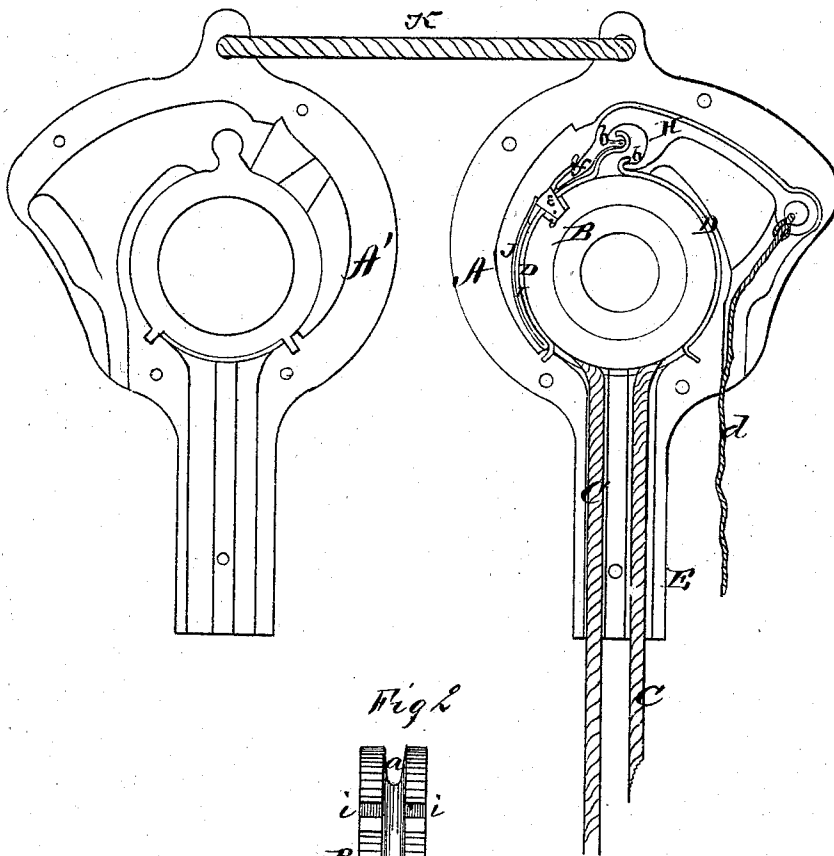
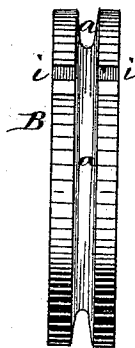


Fig 2



Witness;

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IMPROVEMENT IN FIRE-ESCAPES.

Specification forming part of Letters Patent No. **138,410**, dated April 29, 1873; application filed September 24, 1872.

To all whom it may concern:

Be it known that I, WILLIAM KEGG, of Lasellsville, in the county of Fulton and in the State of New York, have invented certain new and useful Improvements in Fire-Escape; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon making part of this specification.

The nature of my invention consists in the construction and arrangement of a fire-escape, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation referring to the annexed drawing, in which—

Figure 1 is an interior view of my fire-escape, and Fig. 2 is an enlarged view of the wheel or pulley used in the same.

A A' represent the two parts of a bisected box or casing, within which is placed the entire mechanism of my fire-escape. In the center of this box or casing is placed a wheel or pulley, B, having a deep V-shaped circumferential groove, *a*, as shown in Fig. 2, in which groove is placed a rope, C, the ends of which come close together and pass through separate grooves in a bar, E, extending from the casing and forming part of the same. On each side of the pulley B is placed a brake, D, consisting simply of a curved spring-bar, the lower end of which is bent outward and inserted in a groove in the casing. The upper end of one of the brakes is bent upward and laps over the other, both extreme ends being bent or turned so as to form bearings for the two points *b b* of the lever H. This lever is constructed substantially as shown in the drawing, and has a cord, *d*, attached to its outer end. This end is also inclosed within the casing, and the cord *d* passes out through a groove in the casing. To the outer side near the lower end of one of the brakes D is riveted or otherwise firmly attached a bar, I, and spring J, which follow along or lie on the outer side of the brake. Near the upper end of the bar I are two inward-projecting lugs, *e e*, which pass through notches on each side of the brake and into notches *i i* on the pulley

B. The extreme upper end of the bar I rests upon an arm, *f*, projecting from the lever H.

This fire-escape is intended to be used in case of fire to alight from a window by being seated in a loop formed at one end of the rope C, the entire device being suspended by a rope, K, in any suitable manner, and taking hold of the cord *d* and pulling slightly upon it, which will unlock the pulley and allow the rope to run down, at the same time applying the brakes to prevent it from running down too fast. This may be regulated by the descending party, or any person holding the cord, by pulling on the cord, as the case may require. As one end of the rope goes down the other end goes up and is ready to be used alternately, as the device operates either way the same. In case the cord *d* should slip out of the hand the device will at once lock itself until the cord can again be grasped and pulled to unlock and apply the brakes.

It will be noticed that the lever H has a double fulcrum on the brakes, so that all the draft on the cord is direct on the brakes and none of the draft is lost except what is required to raise the spring to the lock. The large rope C running in the V-groove of the pulley is prevented from slipping by being drawn into the same and wrapped nearly around the pulley passing under the brakes and being relieved from the pulley at nearly the same point it enters, and the greater the weight the more firmly the rope is drawn into the V-groove. By having no center-point for the pulley less force is required to brake the same.

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

1. In a fire-escape the arrangement of a pulley, B, with no center-point and a rope, C, wrapped nearly around the same in a V-shaped circumferential groove and passing under suitable brakes, substantially as and for the purposes herein set forth.

2. The locking device for the pulley B, consisting of the bar I with lugs *e e* pressed by the spring J into notches *i i* on the pulley, substantially as and for the purposes herein set forth.

3. The lever H provided with double ful-

crums *b b* and arm *f* for simultaneously operating the locking device and the brakes of a fire-escape, substantially as herein set forth.

4. The combination of the casing *A A'*, pulley *B*, rope *C*, brakes *D D*, lever *H* with cord *d*, and locking devices *I J*, all constructed and arranged to operate substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand and seal this 31st day of August, 1872.

WM. KEGG. [L. s.]

Witnesses:

C. L. EVERT,
MARVIN BRONK.