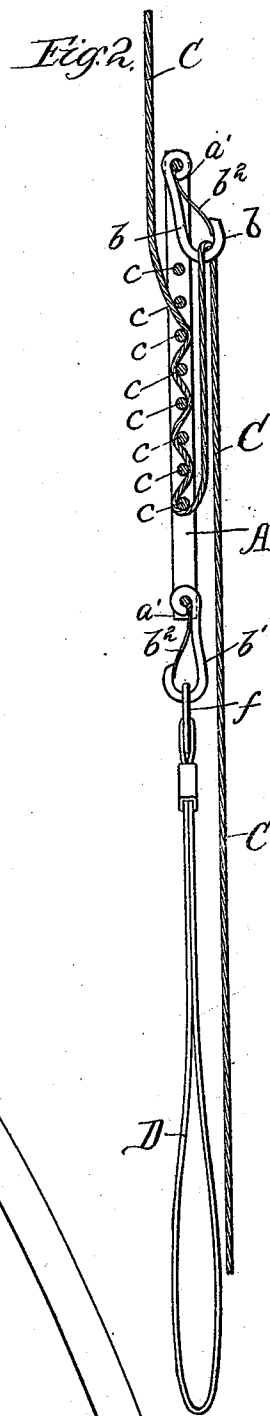
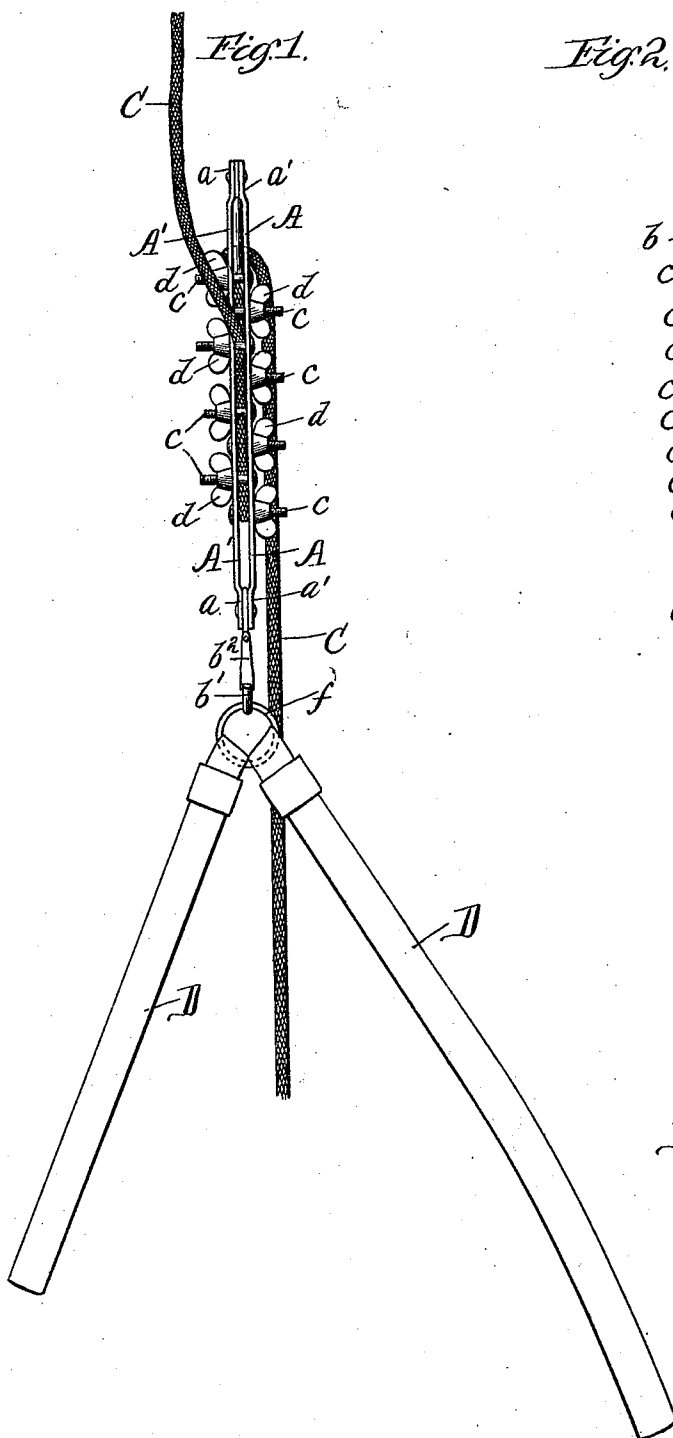
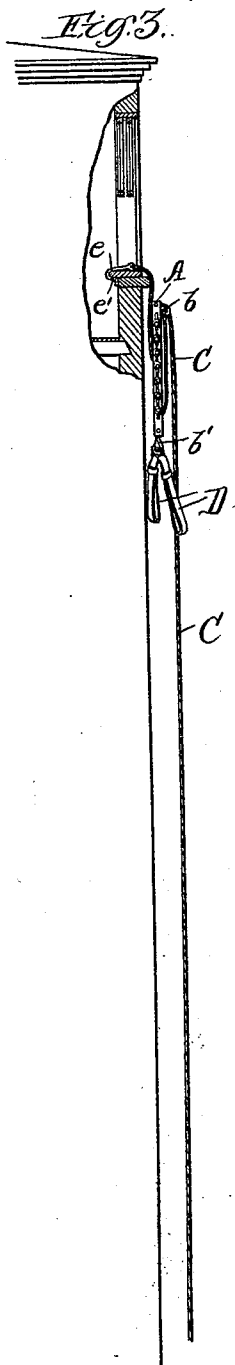


(No Model.)

J. LUEDECKE.
PORTABLE FIRE ESCAPE.

No. 512,730.

Patented Jan. 16, 1894.



Witnesses.

M^r M. Rheims

Arthur M. Loys

Inventor,
Julius Luedcke,
by Jesse Cox
Atty.

UNITED STATES PATENT OFFICE.

JULIUS LUEDECKE, OF CHICAGO, ILLINOIS.

PORTABLE FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 512,730, dated January 16, 1894.

Application filed September 20, 1893. Serial No. 485,989. (No model.)

To all whom it may concern:

Be it known that I, JULIUS LUEDECKE, a citizen of the United States, residing in the city of Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Portable Fire-Escapes, of which the following is a specification.

My invention relates to improvements in portable fire escapes; and the object of my invention is to provide a fire escape which shall be light and easily transported, and by which a person may easily let himself down from any height without assistance. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 represents a view of my portable fire escape showing the complete arrangement of the sides, bolts and thumb-nuts, with a flexible plaited wire cord passing in and out between the bolts. Fig. 2 represents an inside view of one of the side pieces with the other side piece removed, showing the manner of interlacing the plaited wire cord between the bolts. Fig. 3 shows the manner of attaching my fire escape to the window sill or other part of the building.

Similar letters refer to similar parts throughout the several views.

A and A' represent two flat pieces of metal preferably about a foot in length. Said pieces are slightly bent and bolted together at their ends, *a* and *a'*, so as to leave a space of about three quarters of an inch in width between said two side pieces. On each of said end bolts is pivoted a hook, *b* and *b'*. In each of said hooks, *b* and *b'* is a spring tongue, *b²* to retain in said hooks the said flexible cord, or ring attached to the straps hereinafter mentioned, as the case may be. Bolts *c*, *c*, *c*, *c*, having heads at one end, and threaded at their opposite ends, pass through the sides of the flat pieces, A and A', and across the space intervening between said sides, and are removably held in place by means of the thumb-nuts *d*, *d*, *d*, *d*. The bolts should be arranged so that the threaded end of one bolt shall be next to the head of the adjacent bolt, for convenience in operating the thumb-nuts. A flat cord, C, preferably made of plaited wire of malleable iron, passes through a hook *b*, at the upper end of the side pieces,

and then downward to the lowest of the bolts *c*, and is then passed upward between the bolts *c*, *c*, *c*, *c*, as is clearly shown in Fig. 2. This cord is of sufficient length to reach from the upper part of the building to the ground, and has at its upper end a hook, *e*, which, when in use can be attached to the sill of a window or any convenient projection. The straps, D, D, are attached by the ring, *f*, to the lower hook *b'*. These straps are looped, and are preferably so arranged that one of them encircles the middle or upper part of the body of the operator, while the other passes around the upper part of the limbs of the operator, and supports the weight of the body.

In operation the hook, *e*, is fastened to the window sill *e'*, or any other suitable projection on the upper part of a building, and the operator, having attached his body by means of the straps D, D, to the device, grasps the cord, C, at a point opposite his body. The weight of the body being thrown upon the straps, the side pieces, A, and A', with their bolts will slide down upon the cord, C, the friction of the cord upon the bolts, *c*, *c*, *c*, *c*, permitting the operator to regulate his descent and to reach the ground in safety. If the operator finds himself descending too rapidly for safety, he can, by throwing his weight upon the cord C, bring the side pieces, A and A' out of the perpendicular, and thus increase the friction of the wire cord upon the bolts *c*, *c*, *c*, *c*. This will cause the cord to slip more slowly upon the bolts and diminish the speed of the descent. The passing of the cord through this hook, *b*, also prevents the hands of the operator from coming in contact with the side pieces. Of course the greater the number of bolts *c*, *c*, *c*, *c*, among which the said cord is interlaced, the greater will be the friction, and the more weight will be required to bring the operator to the ground. The heavier the operator, therefore, the greater the number of bolts among which the cord should be interlaced. When the operator has reached the ground the device may be used again by simply reversing it, passing the short end of the rope through the adjacent hook *b'*, and fastening the straps, D, D, by the ring *f*, to the opposite hook *b*, the cord

being disengaged from the hook *b*, when the apparatus will be again ready for operation without pulling the wire cord through the same. For this purpose a hook, like the hook
5 *e*, should be attached to each end of the cord.

What I claim as new, and desire to secure by Letters Patent, is—

1. A fire escape composed of two side pieces fastened together at the ends thereof, the said
10 side pieces having between them an intervening space, in combination with removable bolts passing through said side pieces and across said intervening space and hooks; a
15 flexible cord arranged so as to pass downward among and in contact with said bolts in said space and then upward through the hook at the upper ends of said side pieces,

and then again downward so as to be grasped by the operator; and a support attached to the lower parts of said side pieces for the body 20 of the operator, substantially as described.

2. A fire escape, composed of two side pieces fastened together at their ends, and having between them an intervening space, in combination with bolts passing through said side 25 pieces and across said intervening space; a flexible cord passing among and in contact with said bolts in said space, and a hinged hook at the end of said side pieces to receive said cord, substantially as described.

JULIUS LUEDECKE.

Witnesses:

JESSE COX,

JENS L. CHRISTENSEN.