

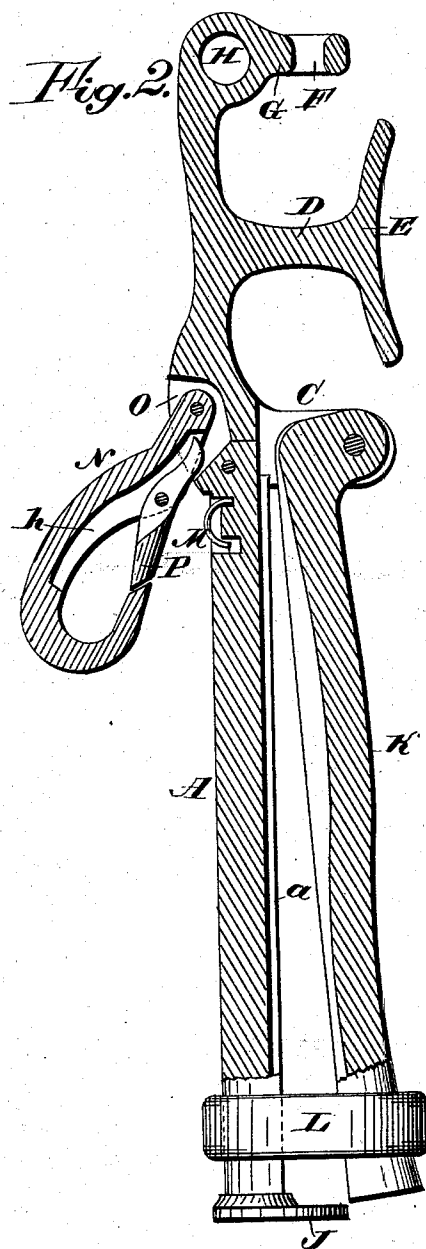
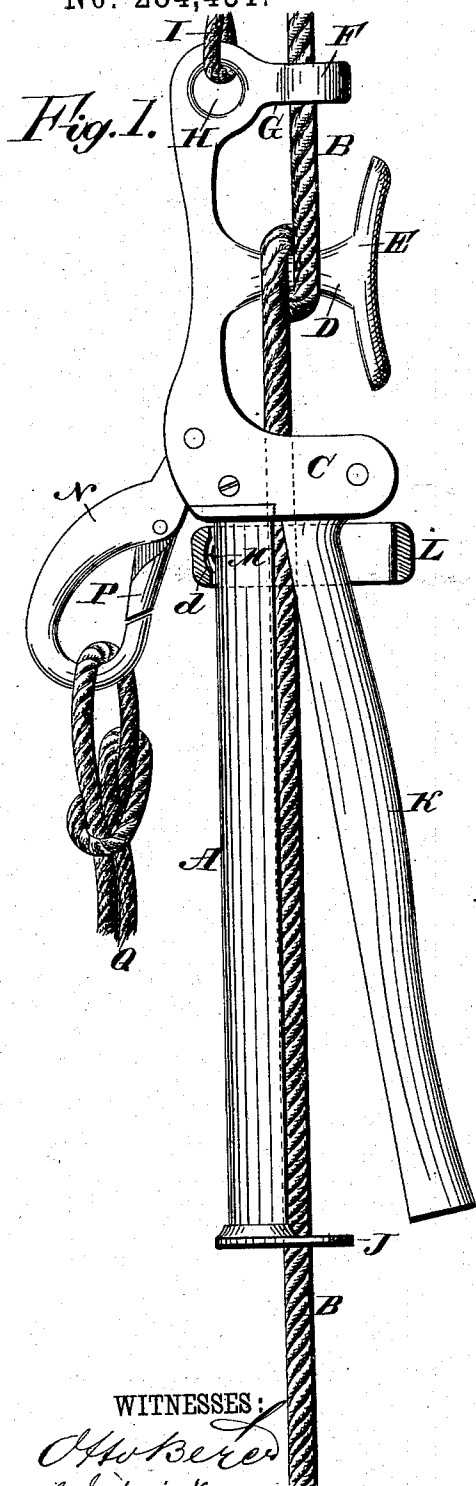
(No Model.)

C. JOHNSON.

FIRE ESCAPE.

No. 284,431.

Patented Sept. 4, 1883.



WITNESSES:
W. B. Beres
C. Sedgwick

INVENTOR:
C. Johnson
BY *M. W. & Co.*
ATTORNEYS.

UNITED STATES PATENT OFFICE.

CHARLES JOHNSON, OF ST. GEORGE, NEW BRUNSWICK, CANADA.

FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 284,431, dated September 4, 1883.

Application filed February 13, 1883. (No model.)

To all whom it may concern:

Be it known that I, CHARLES JOHNSON, of St. George, in the Province of New Brunswick and Dominion of Canada, have invented a new and Improved Fire-Escape, of which the following is a full, clear, and exact description.

The object of my invention is to provide a new and improved device by means of which a person can easily lower himself from a height by means of a rope.

The invention consists in a bar adapted to be held to slide on a rope by means of an arm and eyes, which bar is provided with a brake-lever for checking the movement, which brake-lever can be locked in position by means of a locking-ring adapted to slide on the bar and brake-lever. A hook is pivoted to the bar, which hook is provided with a pivoted latch extending into the recess in which the hook is pivoted, whereby the latch will be held closed by the downward draft on the hook.

The invention also consists in various parts, details, and combinations of the same, as will be fully described and set forth hereinafter.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in both the figures.

Figure 1 is a side view of my improved fire-escape, with the locking-ring shown in section. Fig. 2 is a longitudinal sectional view of the same.

A bar, A, is provided with a shallow longitudinal groove, a, in which the rope B is to rest, which rope passes between two jaws, C, at the top of the groove and above the jaws, and around an arm, D, projecting from the bar, which arm is provided with a curved cross-piece, E, extending up and down, and the rope then passes through an eye, F, formed in the end of an arm, G, at the upper end of the bar A. At its upper end the bar A is provided with an aperture, H, in which a cord or rope, I, is knotted for drawing the device upward, so that it can be used by another person. At its lower end the bar A is provided with a horizontal loop, J, through which the rope B passes, which loop is to hold the rope against the longitudinally-grooved surface of the bar. Between the jaws C a brake-lever,

K, is pivoted, which extends down to the lower end of the bar B. An elongated locking-ring, L, surrounds the bar A and the brake-lever K, and is provided with an interior notch, d, in which a spring, M, held on the bar A at the upper end of the straight part of the same, catches. The locking-ring can slide up and down on the straight part of the bar. A hook, N, is pivoted in a recess, O, in the bar A, directly above the straight part, to which hook an inwardly-swinging latch, P, is pivoted, which is so constructed and of such length that part extends into the recess O. A belt, rope, or analogous device, Q, is passed around the body and passed on the hook N. One or more such belts can be used.

The device is to be made of brass or malleable iron.

The inner side of the brake-lever K is preferably grooved longitudinally, so that it will fit closely against the rope. The edges of the arm D and of the eye or loop F are rounded off, so that they will not cut and chafe the rope.

The hook N is provided on the inner surface of its curved shanks with a longitudinal groove, h, into which the latch P can be pressed when the same is opened. The cross-piece E prevents the rope from slipping off the arm D.

The operation is as follows: The rope B is passed through the device in the manner shown and described, and is secured to a hook, post, window-frame, &c. The belt or rope Q is passed on the hook N, and the bar A and brake-lever K are seized by one hand. The device will then slide down the rope, and the speed can be checked by pressing the brake-lever toward the bar A, whereby the upper end of the brake-lever will be pressed against the rope B. If the descent is to be stopped entirely for a time, and the person wishes to have his hand free for other purposes, the ring L is pushed down to the lower end of the bar A and brake-lever K, as shown in Fig. 2, whereby the brake-lever will be locked in position. When the locking-ring is raised, it is held in position by the spring M. The weight of the person draws the hook downward and presses the inner end of the latch P against the bottom of the recess O, and thereby presses

the outer end of the latch against the end of the hook, thus preventing the belt or rope Q from passing out of the hook accidentally.

After a person has been lowered, the rope B is removed from the arm D, and then the device can be drawn upward on the rope B by means of the rope or cord I.

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

1. In a fire-escape, the combination, with the bar A, having an arm, D, and an eye, F, of the brake-lever K, the locking-ring L, and the spring M, substantially as herein shown and described, and for the purpose set forth.

2. In a fire-escape, the combination, with

the bar A, having an arm, D, and an eye, F, of the brake-lever K, the locking-ring L, having a notch or recess, *d*, in its inner surface, and of the spring M, substantially as herein shown and described, and for the purpose set forth.

3. In a fire-escape, the combination, with the bar A, adapted to be held on a rope, B, so as to slide on the same, of the hook N, pivoted in a recess, O, of the bar, and of the latch P, pivoted to the hook and extending into the recess O, substantially as herein shown and described, and for the purpose set forth.

CHARLES JOHNSON.

Witnesses:

OSCAR F. GUNZ,
C. SEDGWICK.