

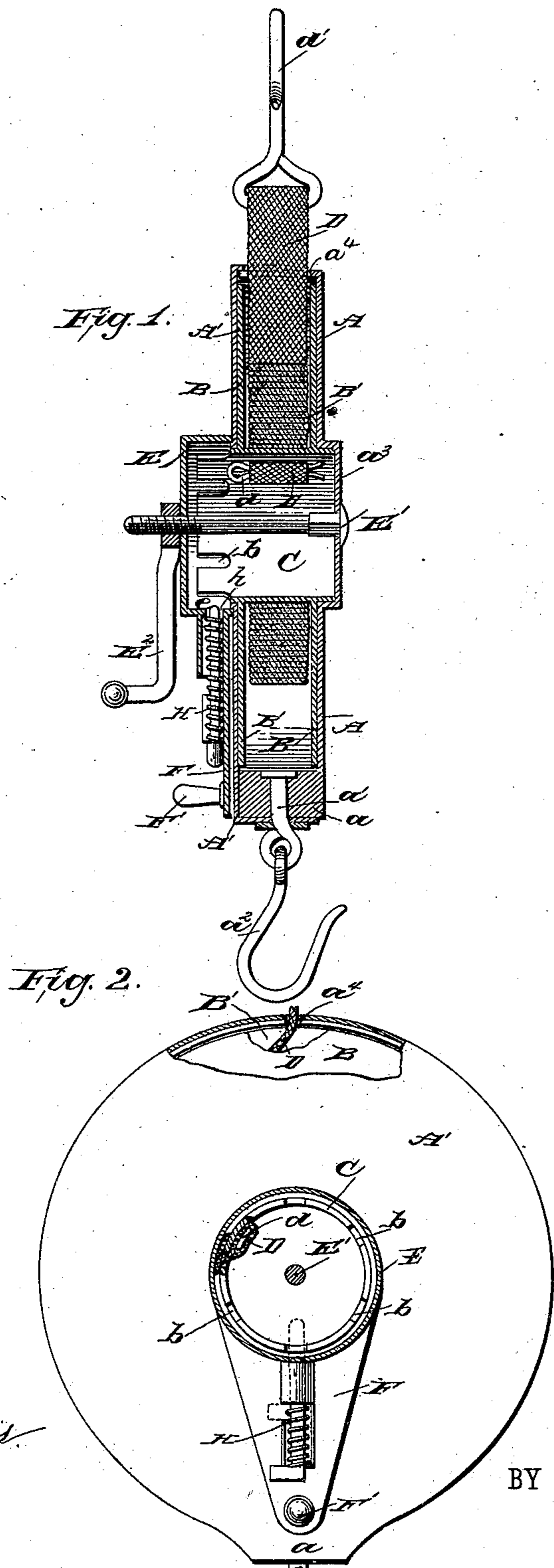
(No Model.)

G. GAVIN, L. W. CROMER & F. GILMOR.

# PORTABLE FIRE ESCAPE.

No. 378,833.

Patented Feb. 28, 1888.



WITNESSES:

W. R. Davis  
G Sedgwick

INVENTOR:

G. Gavin.  
L. W. Cromer.  
F. Gilmer.  
Munn & Co.  
ATTORNEYS.

BY

ATTORNEYS.

# UNITED STATES PATENT OFFICE.

GEORGE GAVIN, LAWRENCE WASHINGTON CROMER, AND FRANK GILMOR,  
OF EUREKA, NEVADA.

## PORTABLE FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 378,833, dated February 28, 1888.

Application filed June 3, 1887. Serial No. 240,141. (No model.)

*To all whom it may concern:*

Be it known that we, GEORGE GAVIN, LAWRENCE WASHINGTON CROMER, and FRANK GILMOR, of Eureka, in the county of Eureka and State of Nevada, have invented a new and Improved Portable Fire-Escape, of which the following is a full, clear, and exact description.

Our invention relates to an improvement in portable fire-escapes, and has for its object to provide a device which may be readily carried in a trunk or valise, of strong yet simple construction, and free from all complication, whereby a person may quickly and effectively lower himself to the ground from a burning building, or lower others, and wherein the rapidity of descent will be completely under the control of the operator.

The invention consists in the construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

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

Figure 1 is a central vertical section through the device; and Fig. 2 is a side elevation thereof, partly in section.

In carrying out the invention the casing is made in two sections, A and A', preferably circular in general contour.

To the periphery of the section A a solid extension, *a*, is attached, adapted to support an eye, *a'*, from which a suitable hook, *a''*, is suspended, purposed to engage any suitable or approved form of harness usually employed in connection with portable fire-escapes, the said section A being provided with a central depressed surface, *a'''*, and a peripheral slot, *a''''*.

Two disks, B and B', of a diameter slightly less than the inner diameter of the casing, are attached at a given distance from one another to the outer surface of a tubular drum, C, the drum being made to project beyond the face of each disk, farthest, however, beyond the disk B, at which point the outer edge of the drum is provided with a series of spaced slots, *b*, extending out through the edge. Between the disks in the surface of the drum a slot is produced, through which slot one end of a

tape, D, preferably of steel, is passed, and secured by a pin, *d*, resting upon the inner surface of the drum, as shown in Fig. 1, or in any other approved manner, the body of the tape being wound around the outer surface of said drum between the disks, as also shown in Fig. 1.

The carrier, consisting of the drum and disks, is placed within the casing-section A, and the short projecting end of the drum enters the central depression, *a'''*, to act in the capacity of a trunnion for said carrier, and the free end of the tape D is thereupon passed out through the peripheral slot *a''''* and attached to a suitable hook, *d'*, as shown in Fig. 1. The section A' of the casing, which is centrally apertured to pass over the projecting slotted end of the drum, is now placed in position over the disk B and over the peripheral edge of the opposing section A. Thus the carrier, being journaled in the casing, is free to revolve.

A cap, E, is placed over the projecting slotted end of the drum, and a space, *e*, is made to intervene between said cap and drum, for a purpose hereinafter set forth, the cap being retained in position by a screw-bolt, E', passing through the section A, the drum, and said cap, and upon the threaded end of said bolt a crank-arm, E'', is screwed.

A plate, F, is secured to the lower and outer peripheral surface of the cap, provided with a handle, F', upon its outer end, and having a spring-actuated bolt, H, secured longitudinally with respect to the upper surface, which bolt is in alignment with a peripheral aperture, *h*, in the cap, normally remaining just within said aperture.

In operation, when a person desires to descend, the hook at the end of the tape is secured in the room and the harness attached to the hook suspended from the casing. The casing may be grasped by one hand, the other hand being left free to grasp the crank. The operator may now descend as rapidly or slowly as desired, as by screwing down the crank upon the cap the latter presses in turn upon the casing, which, bearing upon the disks, causes the same to revolve slowly. When the operator desires to send other persons down, the position of the device is reversed, the harness being attached to the tape, the operator, controlling the device at the window. When

the tape has been released below, the operator, by bringing the bolt in engagement with one slot in the drum, may, by means of the handle F', rewind the tape, and descend himself.

5 Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. A fire-escape consisting of a casing having an attached hook, a carrier journaled in  
10 said casing, a tape wound upon said carrier, projecting through the casing and provided with a hook, a cap bearing upon the casing, a crank-arm adapted to compress said cap and produce friction between the casing and car-  
15 rier, a plate attached to said cap, provided with a handle, and a spring-actuated lock-bolt secured upon said plate, adapted to engage the carrier, substantially as herein shown and de-  
20 scribed, whereby the tape is rewound when run out and the descent regulated by the operator, as set forth.

2. In a fire-escape, the combination, with the casings A A', the drum C, having slots b, the attached disks B B', and carrying tape D, wound upon said drum between said disks, 25 of the cap E, the integral plate F, having a handle, F', a locking device secured upon said plate, adapted to engage the slots in the drum, the bolt E', and crank-arm E<sup>2</sup>, all arranged to operate substantially as herein set forth.

GEO. GAVIN.

LAWRENCE WASHINGTON CROMER.

FRANK GILMOR.

Witnesses to signature of George Gavin:

J. F. ACKER, Jr.,

C. SEDGWICK.

Witnesses to signatures of Lawrence W. Cromer and Frank Gilmor:

JOHN T. BAKER,

R. M. BEATTY.