H. V. SWYNY & J. H. McDONALD.

A. SWYNY, Administratrix of H. V. SWYNY, Dec'd.

FIRE ESCAPE.

(Application filed Apr. 2, 1897.)

(No Model.) Fig. A. Fig. 5. Fig. 3. 28 WITNESSES: H.V. Swyny J.H.Mc.Donald INVENTORS

United States Patent Office.

HENRY V. SWYNY AND JOHN H. McDONALD, OF BUTTE, MONTANA; ANNIE SWYNY ADMINISTRATRIX OF SAID HENRY V. SWYNY, DECEASED.

FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 607,556, dated July 19, 1898.

Application filed April 2, 1897. Serial No. 630,364. (No model.)

To all whom it may concern:

Be it known that we, HENRY VINCE SWYNY, a subject of the Queen of Great Britain, and John H. McDonald, a citizen of the United 5 States, both residents of Butte, county of Silver Bow, and State of Montana, have invented certain new and useful Improvements in Fire-Escapes, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof, in which similar figures of reference indicate corresponding parts.

This invention has relation to fire-escapes; and our object is to provide a portable device of this character which will be of such a size that it may conveniently be carried and at the same time be cheap to manufacture, light,

and efficient in use.

In the drawings forming part of this specification, Figure 1 is a perspective view of the improved fire-escape. Fig. 2 is a side elevation thereof. Fig. 3 is a sectional view of the brake. Fig. 4 is a sectional view of the spring in the brake, and Fig. 5 a perspective view of the sling used in connection with our fire-

escape.

Referring to the drawings, 1 indicates a frame comprising a base portion 2, two uprights 3 3, and a top portion 4. Mounted on 30 a shaft 31, journaled in suitable bearings in the uprights 3, is the drum 5, provided with a brake-wheel 6, having flanged edges 7. A spiral spring 8 is arranged interiorly of the band-brake wheel. A band-brake 9 is se-35 cured to the brake-wheel and occupies a position between the two flanges 7, while the one end 10 of the band-brake is attached to a screw-threaded shaft 11, provided at its extremity with an adjusting hand-wheel 12. 40 The other end of the band-brake is secured in the base portion 2 of the frame, where it passes through an opening in a block 14, and is provided with a buffer 15, against which abūts a nut 16. An indicator 17 is supported and operated by the action of the hand-wheel and passes up through an aperture in base 2, and a pointer 18 is secured to the base, said indicator having a graduated face.

Secured to the uprights 3 are two bars 19, terminating in snap-hooks 20, and are intend-

ed to be used in attaching the sling to the

fire-escape.

A rod 21, having each end secured to the uprights 3, is provided with a loose pulley 22, adapted to move along the rod as the rope 23 55 unwinds from the drum. Attached to the rope is a snap-hook 24, for a purpose to be hereinafter described.

Any form of sling may be used; but we prefer the construction shown in Fig. 5, wherein 60 25 represents a cross-shaped piece of canvas having its ends provided with eyes 26. 27 indicates a ring of any suitable material, designed to encircle the waist of the wearer and attached to the extremities of the sling 65 by means of cords 28. Another rope 29 is secured to the ring 27 and is provided with a snap 30 to be used in connecting it to the fire-escape.

It is our intention to manufacture the va- 70 rious metallic portions of our fire-escape of

aluminium.

The owner of the fire-escape adjusts the dial to correspond with his weight in order that the band-brake may properly control the 75 paying out of the rope when the fire-escape is in use.

When it is desired to put the fire-escape into operation, the end of the rope 23 is passed around some suitable fixed object, such as a 80 radiator or bed-leg, and the hook is secured around the rope, thereby holding the same in position against displacement. The snap 30 is connected with the snap 20. The person then seats himself in the canvas sling, 85 passing the ring 27 around the waist, and swings himself out from the window. The descent of the person is controlled by the band-brake alluded to hereinbefore.

In case it is desired to send the fire-escape 90 back for another person the action of the spring in the drum will when released wind the rope in the drum and by so doing draw the fire-escape back to the window and in position for the rescue of another inmate of the 95 burning building.

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

1. A fire-escape, comprising a frame, a drum 100

journaled in said frame, a spiral spring, a band-brake attached to the frame, a brake-wheel having flanges thereon attached to one end of the drum and means for adjustably controlling the action of the band-brake upon the brake-wheel, said means consisting of a screw-threaded shaft passing through the base of the frame, to one end of which the free end of the brake is attached, and a hand-wheel attached to the lower end of the shaft, a buffer interposed between the base of the frame and the block to which the other end of the brake is secured, and means for attaching a sling to the said frame, substantially as shown and described.

2. A fire-escape, comprising a frame, a drum journaled in said frame, a brake-wheel attached to one end of said drum, a spiral

spring in the wheel, a shaft passing through the base of the frame, a hand-wheel con-20 nected to the shaft, a band-brake passing over the brake-wheel and attached to the base of the frame at one end and secured at its free end to the shaft, and means for attaching a sling to the said frame, substantially as 25 shown and described.

In testimony that we claim the foregoing as our invention we have signed our names, in presence of two witnesses, this 24th day of March, 1897.

H. V. SWYNY.
J. H. McDONALD

Witnesses:
FRED. KOHL,
CHARLES G. KOHL.