No. 725,206. PATENTED APR. 14, 1903.

A. BOISCLAIRE.

FIRE ESCAPE.

APPLICATION FILED SEPT. 4, 1902.

NO MODEL.

FIG. 1.

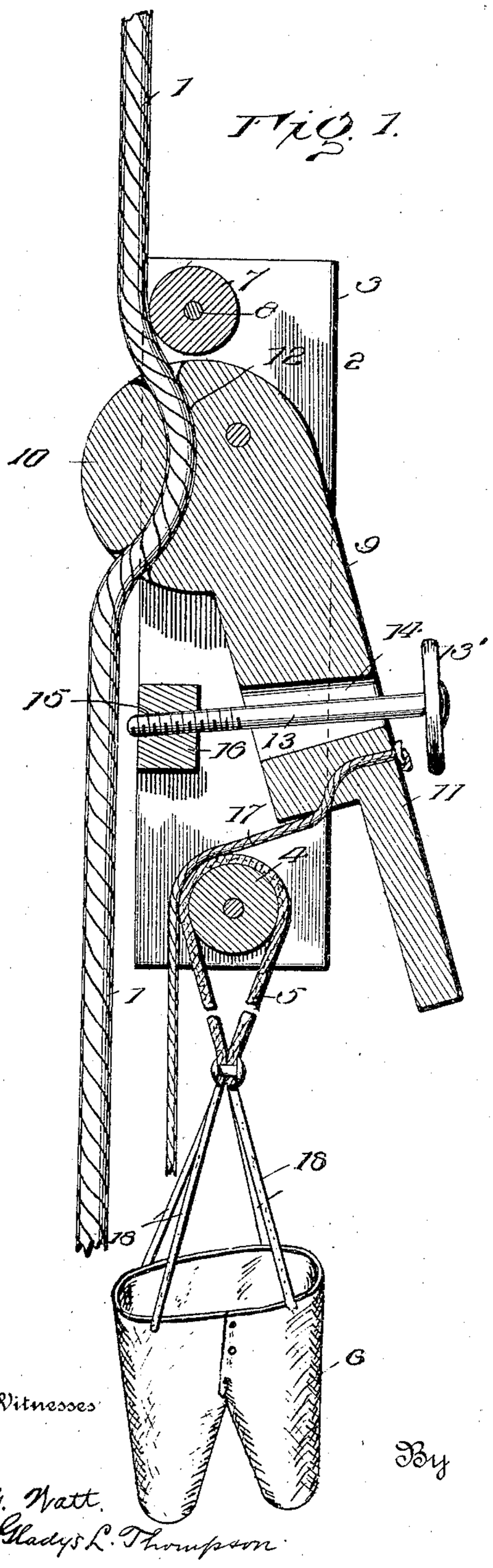
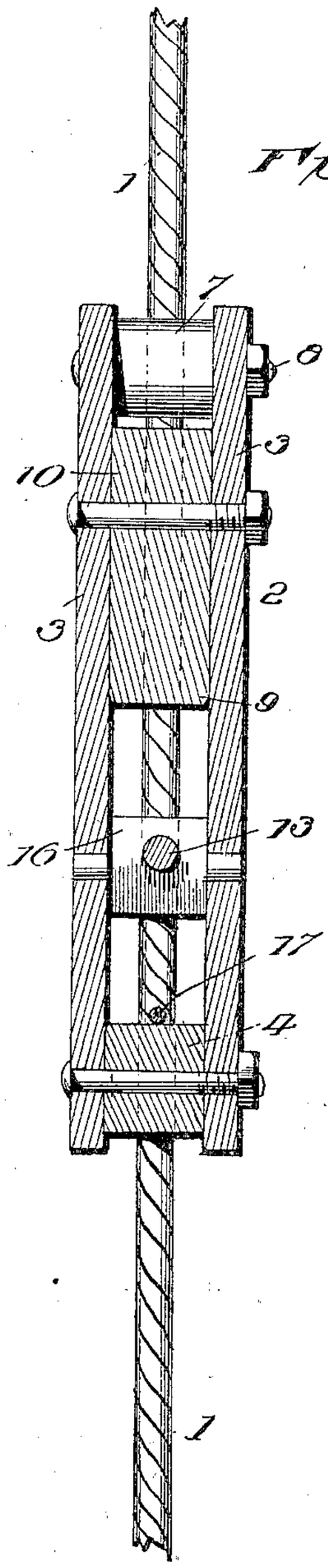


FIG. 2.



Witnesses

G. G. Watt.

Gladys L. Thompson.

Inventor

Alfred Boisclaire

By R. S. & A. B. Lacey

Attorneys.

UNITED STATES PATENT OFFICE.

ALFRED BOISCLAIRE, OF HIGHWOOD, MONTANA.

FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 725,206, dated April 14, 1903.

Application filed September 4, 1902. Serial No. 122,109. (No model.)

To all whom it may concern:

Be it known that I, ALFRED BOISCLAIRE, a citizen of the United States, residing at Highwood, in the county of Choteau and State of Montana, have invented certain new and useful Improvements in Fire-Escapes, of which the following is a specification.

This invention relates to an improvement in fire-escapes of that class wherein a rope-brake controls the speed of the descending carrier.

The primary object resides in the production of a rope-brake of simplified construction provided with means for adjustably setting the power of the brake and also with auxiliary means, within control of the occupant of the carrier, for increasing the power of the brake at will.

With this purpose in view my invention consists of certain details of construction and arrangement of parts to be hereinafter described in connection with the accompanying drawings, wherein the preferred form of my invention is illustrated, and in which—

Figure 1 is a view in elevation of my improved fire-escape with one side plate of the rope-brake removed. Fig. 2 is a transverse section of the same.

Referring to the accompanying drawings, in which like reference characters designate like parts throughout both views, 1 represents the supporting line or rope, which when the escape is in use is to be suitably attached at its upper end in any convenient manner.

2 represents the rope-brake comprising side plates 3, spaced apart at the lower end by a block 4, which is encircled by a metal strap 5, from which depends a suitable carrier 6.

While I prefer the form of carrier illustrated, it is evident that any suitable carrier may be used and that such carrier may be suspended directly from plates 3 instead of from block 4, as shown. The upper ends of the plates 3 are spaced apart by a friction-drum 7, suitably mounted on a shaft 8, having its ends fixed in the side plates.

Adjacent the friction-drum is arranged the brake-block 9, comprising a circular head 10, eccentrically pivoted between the side plates, and an arm or lever 11, projecting from head 10, which lever extends vertically contiguous the side plates 3. An opening 12, having enlarged rounded mouths, is formed in the head, of a size to receive the supporting-rope, the brake-block being so pivoted and the opening 12 formed in such direction that when the parts are assembled the supporting-rope will be in more or less contact with the friction-drum at all times.

13 represents the adjusting-screw, having an operating hand-wheel 13′ for controlling the power of the brake, it being adapted to pass loosely through an elongated slot 14, formed in the lever 11 of the brake-block, with its screw-threaded end engaging a screw-threaded hole 15, formed in a block 16, conveniently pivoted between the side plates 3 to permit the necessary variations in its position incident to the change of position of screw 13 and lever 11 in operation. By suitably turning screw 13 the lever 11 is forced inward toward the side plates 3, turning the eccentrically-pivoted head 10 and binding the supporting-rope 1 between the peripheral surface of head 10 and the friction-drum 7. The extent of movement of screw 13 in either direction will, it is at once apparent, determine the power exerted by the brake-block, and hence the speed of the descending rope-brake and carrier.

I provide an auxiliary means to control the power of the brake-block in order to counteract breakage of the screw-setting means or to increase the power of the brake-block, if sufficient, through hurried or careless operation. The auxiliary means comprises a rope or wire 17, attached to the free end of lever 11, passed between the side plates 3, and depending within reach of the occupant of the carrier, the operation of which rope and the effect thereof is apparent.

The fire-escape as a whole is of little bulk and is adapted to be carried in a satchel or trunk ready for instant use, it being understood that the screw 13 in the event of individual ownership of the fire-escape will be adjusted to give the proper braking power to adapt the rope-brake to the owner's use, and hence the device will remain in serviceable condition at all times.

What I claim as new is—

1. In a fire-escape, a supporting-rope, a brake therefor, said brake comprising a friction-drum, a brake-block having an eccen-

trically-pivoted head through which the supporting-rope is adapted to pass, and a projecting lever, and a screw passing through the lever and adapted in operation to move the eccentric head of the brake-block to bind the supporting-rope against the friction-drum, and a carrier depending from the block, substantially as described.

2. A rope-brake for fire-escapes comprising side plates, a friction-drum held between the side plates, a brake-block comprising a head and a projecting lever, the head being eccentrically pivoted between the side plates adjacent the friction-drum, and formed with a rope-receiving opening, and a screw passed loosely through the lever and engaging a block fixed between the side plates, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

his
ALFRED × BOISCLAIRE. [L. S.]
mark

Witnesses:
CHAS. H. BOYLE,
E. O. CULBERTSON.