A. A. JAHNKE.

FIRE ESCAPE.

APPLICATION FILED APR. 20, 1909.

940,601. Patented Nov. 16, 1909.

Fig. 1.

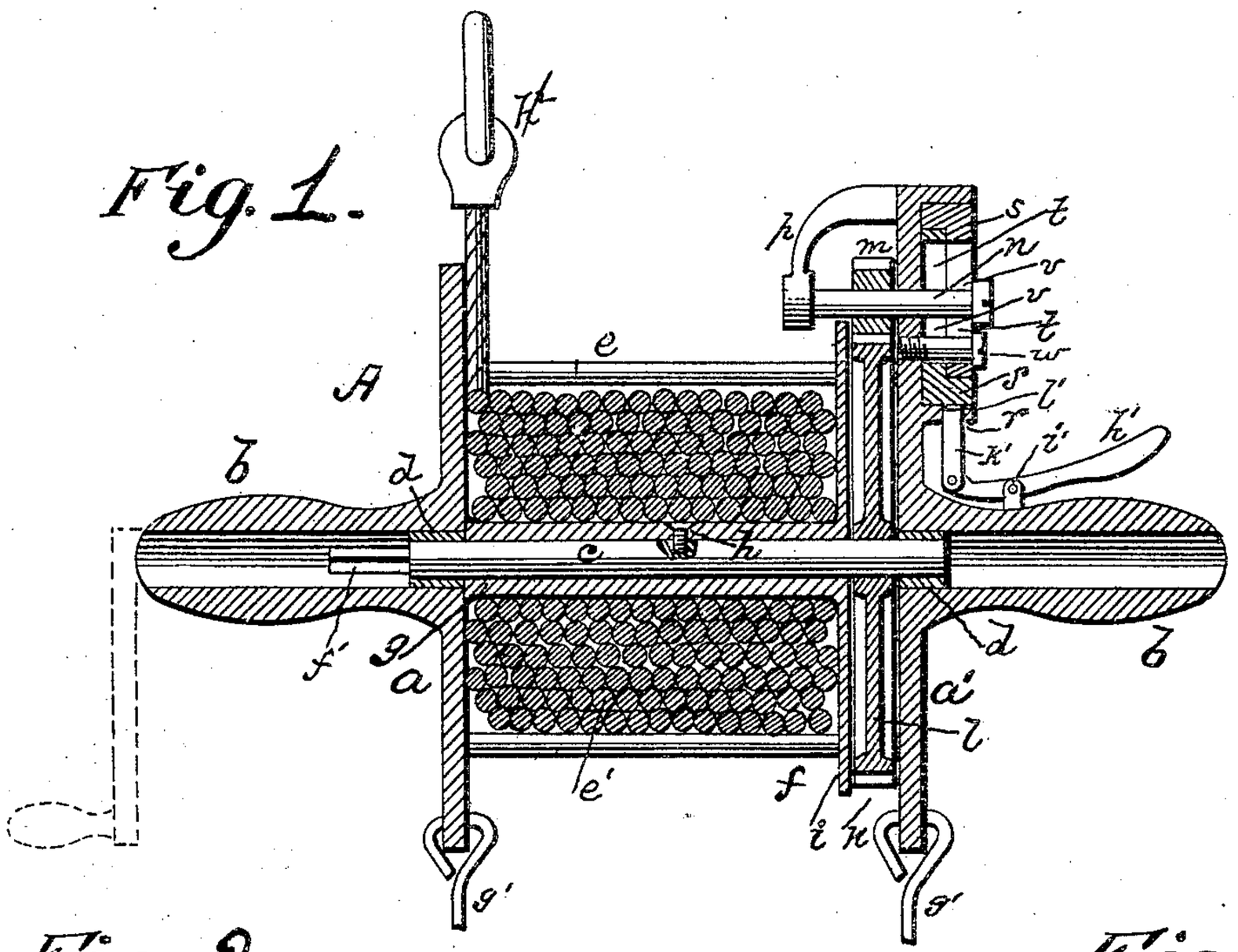


Fig. 2.

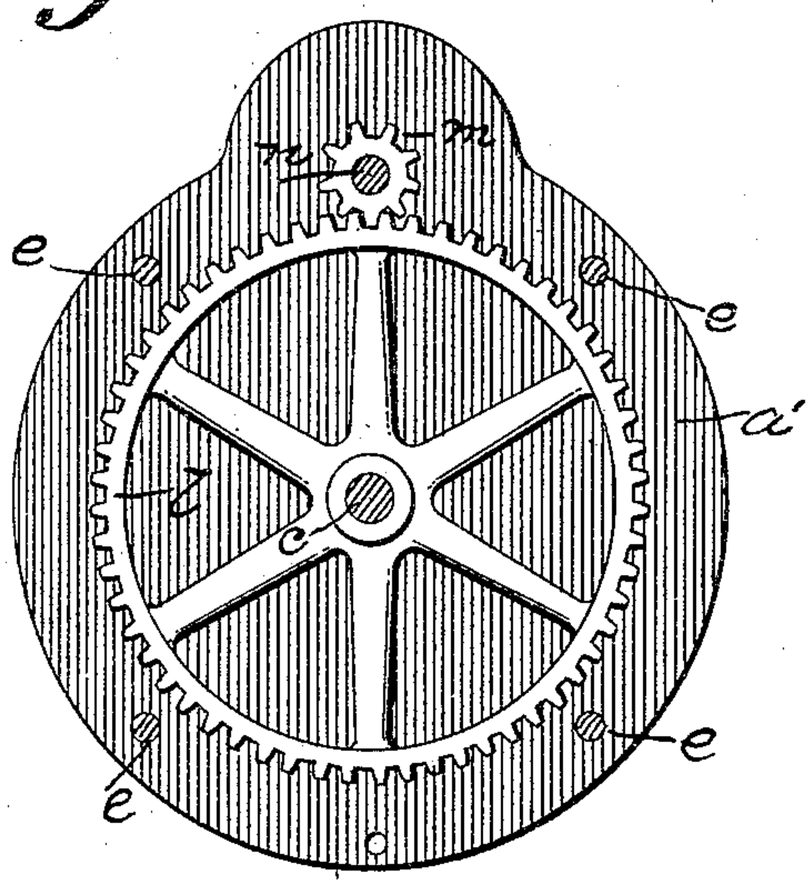
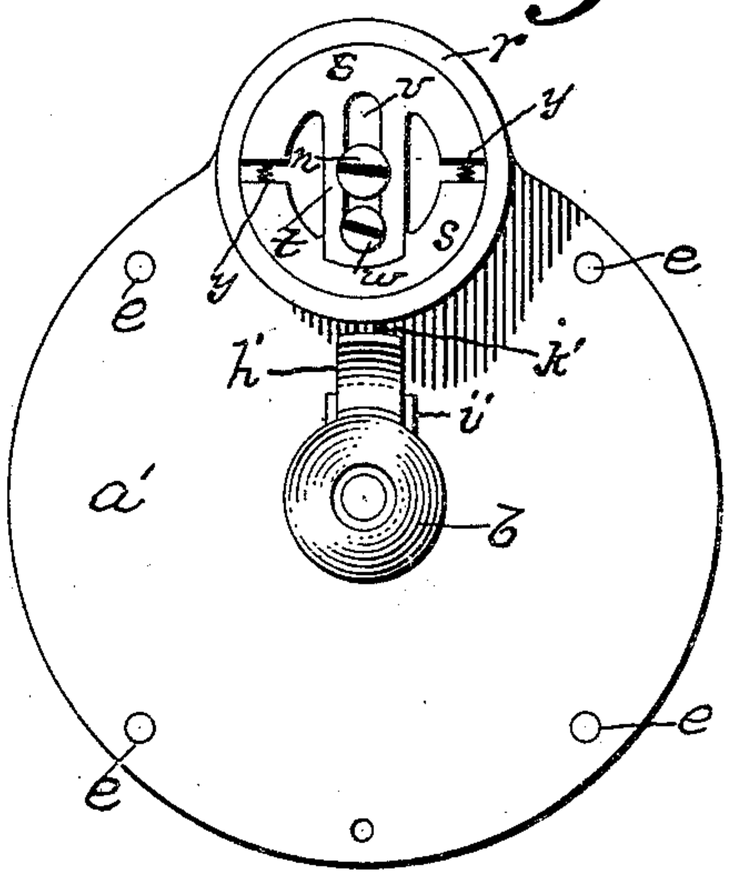


Fig. 3.



Witnesses

Jos. F. Collins

Frank J. Golden

Inventor

A. A. Jahnke

By E. H. Bates Attorney

UNITED STATES PATENT OFFICE.

ALBERT A. JAHNKE, OF SAN FRANCISCO, CALIFORNIA.

FIRE-ESCAPE.

940,601. Specification of Letters Patent. Patented Nov. 16, 1909.

Application filed April 20, 1909. Serial No. 491,054.

To all whom it may concern:

Be it known that I, ALBERT A. JAHNKE, a citizen of the United States, residing at San Francisco, in the county of San Francisco and State of California, have invented certain new and useful Improvements in Fire-Escapes, of which the following is a specification.

This invention has relation to improvements in hand operating fire escapes, and it consists in the novel construction, combination and arrangement of parts of which it is composed, all as will be hereinafter more fully described and particularly pointed out in the following specification.

The annexed drawing, to which reference is made, fully illustrates my invention, in which—

Figure 1, represents a vertical sectional view of my device. Fig. 2, is a vertical transverse sectional view, and Fig. 3, is a side view.

Referring by letter to the accompanying drawing, A, designates the fire escape, comprising side disks *a*, *a'*, having hollow handles *b*, *b*, and a transverse shaft *c*, which has its end bearings in boxes *d*, *d*, of the hollow handles. These disks are connected to one another by transverse binding rods *e*, thus forming a rigid frame or body. Mounted upon this transverse shaft is a reel *f*, composed of the sleeve *g*, which is secured to said shaft by screw *h*, to permit said sleeve to turn, only, with said shaft, and at one end of this sleeve is secured or formed integral therewith a disk *i*, and between this disk and the disk *a'*, is a space *k*, in which is interposed a gear wheel *l*, that is securely mounted on the transverse shaft, and which meshes with a pinion *m*, secured to a short horizontal detachable shaft *n*, that has its bearing or support in the side disk *a'*, the inner end of this shaft is supported at the outer end by a bracket or arm *p*, fixed to said disk. This disk is constructed with a circular recess or boxing *r*, in which are arranged twin semicircular blocks *s*, *s*, having inner and outer arms *t*, *t*, which are slotted at *v*, and through which pass a screw bolt *w*, and the short shaft aforesaid. The twin blocks being held in position by the heads of the screws, and the short shaft *n*, having flat sides that engage the sides of the slots *t*, *t*, thus revolving the blocks, when the pinion is in motion, and between the two blocks, are springs *y*, *y*, that cause the block or circular friction shoe to impinge upon the inner circular wall of the box, thereby at all times keeping the twin section of the brake shoe slightly spread apart.

The cable *e'*, is reeled upon the transverse sleeve; the inner end thereof being secured to the escape while the outer end has a hook h^2, or other device by which said cable can be made fast to an object; the cable being wound upon the sleeve by a crank (shown in dotted lines) applicable to the square end *f'*, of the transverse shaft *c*.

Straps or suspending cables *g'*, are secured to the disks by one end, while the opposite end may be secured to a basket or to a belt around a person's waist.

It is obvious, from the above description, when taken in connection with the accompanying drawing that by my construction of a fire escape a person can readily descend from a building with the assurance that the revolution of the reel in paying out the cable, will be controlled to a nicety, as the brake instantly and at all times during the descent acts automatically, by the twin section comprising the shoe, in its revolution impinging the inner face of the box, said revolution obtained through the medium of the gearwheel and pinion.

For further security and at the same time imparting more confidence to the operator I reinforce the brake shoe by a hand lever *h'*, which is fulcrumed to the hollow handle at *i'*, and is pivoted to the lower end of a short rod *k'*, the free end of which passes through an opening *l'*, in the body of the box and contacts with the periphery of the shoe and by pressure upon the fulcrumed lever, the shoe is forced against the inner wall of the box and greater friction is secured between these parts.

It will be seen that the descending escape is controlled by the automatically operating shoe and when it is desired to still further retard the movement of the same, the operator presses upon the fulcrumed lever and thereby forcing the shoe to a continual friction with the wall of the box casing and the operator can regulate the downward movement of the escape at will, or can at any given point bring the device to a full stop, and a device as herein described and shown is durable, easily operated, ornamental, and, at the same time cheap to manufacture.

In the drawing I have shown a preferable construction of the various parts, but various

changes may be made therein, without departing from the spirit of my invention.

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

1. A fire escape comprising two spaced disks formed with hollow handles, a shaft journaled in said disks and handles, a drum-sleeve secured on said shaft and having a disk flange, and a gear wheel on said shaft between the drum flange and one of the main disks and a pinion engaging said gear wheel and a brake controlled by the rate of rotation of said pinion.

2. The herein described fire escape, comprising twin side disks, each having a hollow handle and connected to one another by the binding rods, one of which disks having a box, a sleeve mounted upon the shaft, having a flange, a gear wheel secured to the transverse shaft, and interposed between the flange and box disk, a pinion engaging the gear wheel and secured to the inner end of the shaft n, a brake shoe comprising twin blocks, having the slots to engage the flat surfaces of the pinion shaft and arranged within the box and a brake lever consisting of the handle h' fulcrumed to the hollow handle and pivoted at its inner end to the lower end of a vertical rod k', the upper end thereof contacting with the blocks.

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

ALBERT A. JAHNKE.

Witnesses:
R. B. Bates,
Frank J. Golden.