

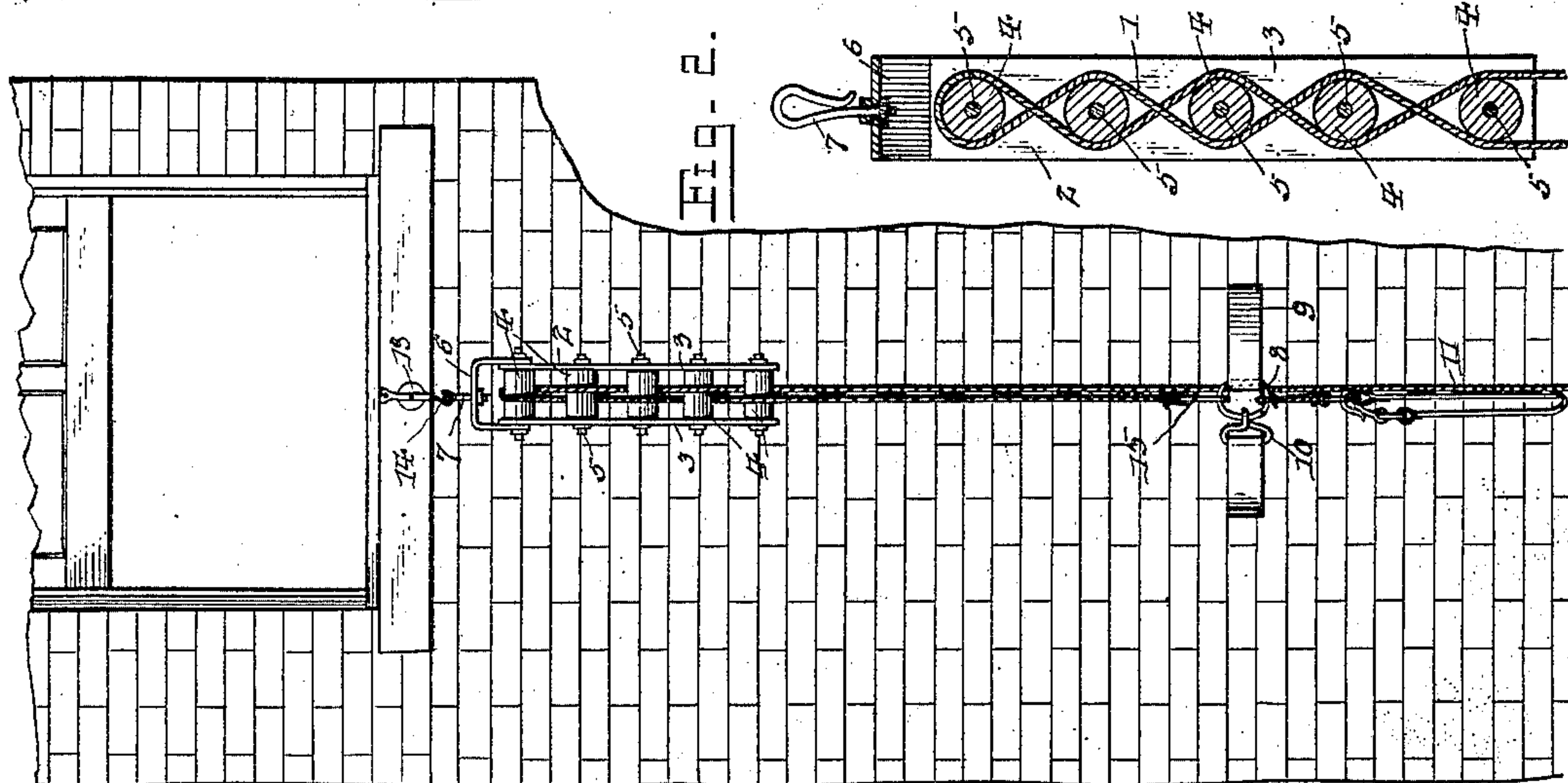
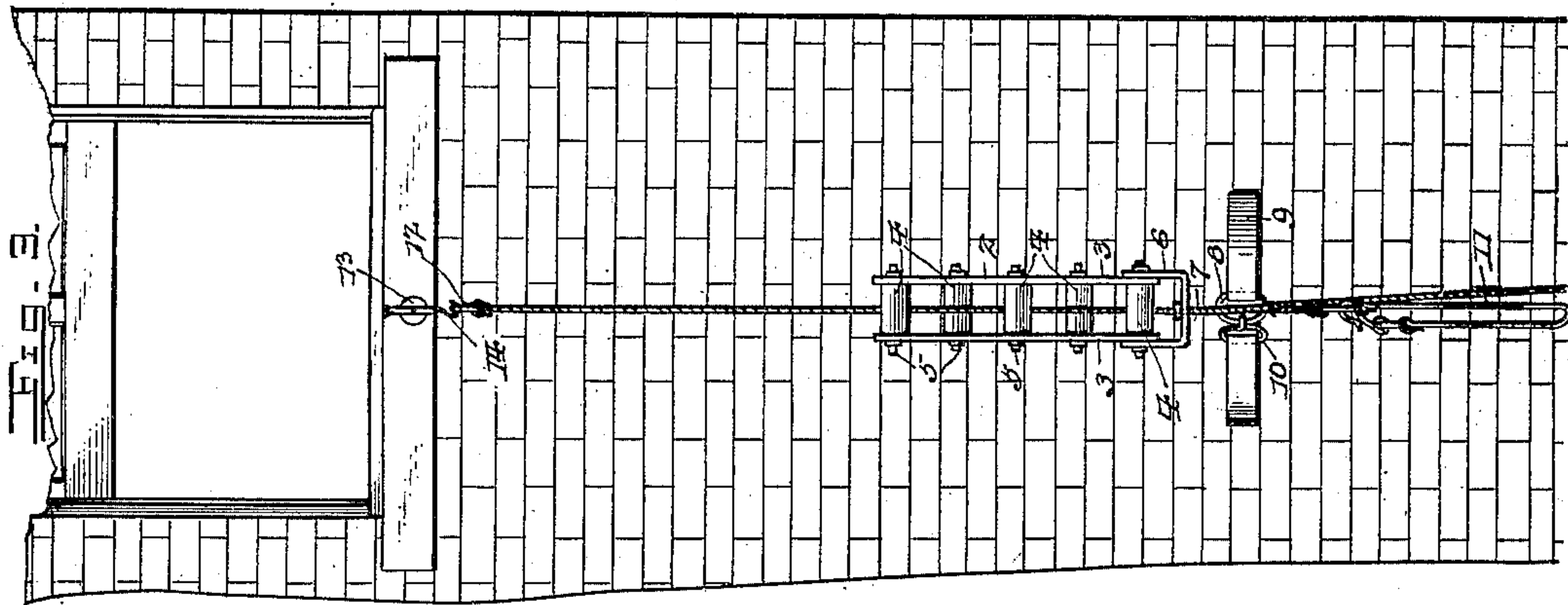
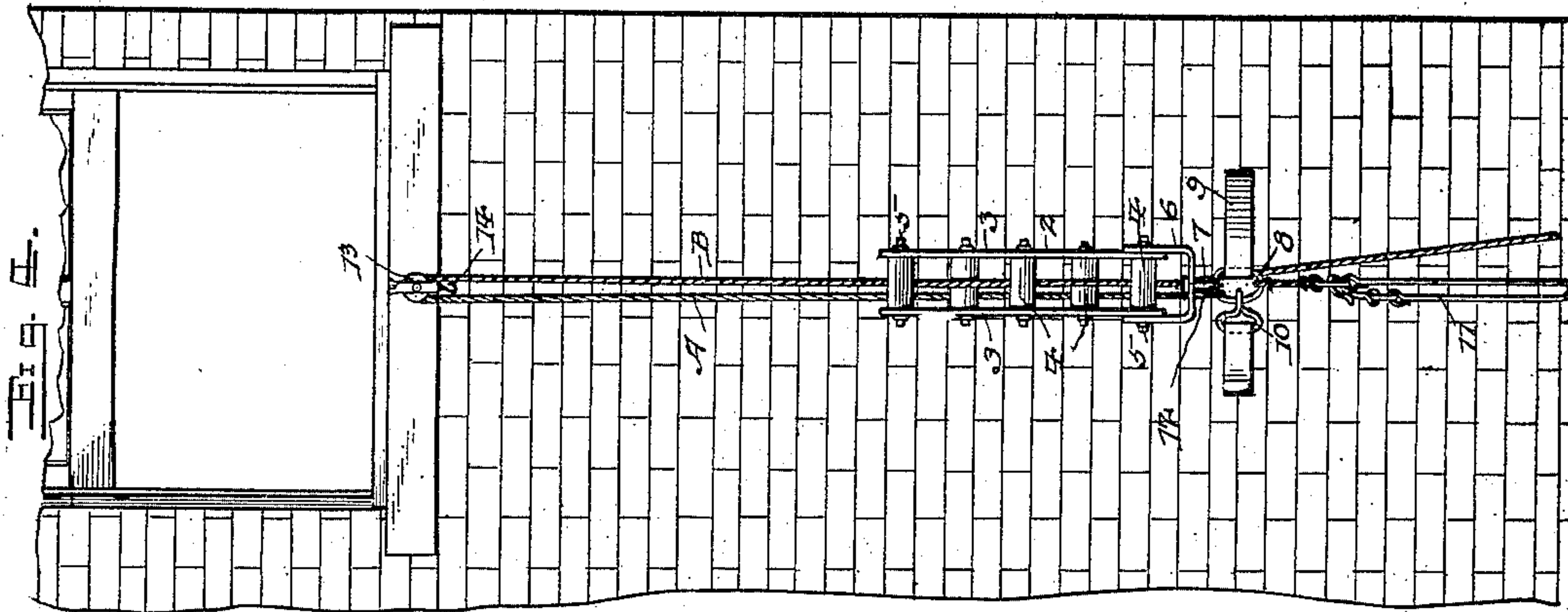
No. 688,592.

Patented Dec. 10, 1901.

R. CHADWICK.
FIRE ESCAPE.

(Application filed Dec. 3, 1900.)

(No Model.)



Witnesses

F. E. Alden.
H. J. Shepard.

Fig. 1.

by *R. Chadwick, Inventor.*
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UNITED STATES PATENT OFFICE.

ROBERT CHADWICK, OF SUMNER, NEBRASKA.

FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 688,592, dated December 10, 1901.

Application filed December 8, 1900. Serial No. 38,521. (No model.)

To all whom it may concern:

Be it known that I, ROBERT CHADWICK, a citizen of the United States, residing at Sumner, in the county of Dawson and State of Nebraska, have invented a new and useful Fire-Escape, of which the following is a specification.

This invention relates to fire-escapes, and has for its object to provide an improved portable device of this character which may be conveniently rigged up for use to effect the escape of a person from an upper story of a burning building.

It is furthermore designed to provide for using the device in several different ways, so as to accommodate the same to the circumstances governing any application thereof.

With these and other objects in view the present invention consists in the combination and arrangement of parts, as will be hereinafter more fully described, shown in the accompanying drawings, and particularly pointed out in the appended claim, it being understood that changes in the form, proportion, size, and minor details may be made within the scope of the claim without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawings, Figure 1 is a side elevation showing one application of the improved fire-escape. Fig. 2 is a detail longitudinal sectional view of the reversible friction-slide. Figs. 3 and 4 are views similar to Fig. 1, showing two other applications of the frictional slide.

Like characters of reference designate corresponding parts in all of the figures of the drawings.

In carrying out the present invention I employ a cable 1, upon which is mounted a friction-slide 2, that is designed to slide downwardly upon the cable in some instances and to form a support through which the cable runs in other instances. This frictional slide has a frame comprising opposite sides 3, between which are mounted a plurality of rollers 4, the spindles 5 of which form the sole connection for the sides of the frame. At one end of the frame and embracing the same is a yoke 6, which has the opposite ends of the adjacent spindle passed through its opposite sides, so as to pivotally connect the yoke to

the frame of the slide. An outwardly-projecting hook 7 is swiveled to the intermediate portion of the yoke, so as to suspend the slide from a suitable support. A ring 8 is provided at one end of the cable, and a suitable belt 9 has one end secured to the ring and its opposite end provided with a hook 10 for disengageable engagement with the ring, so as to facilitate the placing of the belt about the body of the person who is to use the device. From the same ring there is suspended a similar belt or loop 11, which is designed to form a support for the feet of the user. These two belts form a support for the person descending by means of the present fire-escape. The opposite end of the cable is provided with a hook 12, as indicated in Figs. 3 and 4, for a purpose as will be hereinafter described. For the support of the device during a descent there is employed a pulley-block 13, which is secured to a window-sill, as clearly shown in the drawings, and forms a supporting-guide for the loose reception of the intermediate portion of the cable in one of the applications of the fire-escape.

In using the device as shown in Fig. 1 of the drawings the cable is doubled and has its opposite portions reeved in opposite directions around the respective rollers, as best shown in Fig. 2, and the frame is suspended from a pendent hook 14, carried by the pulley-block and with which the hook 7 of the frame is engaged. It will now be understood that the user buckles the upper belt about his body and then swings himself out of the window and controls his descent by manipulation of the opposite free portion of the cable, and in any event the passage of the opposite portions of the cable in and out across the several rollers places considerable friction upon the cable, so as to prevent a too-rapid descent.

To use the device as shown in Fig. 3, the slide is inverted and the cable reeved once through the rollers, after which the hook 12 at one end of the cable is engaged with the hook 14 of the pulley-block. The ring 8 of the belt 9 is then engaged with the hook 7 of the frictional slide, so as to connect the latter and the supporting-seat, whereby the latter and the slide are designed to travel downwardly upon the cable, which is suspended from the support formed by the pulley-block.

In this application there is no free portion of the cable to control the descent of the person, as the belt, which is at the free end of the cable, is connected to the slide. It is preferable to have the ring of the belt detachably connected to the adjacent end of the cable by means of a hook 15, permanently carried by said end of the cable in order that the belt may be disconnected from the latter, although it is not necessary to disconnect these parts, as the free end of the cable will travel downwardly with the belt without interfering with the descent of the slide, as will be understood.

In Fig. 4 I have shown another arrangement of the device in which the intermediate portion of the cable is run loosely through the pulley and one portion thereof is run through the slide, the latter being inverted and connected to the ring of the belt, as hereinbefore described, and the hook 12 of the cable engaged with the ring of the belt, the opposite end of the cable hanging downwardly and free or connected to the ring of the belt. By this arrangement the portion A of the cable, the belt, and the slide are all connected together, so as to travel downwardly with the slide, which slides downwardly upon the cable portion B, whereby as the cable portion A travels downwardly through the pulley the opposite portion B travels upwardly through the slide.

From the foregoing description it will be seen that the present device comprises a cable having opposite terminal hooks, a pulley-block having a pendent hook for the sup-

port of the cable, a frictional slide through which the cable is to be passed, and a seat or support for interchangeable connection with the cable and the slide, whereby the parts of the device may be interchanged and rearranged to accommodate the same to any particular circumstances or desire of the operator. Moreover, the opposite terminals of the cable, the friction-slide, and the body-support are provided with interconnectible fastenings whereby the device is adapted for the several applications, as shown in the drawings.

What is claimed is—

In a fire-escape, the combination of a cable having opposite terminal hooks, a supporting-pulley adapted for the loose reception of the intermediate portion of the cable, and having a pendent hook for detachable engagement with one of the hooks of the cable, a frictional slide having frictional rollers for engagement with the cable, and a terminal swinging yoke having a swiveled hook for detachable engagement with the pendent hook of the pulley, and a body-support having a ring for interchangeable engagement with the hook of the slide and one of the terminal hooks of the cable.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in the presence of two witnesses.

ROBERT CHADWICK.

Witnesses:

J. H. MILHOUSE,
J. L. DRAKE.