

(No Model.)

2 Sheets—Sheet 1.

F. B. PETERS.

FIRE ESCAPE.

No. 354,217.

Patented Dec. 14, 1886.

FIG. 1.

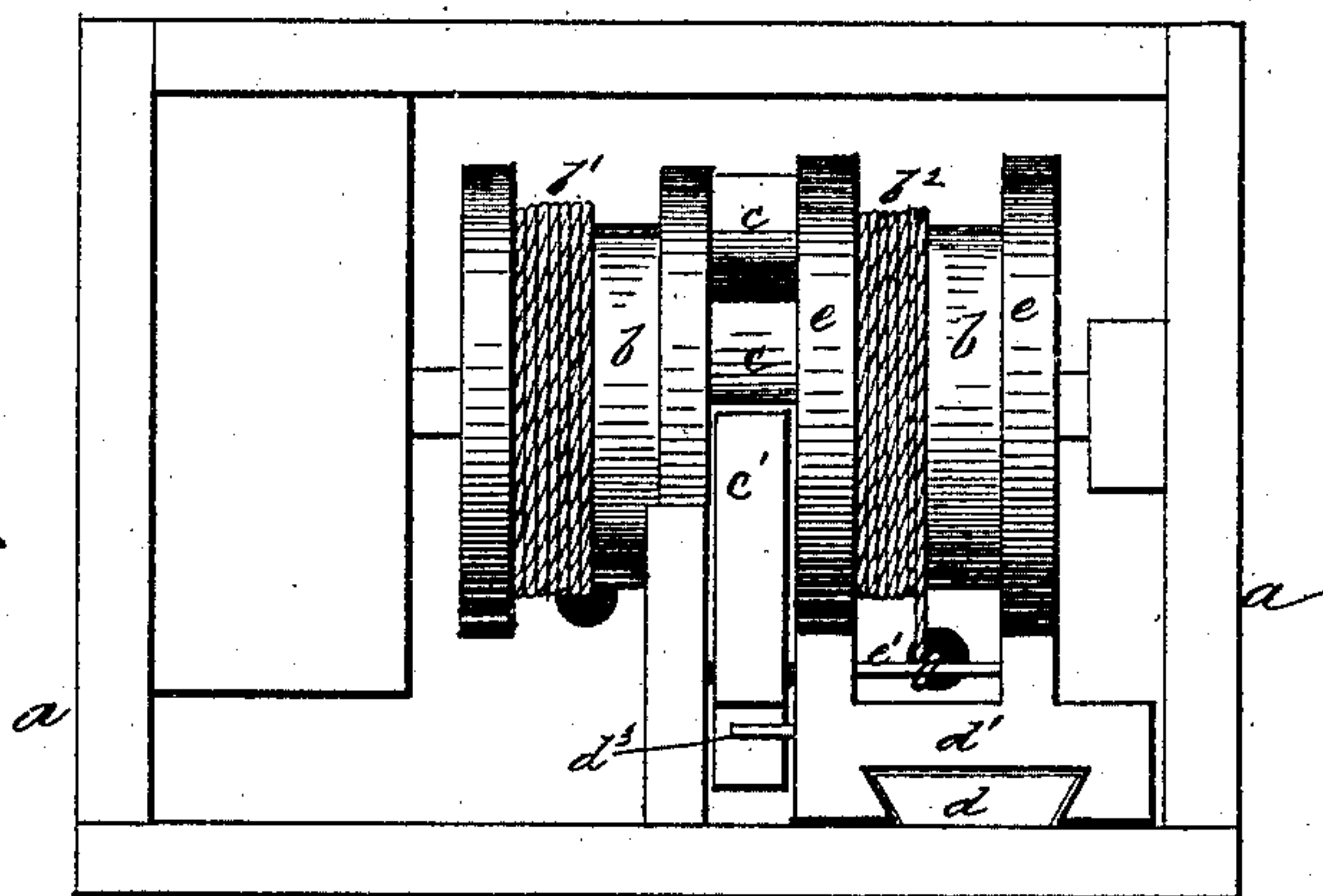
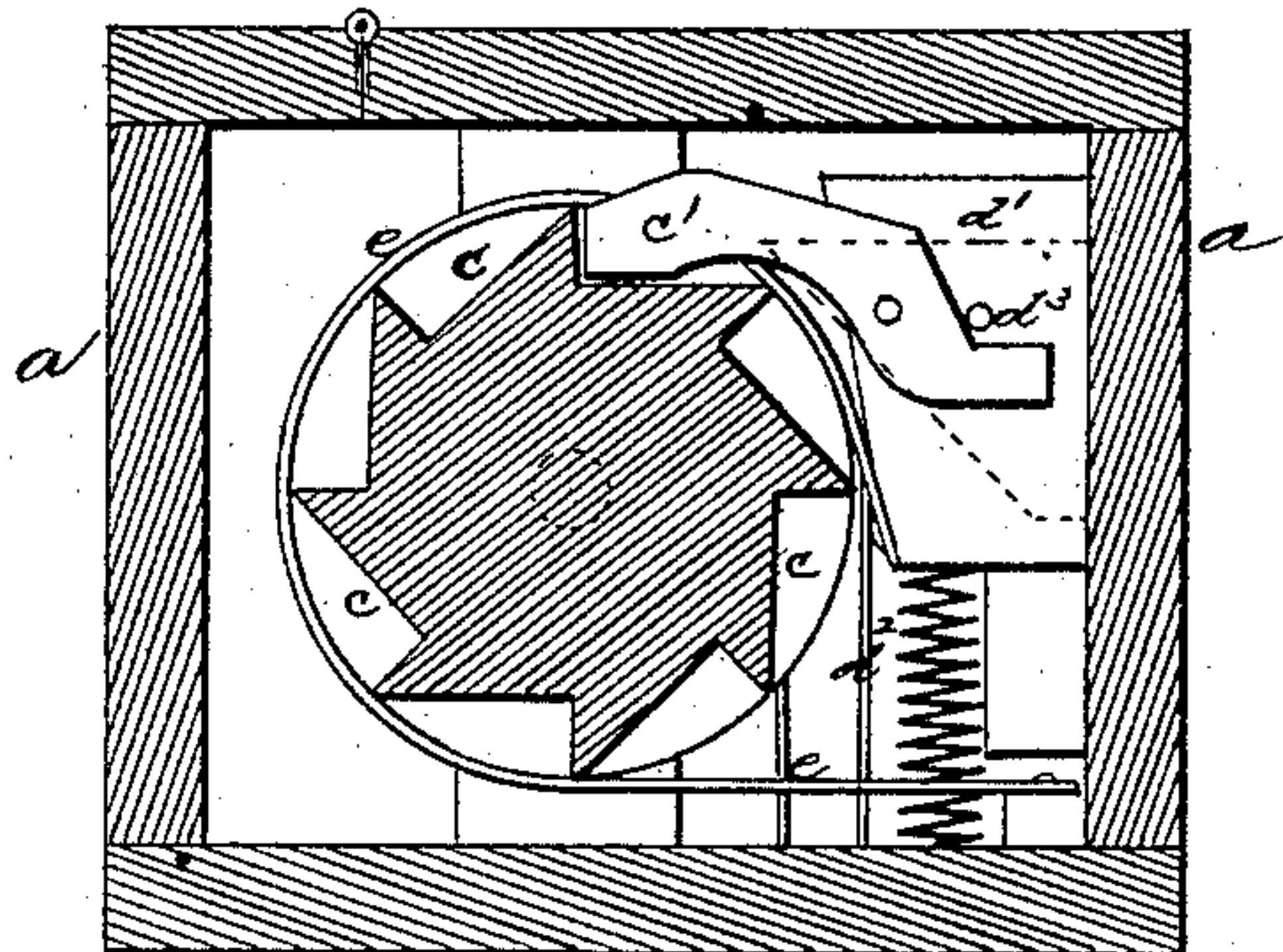


FIG. 2.



Witnesses:

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Inventor:

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Per

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(No Model.)

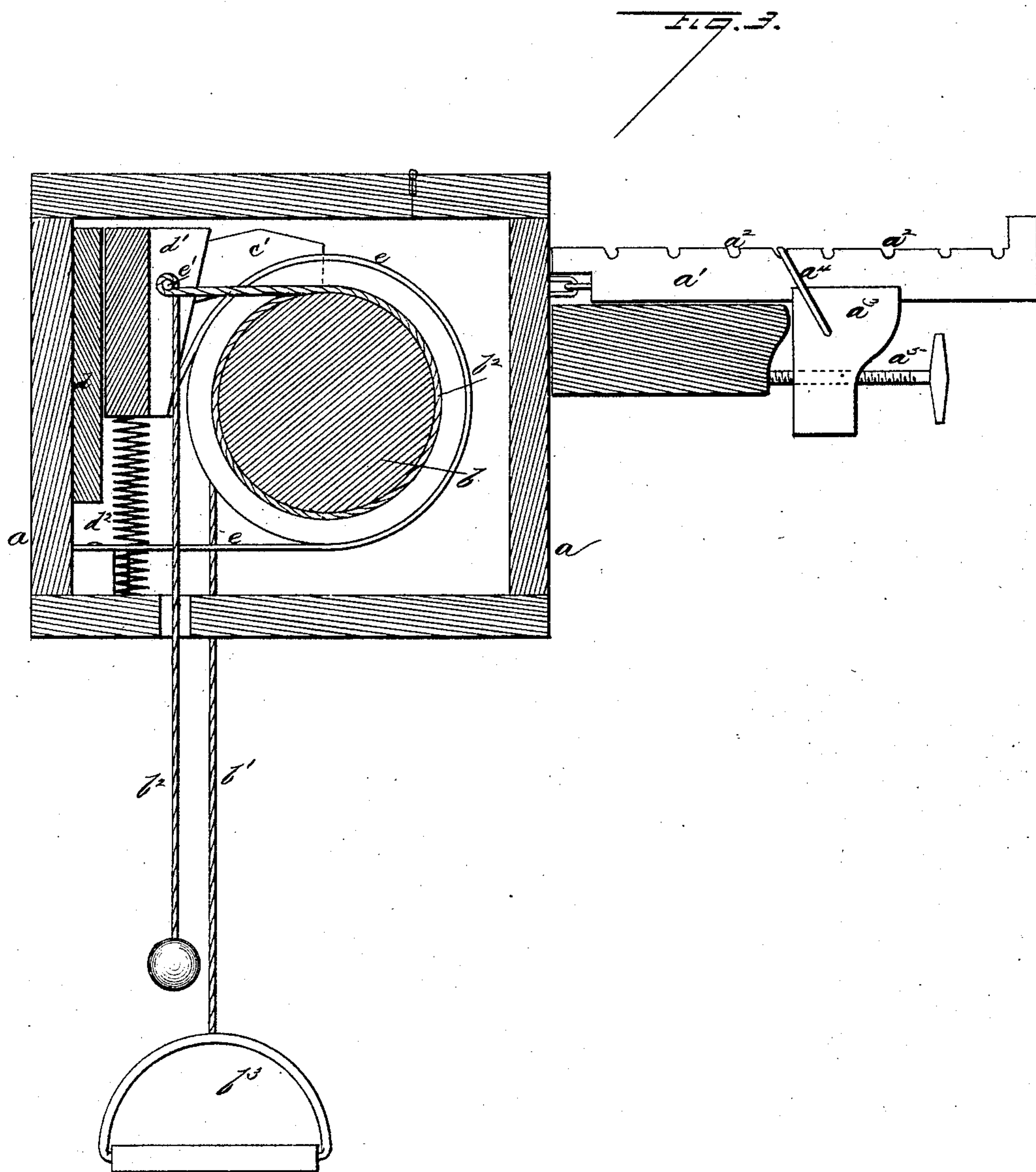
2 Sheets—Sheet 2.

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# UNITED STATES PATENT OFFICE.

FRANZ BENJAMIN PETERS, OF LINCOLN, NEBRASKA.

## FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 354,217, dated December 14, 1886.

Application filed July 23, 1886. Serial No. 208,990. (No model.)

*To all whom it may concern:*

Be it known that I, FRANZ BENJAMIN PETERS, a citizen of the United States, residing at Lincoln, in the county of Lancaster and State of Nebraska, have invented certain new and useful Improvements in Fire-Escapes, of which the following is a specification, to wit:

This invention relates to fire-escapes; and it consists in certain peculiarities of the construction and arrangement of the same, substantially as will be hereinafter more fully set forth and claimed.

In order to enable others skilled in the art to which my invention pertains to make and use the same, I will now proceed to describe its construction and operation, referring to the accompanying drawings, in which—

Figure 1 is a top plan view of my device with the cover removed. Fig. 2 is a transverse section of the same, and Fig. 3 is a similar view looking in the opposite direction.

*a* represents a box or case for containing my apparatus, to the rear side of which is attached a bar, *a'*, formed with notches *a''* in its upper edge. Upon the lower edge of this bar is a slide, *a'''*, provided with a loop or bail, *a''''*, passing around the bar and engaging one of the notches to retain the slide in place. A set or clamping screw, *a''''''*, passes through the slide, as seen in Fig. 3.

Within the box or case *a* is journaled a double drum, *b*, on each portion of which is secured a rope, *b'* *b''*, one of which is passed through the bottom of the case, and provided with a stirrup, *b'''*, and the other is similarly led downward and provided upon its end with a small weight to prevent its swaying and keep it in place. This is fully shown in Figs. 1 and 3.

Between the coils of rope *b'* *b''* the double drum is formed with a ratchet, *c*, and on the adjacent side of the box is pivoted a pawl, *c'*, which engages this ratchet and prevents the movement of the drum. A guide-bar, *d*, on the box is provided with a vertical slide, *d'*, normally held in its topmost position by a spring, *d''*, and having on one side a spur, *d'''*, which, when the slide is depressed, engages and presses down the heel of the pawl and disengages it from the ratchet, as in Fig. 2. To this slide are also secured a pair of flexible

brake-bands, *e*, which pass around the flanges of the drum, and have their other ends secured to the box, as in Figs. 2 and 3. The rope *b''* does not pass from its drum directly out of the box, but is first passed over a pin, *e'*, upon the slide, and is used to operate the latter, as will be explained.

In use the box or case is secured to the sill of a window, as in Fig. 3, by passing the notched bar over the sill, adjusting its slide, and screwing up the set-screw inside of the sill, thus securing the apparatus firmly in place. The person then gets out and stands in the stirrup, and by pulling on the rope *b''* draws down the slide within the case and releases the pawl from the drum. This allows the rope to unwind from both parts of the drum as long as strain is kept on the weighted one, but at the same time tightens the band-brake to control the speed. It will thus be seen that no accident can occur, as should any one lose his presence of mind and release the brake-rope, the pawl at once stops the drum, and when this pawl is lifted the brake is applied.

The device is readily applied to any window, and is easily made of sufficient strength to sustain the weight of one or more persons without being unduly large or heavy for proper ease of handling.

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

1. In a fire-escape, the combination, with a box or case for containing the device, of a bar formed with notches on one edge, a slide thereon having a loop for engaging these notches, and a set-screw in this slide for engaging a window-frame, substantially as and for the purpose set forth.

2. In a fire-escape, the combination, with a drum on which the escape-rope is wound, provided with a ratchet and pawl, of a second or controlling line on said drum, a band-brake around the drum, and a slide connected to the band and provided with a spur to engage the pawl, and a pin over which the controlling-line passes, substantially as and for the purpose set forth.

3. In a fire-escape, a drum or reel provided with a ratchet, in combination with a band-brake around the drum, a slide for applying

it, and a stop-pawl, operated also by the slide, whereby the pawl and brake are caused to be applied alternately, substantially as and for the purpose set forth.

5 4. In a fire-escape, the combination, with the case  $a$ , notched bar  $a'$ , and its slide  $a^3$ , provided with the loop  $a^4$  and screw  $a^5$ , of the double drum  $b$ , formed with ratchet  $c$ , the ropes  $b'$   $b^2$ , pawl  $c'$ , slide  $d'$ , supported on a  
10 spring,  $d^2$ , and its spur  $d^3$  and pin  $e'$ , and the

brake-bands  $e$ , all constructed and arranged to operate substantially as and for the purpose set forth.

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

FRANZ BENJAMIN PETERS.

Witnesses:

M. L. OVERTON,

W. DON FOWLER.