(No Model.)

A. V. GOLTERMANN.

FIRE ESCAPE.

No. 484,093. Patented Oct. 11, 1892.

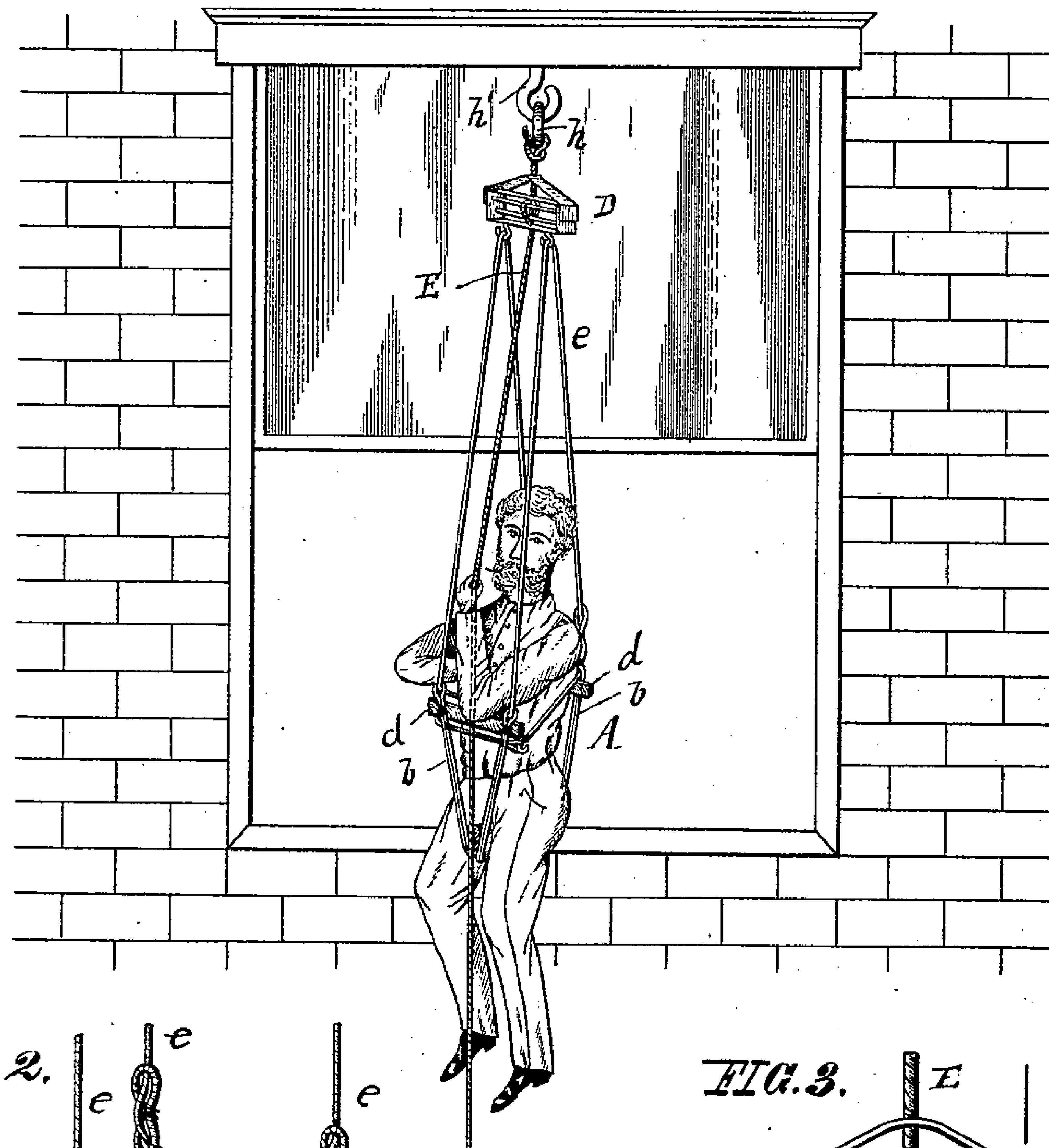


FIG. 1.

FIG. 2.

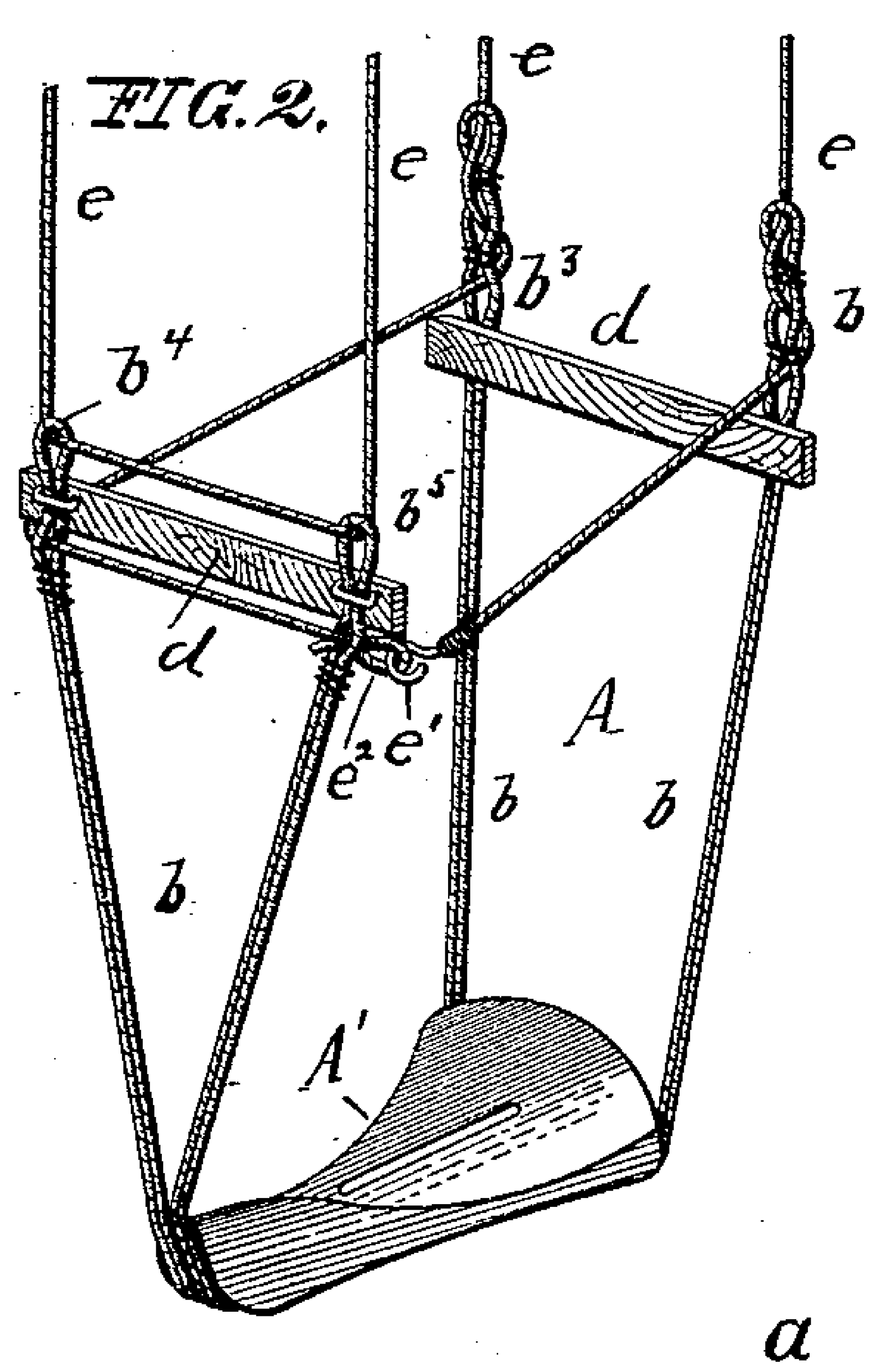


FIG. 3.

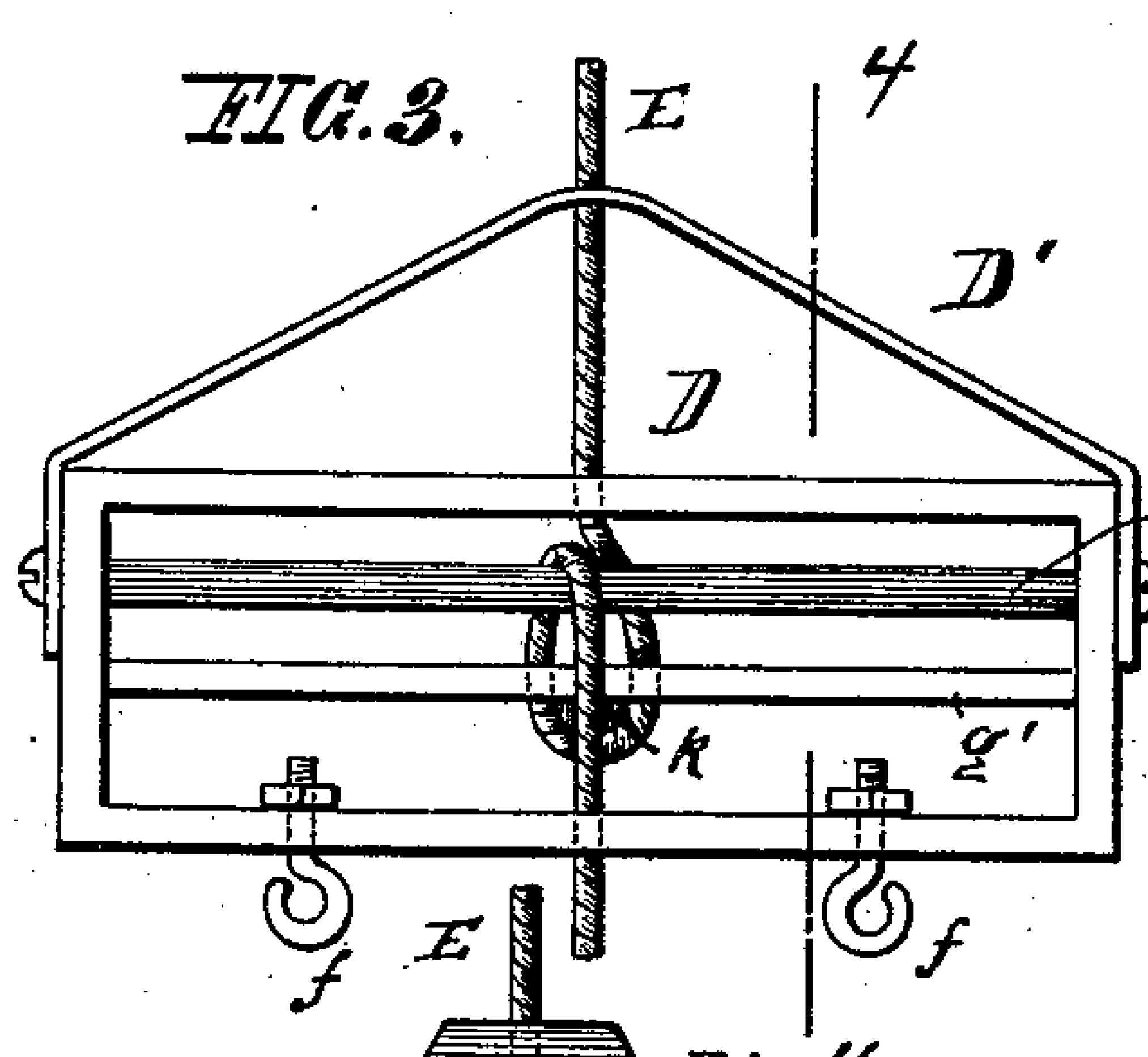


FIG. 4.

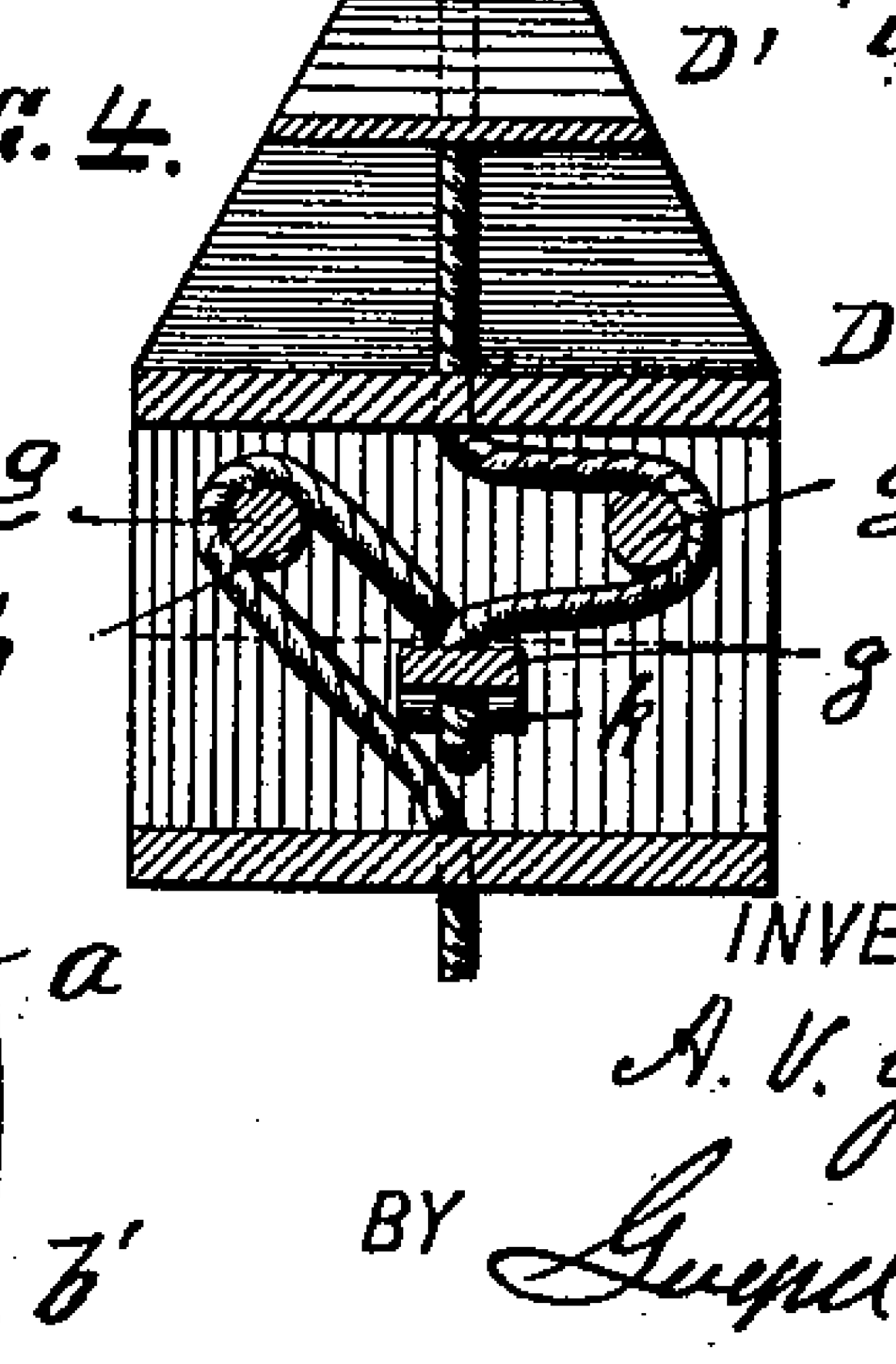
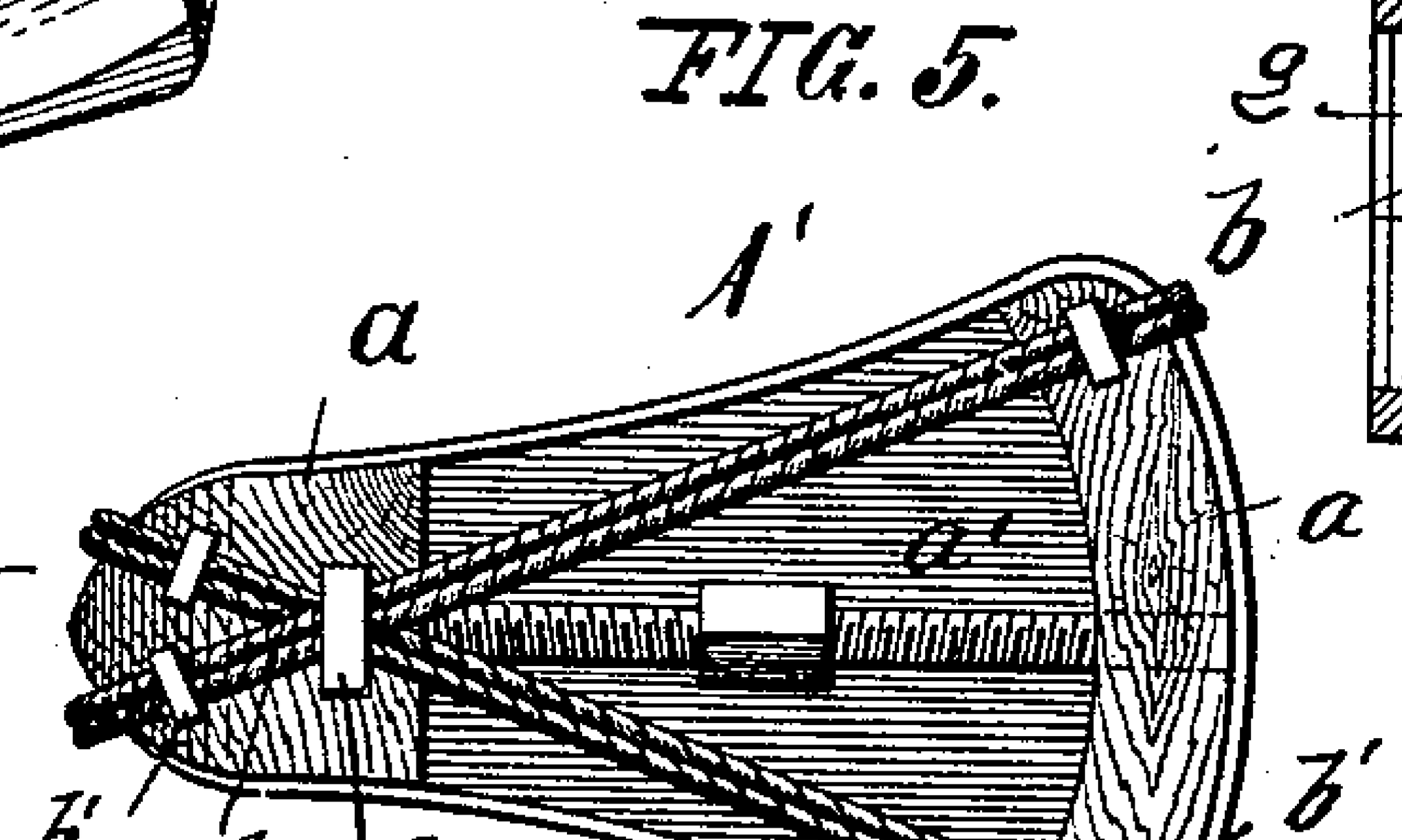


FIG. 5.



WITNESSES:
Chas. [illegible]
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UNITED STATES PATENT OFFICE.

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FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 484,093, dated October 11, 1892.

Application filed December 26, 1891. Serial No. 416,152. (No model.)

To all whom it may concern:

Be it known that I, ADA V. GOLTERMANN, a citizen of the United States, and a resident of New York city, in the county and State of New York, have invented certain new and useful Improvements in Fire-Escapes, of which the following is a specification.

This invention relates to an improved fire-escape of that class in which a seat is suspended and adapted to be lowered by the action of the person occupying the same, said seat portion being adapted for use for men, women, and children; and the invention consists of a fire-escape which comprises a seat formed of a saddle, suspension-cords for the same, and adjustable suspension-cords by which the seat is adjusted automatically to the body of the person using the seat. The seat is suspended from a friction device that moves along a rope as the seat descends, said rope acting in the nature of a brake, so as to govern the descent.

In the accompanying drawings, Figure 1 represents a perspective view of my improved fire-escape, showing the same in use. Fig. 2 is a perspective view of the seat portion of the same, drawn on a larger scale. Figs. 3 and 4 are a side elevation and a vertical transverse section on line 4 4, Fig. 3, of the lowering device for the brake-rope; and Fig. 5 is a bottom view of the saddle of the seat portion.

Similar letters of reference indicate corresponding parts.

Referring to the drawings, A represents the seat portion of my improved fire-escape, which is formed of a saddle A′, that is preferably made of leather applied to end blocks *a*, of wood, iron, or other suitable material, which blocks *a* are connected by a central longitudinal right and left hand screw-rod *a′*, that engages threaded apertures in said blocks and by which the leather forming the saddle can be stretched from time to time whenever it should get slack. The saddle A′ is suspended by means of double cords *b b*, which cross each other at the under side of the saddle and which are attached by staples *b′* to the end blocks *a*, the two suspension-cords *b b* being spread apart at their upper ends by means of transverse pieces *d*, which are attached by staples to the suspension-cords *b b*, as shown clearly in Fig. 2. Loops are formed by the suspension-cords *b b* above the cross-strips *d d*, said loops serving for the passage of the adjustable suspension-cord *e*, one end of which is attached to one end of the front cross-strip *d* or to the upper end of one front suspension-cord *b*, then passed parallel with and below the front cross-strip *d* through a loop on the upper part of the other front suspension-cord *b*, then across through loops b^3 on the upper end of one rear suspension-cord *b*, then upward and through an eye *f*, attached to the bottom of the friction device D, then downward and through a loop b^4 on the upper end of a front suspension-cord *b* and parallel with and above the front cross-strip *d* through a loop b^5 on the upper end of the other front suspension-cord *b*, then upward and through the second eye *f*, attached to the bottom of the friction device D, then downward and through loops b^6 on the upper end of the other rear suspension-cord *e*, and then to the front, the free end of said suspension-cord *e* being provided with a hook *e′* or snap-hook that can be engaged with the loop e^2, formed on that end of the cord *e* that is attached to the front cross-strip *d* or to the end of one of the front suspension-cords *b*, as shown clearly in Figs. 1 and 2. The multiple arrangement of loops above the rear cross-strips *d* is provided for the purpose of producing a certain friction on the suspension-cord *e* as the same adjusts itself to the weight of the person mounting on the seat.

The friction device D is composed of a box-shaped open frame provided with two longitudinal rods *g* and a central longitudinal bar *g′* below the same. A brake-cord E is attached by a ring *h* to a fixed hook *h′* at the top part of the window-frame and is passed through a guide-hole of an upper stiffening-brace D′ of the friction device D, then through a central opening in the top part of the frame of the friction device and around one of the longitudinal rods *g*, then through a hole in the longitudinal bar *g′* and around a grooved rounded portion *k* of the same, then upward through a second hole in the bar *g′* and over the second longitudinal rod *g*, and then in downward direction through a central opening in the bottom part of the friction device D, the brake-rope E being of sufficient length to correspond to the distance of the window

from the ground, so that the seat can be lowered down along the same by means of the friction between the brake-rope and the rods of the friction device D.

The fire-escape is suspended, when not in use, from the hook h' on the top of the window-casing, the seat portion being preferably wrapped up in a suitable cover, so as to be folded up in the same on a small scale, and suspended from the upper part of the window-casing. When it is required for use, the cover is removed and the seat portion placed in position near the sill of the window-casing. That end of the adjustable suspension-cord which is provided with the hook e' is opened, so that the person who is desirous of using the fire-escape can readily place himself astride of the saddle a. The hook is then applied to the end loop e^2 of the adjustable suspension-cord e, and then the full weight of the person is permitted to act on the seat by swinging away from the sill, so that the suspension-cord e adjusts itself and places the cross-strips d close to the front and rear part of the body, as shown in Fig. 1. In this position the person is securely suspended and can then readily lower himself by the brake-rope. On letting the brake-rope go a slow descent of the seat portion takes place as the friction device moves slowly along the brake-rope. As soon as the brake-rope is pulled in downward direction the descent is retarded or entirely interrupted. By the brake-rope and the friction device D the fire-escape is fully within control of the party using it. As the seat portion can be readily used by males and females and as the cross-strips are applied closely to the body, a feeling of security is given, which is usually wanting in fire-escapes of this class, so that women and children in most cases are not able to use the same. The descent is controlled by the brake-rope, so that the lowering can be accomplished at a quicker or slower rate, as desired by the occupant of the fire-escape. When it is desired to use the fire-escape a second time, the same is pulled up again into the window, the friction device being moved along the brake-rope before it is used again until it arrives near the suspension-ring. The seat is then occupied again by the next party desiring to save himself from danger of fire, who lowers himself in the same manner as before described.

The seat portion is constructed either of double ropes or of bands made of webbing, while the adjustable cord is preferably made of a good stout rope. The saddle is made of leather, while the brake-rope must be a rope strong enough to support the fire-escape and the weight of the person on the same. The fire-escape can be made at a comparatively-small price and is adapted for the use of large apartment-houses, tenement-houses, hotels, factories, and similar buildings.

Having thus 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 friction device and a seat portion formed of a saddle, of suspension-cords attached to said saddle and provided with cross-strips at their upper ends, said suspension-cords being provided with loops above said cross-strips, and adjustable suspension-cords that are passed through the loops of the suspension-cords and through eyes of the friction device, substantially as set forth.

2. In a fire-escape, the combination, with a seat portion composed of a saddle formed of leather and end blocks connected by a right and left hand screw, of double suspension-cords extending across the under side of the saddle and attached thereto, cross-strips attached to the upper ends of the suspension-cords, which are provided with loops above said cross-strips, and adjustable suspension-cords passing through the loops above the cross-strips, substantially as set forth.

3. In a fire-escape, the combination, with a seat portion formed of a saddle, of suspension-cords attached to said saddle and cross-strips attached to the upper ends of the front and rear suspension-cords, adjustable cords passed through loops arranged in the stationary suspension-cords above the cross-strips and through eyes at the bottom of the friction device, a friction device, and a brake-cord suspended by a stationary hook and passing through the members of said friction device, substantially as set forth.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

ADA V. GOLTERMANN.

Witnesses:

PAUL GOEPEL,

H. GOLTERMANN.