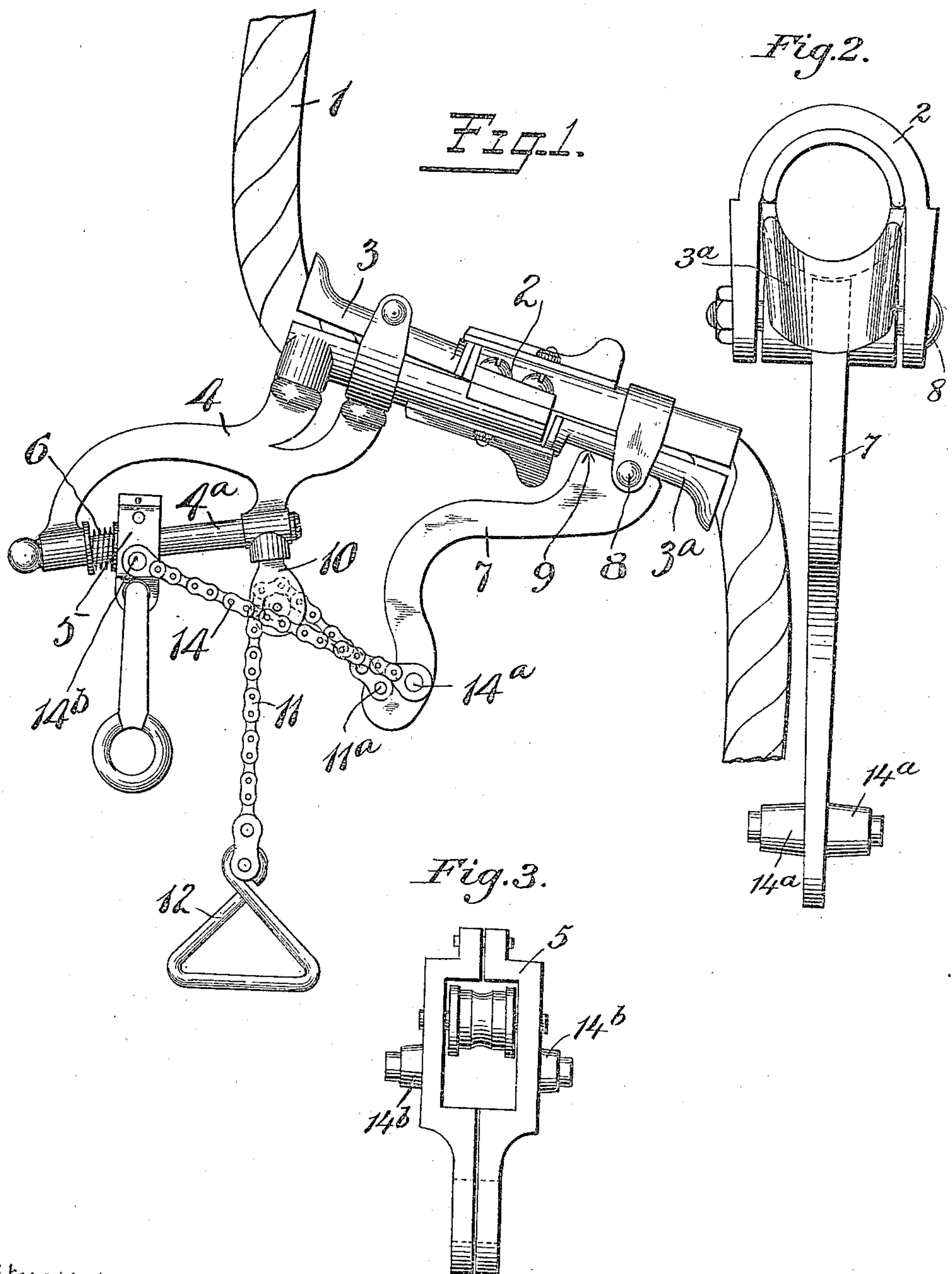


951,823.

J. LUCKETT.
FIRE ESCAPE.
APPLICATION FILED APR. 14, 1909.

Patented Mar. 15, 1910.



Witnesses:
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UNITED STATES PATENT OFFICE.

JAMES LUCKETT, OF BROOKLYN, NEW YORK.

FIRE-ESCAPE.

951,823.

Specification of Letters Patent. Patented Mar. 15, 1910.

Application filed April 14, 1909. Serial No. 489,776.

To all whom it may concern:

Be it known that I, JAMES LUCKETT, a citizen of the United States, residing at Brooklyn, county of Kings, State of New York, have invented certain new and useful Improvements in Fire-Escapes, of which the following is a full, clear, and exact description.

My invention relates to improvements in fire escapes and particularly is an improvement upon my fire escape made the subject matter of my application, Serial No. 463,315, filed November 20th, 1908.

The object of the present invention is to provide simple and effective mechanism whereby the user of the fire escape may, in his or her descent, control the speed, or stop at any and all times.

In the drawing, Figure 1 is a side elevation of my invention in the position that it appears in use. Fig. 2 is a relatively enlarged view of certain parts viewed from the right hand end. Fig. 3 is an end view of a detail.

1 represents a rope, down which my fire escape slides or travels.

It will be unnecessary for me to describe at length the particular construction of the traveling element since that is fully described in my former application.

2 is the main body of the traveler, having at opposite ends and on opposite sides the clutch members 3—3^a.

4 is a bracket which carries the weight of the user. This bracket is connected with the traveler 2 and carries a rod 4^a, upon which slides a pulley 5.

When the apparatus is in use, the traveler is tilted by the weight of the user suspended from the pulley 5, so that it assumes substantially the position shown in Fig. 1, putting thereby a double bight in the rope 1 so that the drag of the rope over the clutches 3—3^a will cause the same to press more or less tightly against that part of the rope within the traveler. This offers that degree of friction, under normal circumstances, necessary to resist too speedy a descent. The angle of inclination of the traveler depends upon the weight of the user. In the case of a light person making the descent, the pulley 5 will remain toward the right hand end of the rod 4^a (as viewed in Fig. 1), while with a heavier person, the rod 4^a will be inclined down at more of an angle so that the pulley will travel to the left against the action of a spring 6. As the pulley travels

to the left, the traveler 2 will be tilted to a greater degree, increasing the frictional drag upon the rope 1.

Thus far I have described generally only that which is disclosed and claimed in my former application referred to.

The present invention comprises a safety brake which, in the preferred form, cooperates with one of the clutches 3—3^a. In the drawings I have shown this brake applied to the clutch 3^a. The brake comprises a lever 7 pivoted at 8, having a shoulder 9 arranged to bear against the rope clutching end of the clutch 3^a.

10 is a fixed pulley on the bracket 4.

11 is a suitable connector, such as a chain leading from the end of the brake lever 7 over pulley 10 to a handle 12, located at a convenient place accessible to the user. Should there be any occasion to retard or check the descent, the user has merely to pull down upon the handle 12, whereupon the clutch may be pressed against the rope 1 with that degree of pressure necessary to retard, or to check, the movement of the traveler upon the rope.

If desired, the sliding pulley 5 may also be attached to the lever 7 as by connector 14, so that there will be an automatic cooperation between the pulley 5 and brake lever 7, whereby the latter will be operated to a degree dependent upon the weight of the user upon the apparatus.

The chain 11 may be connected to the lever 7 by a pin 11^a while one or two chains 14 may be employed, the latter being connected to the lever 7 by side projecting pins 14^a—14^a. The opposite ends of said chains 14 may be connected by pins 14^b—14^b to the pulley 5.

What I claim is:

1. In a fire escape of the character described, a traveler element arranged to slide upon a rope and including a body portion having a rope passage, means for suspending a weight from said body portion to cause the latter to tilt out of the vertical position when in use to put a bight in said rope, a clutch carried by the body portion adjacent to said bight, and tension actuated by said rope and manually operable means arranged to coact with said clutch during the period of descent to vary the action of said clutch independently of the tension on the rope.

2. In a fire escape, a traveling element ar-

5 ranged to slide upon a rope, and including
a tilting clutch member arranged to fric-
tionally bear down at one end upon said
rope as it passes through said traveling ele-
ment and being provided at its other end
with a bearing around which said rope
travels and against which said rope pulls,
and means for suspending a weight secured
to and projecting from said body member
10 at its upper end whereby when a weight is
applied thereto said traveler will be tilted

at an angle to form a bight in the rope ad-
jacent the bearing of said clutch, and a
manually operable brake device coacting
with said clutch for operating the latter to
vary the braking friction independently of 15
the tension on the rope.

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