

M. J. & G. A. BROOME.
FIRE ESCAPE.
APPLICATION FILED JULY 13, 1908.

918,275.

Patented Apr. 13, 1909.

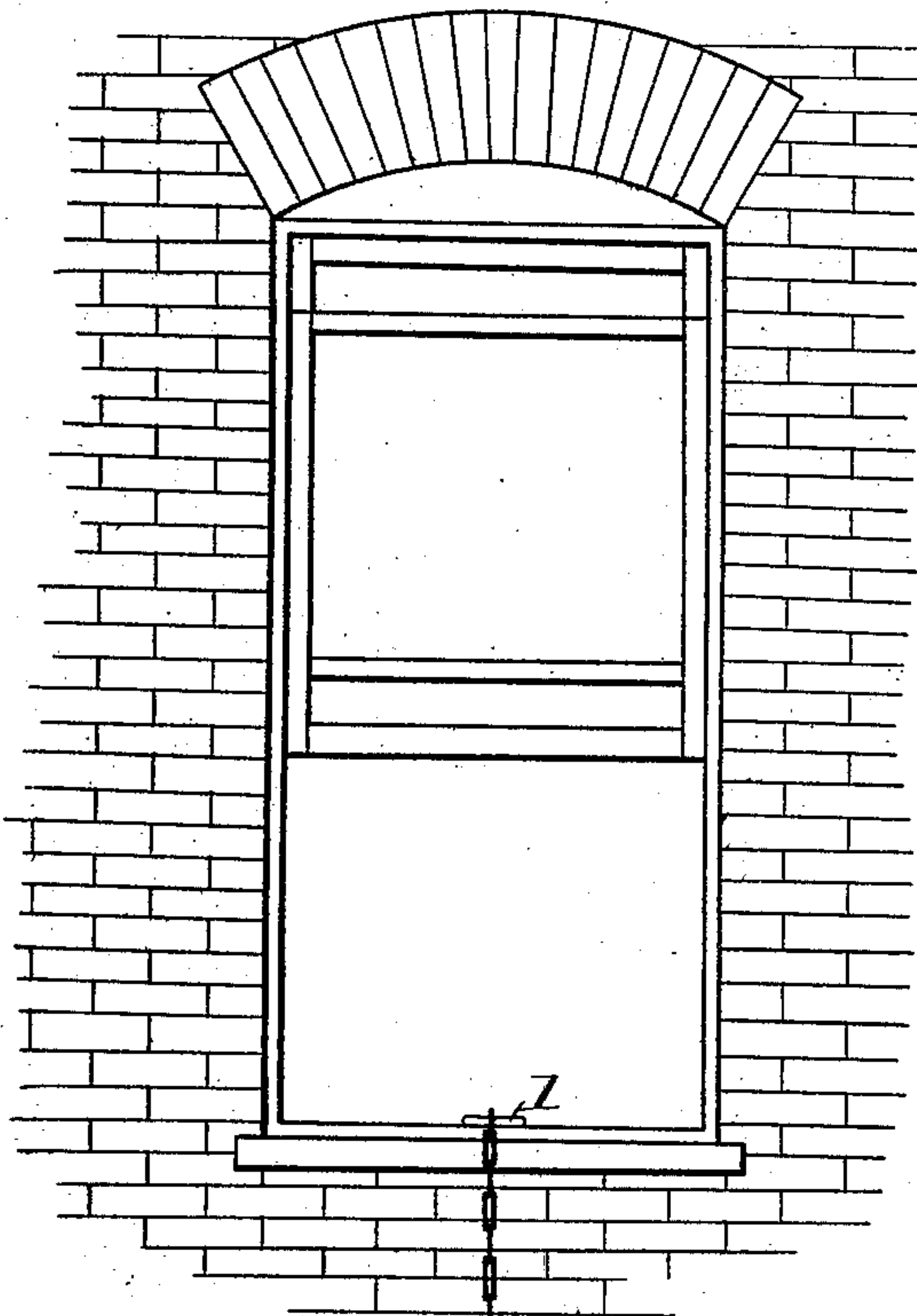


Fig. 1.

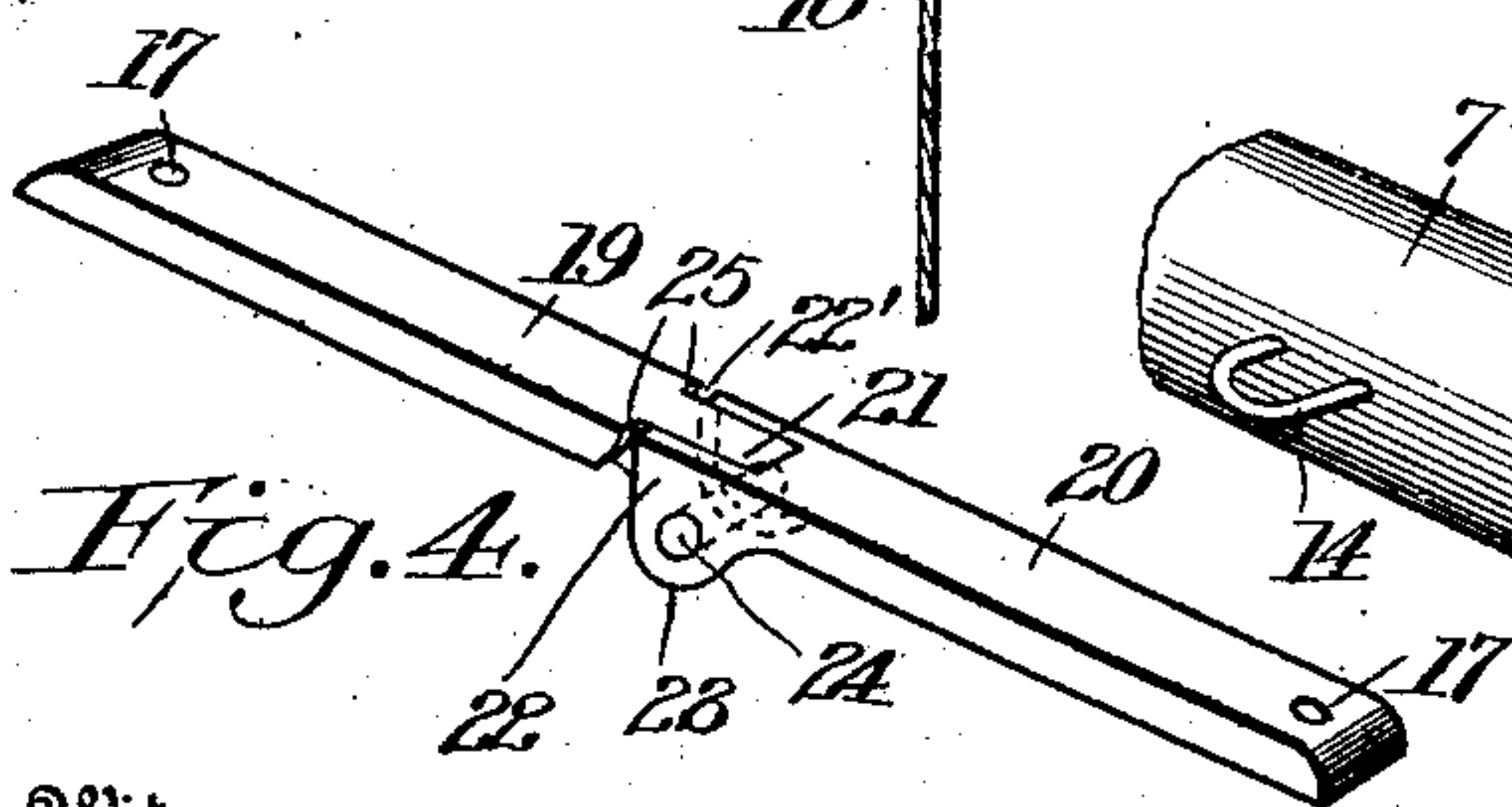
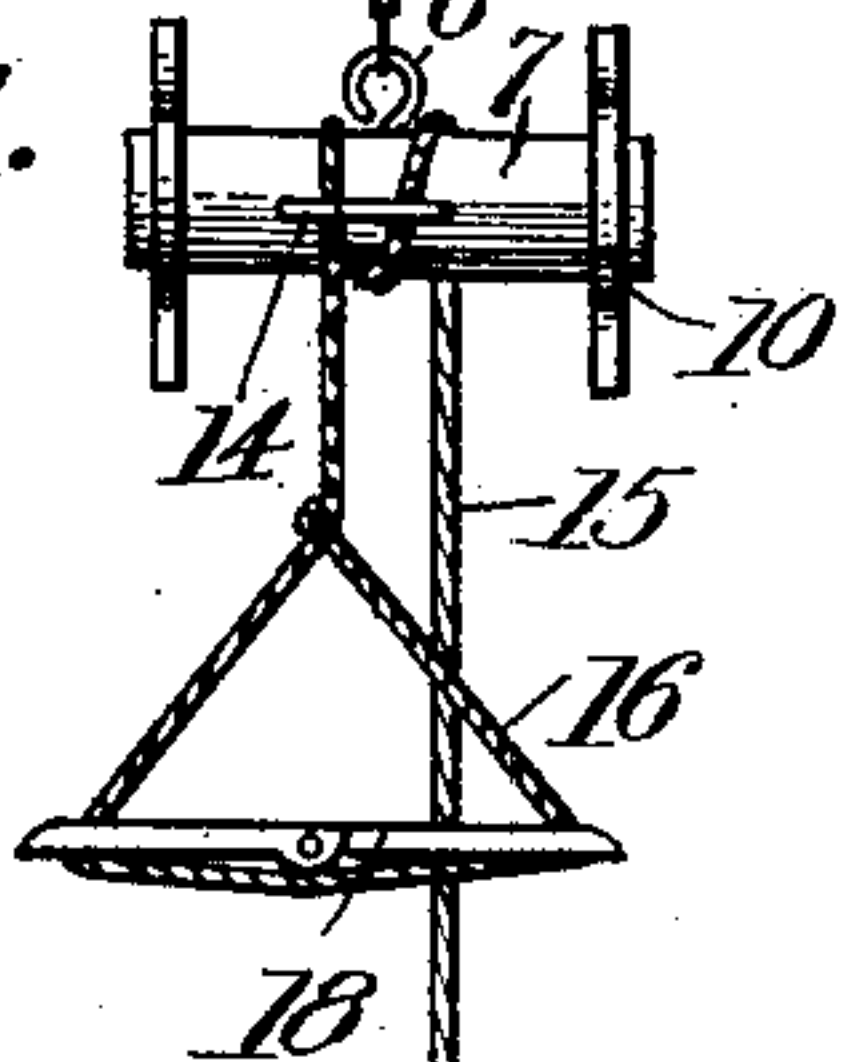


Fig. 4.

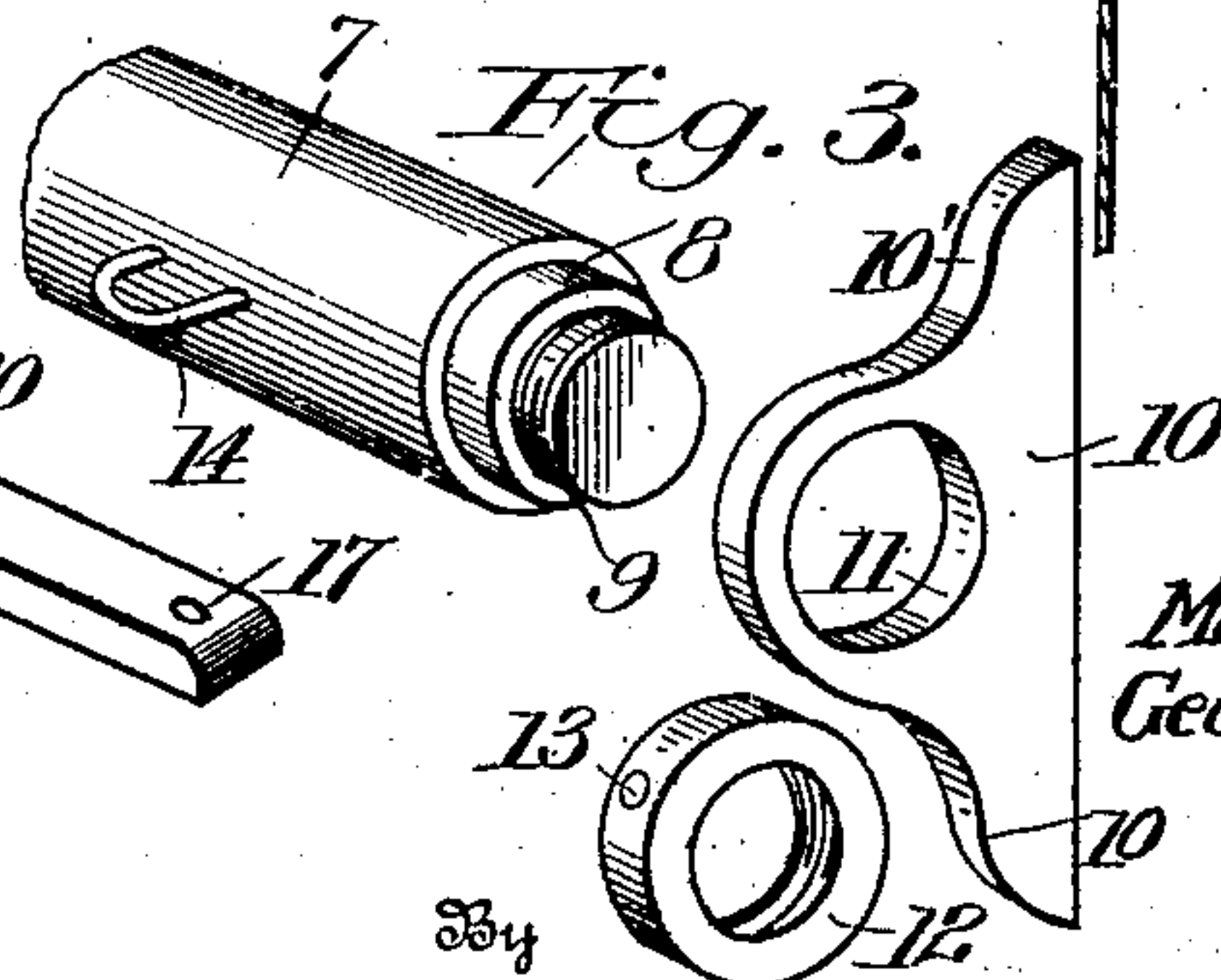


Fig. 3.

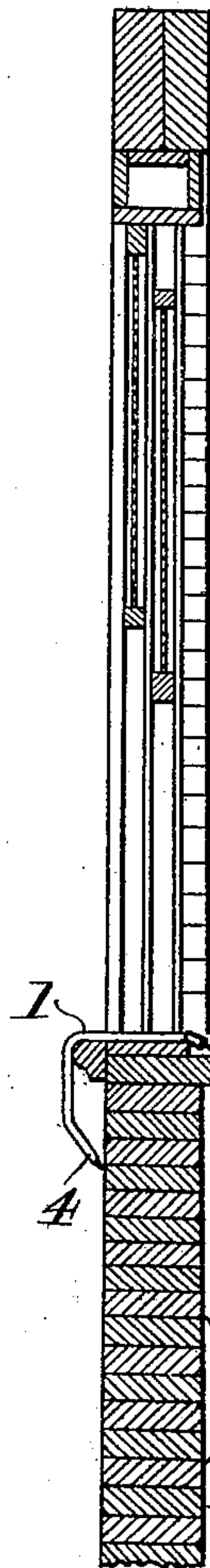


Fig. 2.

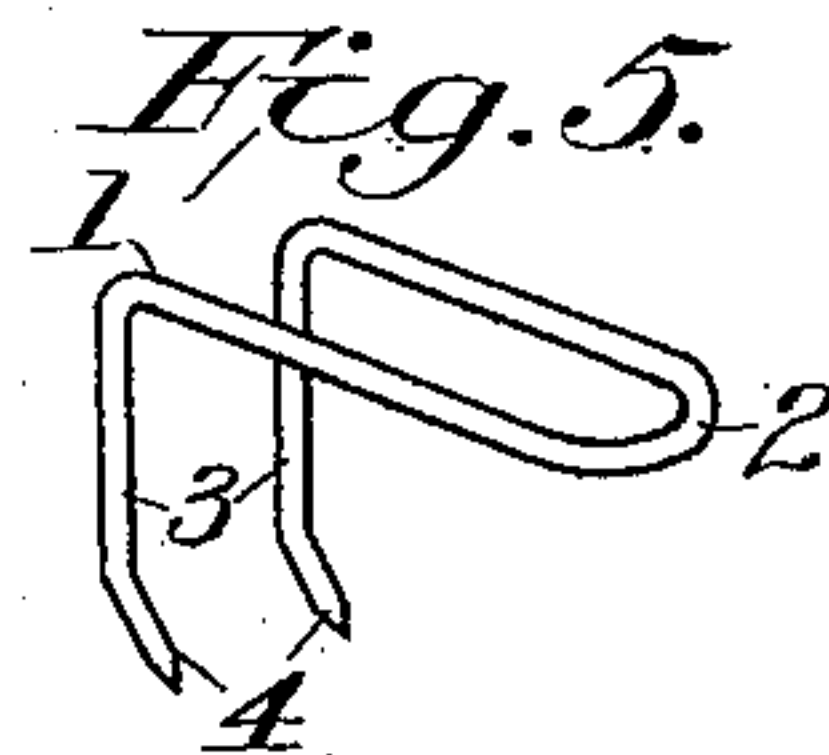


Fig. 5.

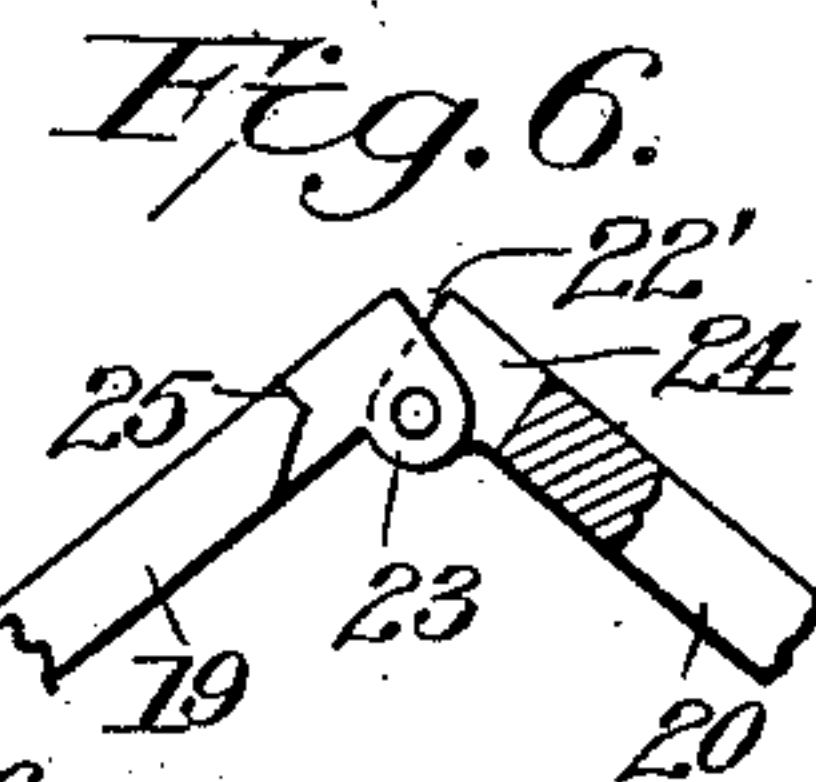


Fig. 6.

Witnesses

W. Walker
J. L. M. Cathran

Inventors
Mary J. Broome
George H. Broome

By

E. E. Broome, Attorney.

UNITED STATES PATENT OFFICE.

MARY J. BROOME AND GEORGE A. BROOME, OF CEDAR RAPIDS, IOWA, ASSIGNORS OF ONE-THIRD TO MILES M. MILLER, OF MEDIAPOLIS, IOWA.

FIRE-ESCAPE.

No. 918,275.

Specification of Letters Patent.

Patented April 13, 1909.

Application filed July 13, 1908. Serial No. 443,259.

To all whom it may concern:

Be it known that we, MARY J. BROOME and GEORGE A. BROOME, citizens of the United States, residing at Cedar Rapids, in the county of Linn and State of Iowa, have invented certain new and useful Improvements in Fire-Escapes, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to certain new and useful improvements in fire-escapes, and it has for its object the production of a frictional device which is adapted to be suspended from a window sill and rest against an outside wall of a building.

Another object of this invention is the production of a fire-escape, which can be lowered from a window and can be controlled from below.

Still another object of this invention is the production of a portable fire-escape which can be readily applied to a window, and which constitutes a comparatively small number of parts.

With these and other objects in view, this invention consists of certain novel constructions, combinations, and arrangements of parts, as will be hereinafter fully described and claimed.

Referring to the drawings: Figure 1 is a view showing the fire-escape attached to a window. Fig. 2 is a sectional view of a window showing the fire-escape attached thereto. Fig. 3 is a perspective view of one end of the drum showing the sections detached. Fig. 4 is a perspective view of the seat. Fig. 5 is a perspective view of the grappling-hook. Fig. 6 is a side view of the seat partly folded.

Referring to the drawings by numerals, 1 designates a grappling-hook, which has a substantially U-shaped body portion 2, the ends 3 of said body portion extending downwardly and provided with inwardly-extending portions 4, for the purpose of gripping the edge of a sill. To the U-shaped portion 2 of the grappling-hook 1 is attached a chain 5, which chain 5 is connected to a hook 6 upon a drum 7. The drum 7 is provided, at each end, with a smooth, annular-reduced portion 8, and with a reduced screw-threaded portion 9. Upon the smooth reduced portion 8 is positioned a rotatable bracket 10, which is provided with outwardly-extending flanges 10', constituting a wide wall-engaging surface. The reduced portion 8 fits loosely in

an aperture 11 in the brackets 10. The bracket is held upon the reduced portion 8 by means of an annular cylindrical nut 12, which is threaded upon the screw-threaded reduced portion 9. The nut 12 is provided with an aperture 13, which is adapted to receive a tool for tightening said nut upon said reduced portion 9. Upon the drum are positioned a plurality of staples 14, which staples 14 act as a guide for a rope or cable 15, which has one or more coils around the drum 7 and its ends depending therefrom on opposite sides.

The rope 15 is provided, at one end, with a loop 16, which loop passes through apertures 17 in a seat and under said seat. Said apertures 17 are positioned near the end of the seat. The seat comprises a primary section 19 and an auxiliary section 20; the primary section 19 is provided, at one end, with a reduced extension 21, and the auxiliary section 20 is provided with a bifurcated end 22, into which is positioned the reduced extension 21 of the primary section 19. The reduced extension of the primary section 19 and the bifurcated end of the auxiliary section 20 are provided with downwardly-extending portions 23. A pin 24 passes through said downwardly-extending portions and holds the extension 21 in the bifurcated portion 22. The pin 24 is positioned off-center so as to allow the seat to be folded only in one direction and when the seat is in its open position as in Fig. 4, the extension 21 will be clamped in the bifurcated portion 22 of the auxiliary section 20, and the ends 22' of the auxiliary section 20 will clamp against the shoulders 25 upon the end of the primary section 19, provided with the reduced extension 21.

From the foregoing, it will be understood that the device is one that can be readily placed in an operative position, and can also be conveniently handled, and when desired, may be readily taken apart and packed in a compact condition so as to require the minimum of storage space.

A prominent and distinctive feature of the invention is in the described shape of the brackets, and their mounting on the drum 7. As will be seen by reference to Fig. 2, said brackets are of such a size that when their long straight edge 10' is in contact with a wall or the like, the drum 7 will be projected outwardly beyond the plane of the outer edge

of the window sill, thereby assuring of the weight of a person in the seat 18 retaining such brackets in engagement with the wall, and as the mounting of said brackets on the
5 drum is a loose one, they will readily accommodate themselves to the wall, whether the same be straight or on an incline.

When a person desires to descend from a window by means of our improved fire-
10 escape and sits upon the seat 18, the weight of his body will cause the seat to descend, and this descent can be regulated by either grasping the rope and tightening the coils of the same around the drum 7, so as to create
15 a greater frictional contact of said rope with said drum, or the rope can be let out by a person stationed on the ground.

What we claim is:

1. A fire escape comprising a drum having
20 shouldered ends, one of said shoulders at each end being threaded, a suspending device for said drum, a bracket loosely fitting one of said shoulders at each end of said drum and provided with elongated straight
25 edges for engagement with a wall, a nut fitting the threaded shoulder at each end of said drum for retaining said brackets on the drum, and a cable coiled about said drum and having oppositely disposed ends one of
30 which carries a seat.

2. A fire escape comprising a drum having shouldered ends, one of said shoulders at each end being threaded, a suspending device for said drum, a bracket loosely fitting one of
35 said shoulders at each end and provided with a straight wall engaging edge, nuts fitting the threaded shoulders of the drum and adapted to retain the brackets thereon, a cable coiled about said drum and having its ends pro-
40 jecting from opposite sides thereof, and guides carried by said drum for said oppositely disposed ends of the cable.

3. A fire escape comprising a drum having reduced shoulders at each end, the outer
45 shoulder being threaded, a suspending device for said drum carrying a window engaging

hook, a bracket for one of the shoulders at each end of the drum and loosely fitting thereon, said brackets being provided with elongated straight wall engaging edges, nuts
50 for the threaded shoulders of the drum and adapted to retain the brackets thereon, a cable coiled about said drum and having oppositely disposed ends one of which carries a seat, and guides carried by said drum for the
55 oppositely disposed ends of said cable.

4. A fire escape comprising a drum, means for suspending the same, brackets loosely fitting the ends of said drum and provided with elongated straight wall engaging edges,
60 means for retaining said brackets on said drums, and a cable coiled about said drum and having oppositely disposed end portions one of which carries a seat.

5. A fire escape comprising a drum, means
65 for suspending the same, brackets loosely fitting the ends of said drum and provided with elongated straight wall engaging edges, said bracket being of such a size that when suspended from a window sill or the like, the
70 drum will project beyond the plane of the outer edges thereof, a cable coiled about said drum and having end portions depending from opposite sides thereof, and a seat carried by one of said ends.
75

6. A fire escape comprising a drum, means for suspending the same from a window or the like, brackets loosely fitting the ends of said drum and adapted to contact with a wall when in a suspended position so as to
80 hold the said drum in a plane beyond the outer edge of the window sill, a cable coiled about said drum and having oppositely disposed depending ends, and a seat carried by one of said ends.
85

In testimony whereof we hereunto affix our signatures in presence of two witnesses.

MARY J. BROOME.

GEORGE A. BROOME.

Witnesses:

GEO. M. DILTZ,

THOS. W. KELLY.