

No. 665,585.

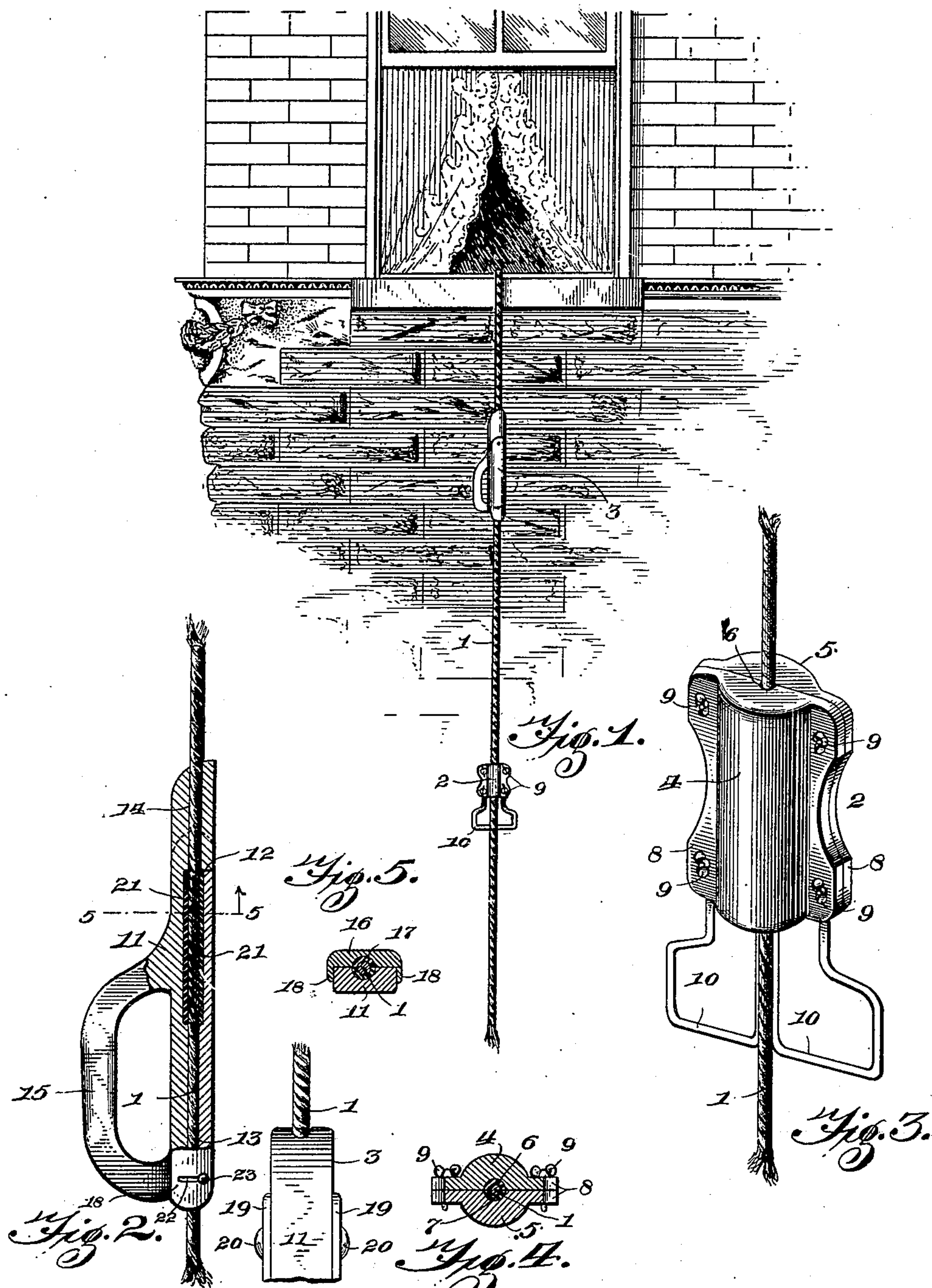
Patented Jan. 8, 1901.

J. A. SHUPING.

FIRE ESCAPE.

(Application filed Oct. 18, 1900.)

(No Model.)



Witnesses
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UNITED STATES PATENT OFFICE.

JACOB A. SHUPING, OF MORGANTON, NORTH CAROLINA.

FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 665,585, dated January 8, 1901.

Application filed October 16, 1900. Serial No. 33,247. (No model.)

To all whom it may concern:

Be it known that I, JACOB A. SHUPING, a citizen of the United States, residing at Morganton, in the county of Burke and State of North Carolina, 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 which may be conveniently carried in a valise and readily arranged in position for use to escape from an upper window of a burning building. It is furthermore designed to provide improved means for controlling the speed of descent, so as to come to a stop, if desired, and, finally, to provide improved means for the support of the body, which is adjustable with respect to the controlling means in order that the device may be accommodated to persons of different heights.

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 claims, it being understood that changes in the form, proportion, size, and minor details may be made within the scope of the claims without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawings, Figure 1 is a side elevation of the present device hung out of a window and in position for a descent. Fig. 2 is a detail sectional elevation of the hand-operated controlling device. Fig. 3 is a detail perspective view of the foot-support. Fig. 4 is a transverse section of the foot-support. Fig. 5 is a transverse sectional view of the controlling device, taken on the line 5 5 of Fig. 2. Fig. 6 is a detail edge elevation of the upper end of the controlling device, showing the hinged connection of the members thereof.

Corresponding parts are designated by like characters of reference in all of the figures of the drawings.

Referring to the drawings, it will be seen that I employ a cable 1, which has its upper end secured in any suitable manner within the room of a building and its opposite end hanging downwardly from a window of the

room and upon the outer side of the building. The foot-support 2 and the controlling device 3 are slidably mounted upon this cable 55 and are designed to travel downwardly thereon with the operator.

The foot-support comprises the opposite duplicate members 4 and 5, which are provided upon their inner flat sides with corresponding longitudinal grooves 6, that have their intermediate portions lined with semitubular rubber strips 7, which are designed to form frictional strips for engagement with the cable. The members have their outer sides rounded, so that they are semitubular in shape, and are also provided with opposite longitudinal flanges 8, which normally lie in mutual contact and are connected by means of the adjusting thumb-screws 9, whereby the members may be adjusted toward and away from each other to vary the frictional contact with the cable. It will be understood that the cable is received within the combined grooves of the members. Pendent from the frictional grip formed by the members 4 and 5 is the foot-support in the form of a stirrup 10, which is secured to one of the parts or members of the grip, so that the latter may be conveniently adjusted and separated.

The controlling device comprises a body portion 11, having its inner flat side cut away from the bottom upwardly and terminating short of the top in a laterally-projecting shoulder 12. The reduced part of the body is provided with a longitudinal groove 13, which is extended through the shouldered portion of the body in the form of a slot 14 for the slidable reception of the cable. A bowed hand-guard 15 is provided upon the lower portion of the body and opposite the grooved inner side thereof. The movable member 16 has its inner face provided with a longitudinal groove 17, corresponding to the groove in the body member, and is also provided with opposite longitudinal flanges 18 to slidably embrace the corresponding opposite sides of the body member, so as to guide the movable member and also brace the two members against lateral strain. This movable member is of substantially the same length as the reduced portion of the body member and is provided at its upper end with opposite ears

19, formed by extensions of the flanges and designed to embrace the lower part of the shouldered portion of the body and are pivotally or hingedly connected thereto, as indicated at 20 in Fig. 6 of the drawings. The intermediate portions of the grooves of the members are provided with semitubular friction-strips 21 for engagement with the cable.

In the operation of the device the foot-support is adjusted to grip the cable according to the weight of the person desiring to descend. The cable is then secured in any suitable manner and its free end thrown out of the window, after which the operator climbs outwardly through the window, places one or both feet in the stirrup, and grasps both members of the controlling device, so that they frictionally embrace the cable to permit of the movable parts of the device sliding slowly downwardly upon the cable. Should it be desired to stop at any point in the descent, it is merely necessary to grip the controlling device tight enough to prevent the latter from sliding downwardly.

It will be observed that the controlling device is located above the foot-support, and the two parts of the device are entirely independent of each other, so that they may be adjusted toward and away from each other upon the cable to accommodate the device to persons of different heights. It will be understood that when descending most of the weight of the person is upon the support, and when the controlling device is caused to grip more tightly upon the cable some of the weight is removed from the support and applied to the controlling device, whereby the weight is distributed between the two devices and the descent is stopped.

From the foregoing description it will be apparent that the present device may be coiled up so as to take up but a small space in a room and may be conveniently carried in a valise, trunk, or the like and is always in readiness for use.

In order that the free ends of the members of the controlling device may be prevented from separating too far, the lower end portion of one of the flanges 18 is provided with a transverse slot 22, and a stop-pin 23 pro-

jects laterally from the adjacent side of the body member and is also projected into the slot, so as to form a stop to limit the outward swing of the movable member.

What is claimed is—

1. A fire-escape, comprising a cable, a slidable support thereon formed in sections having corresponding grooves for the reception of the cable, adjusting thumb-screws connecting the sections, a stirrup or seat carried by one section only, and a hand-operated controlling device frictionally embracing the cable and located above the slidable support.

2. A fire-escape, comprising a cable, a slidable support thereon, and a hand-operated controlling device frictionally embracing the cable and comprising a pair of pivotally-connected members, one of the latter having a transversely-slotted flange overlapping the other member, and the latter member having a stop-pin projected through the slot.

3. A fire-escape, comprising a cable, a slidable support thereon, and a hand-operated controlling device comprising a body member, having a lateral shoulder upon its upper inner side, said shoulder having a longitudinal bore or slot, which is continued in the form of a longitudinal groove through the inner face of the body, and a movable member, having an inner longitudinal groove, opposite longitudinal flanges embracing the body member, and opposite upper ears pivotally or hingedly embracing the shoulder of the body.

4. A fire-escape, comprising a cable, a slidable support thereon, and a hand-operated controlling device, comprising pivotally or hingedly connected members frictionally embracing the cable, one of the members having a transverse slot extending in the direction of the opening movement of the members, and a stop-pin carried by the other member and projected into the slot.

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

JACOB A. SHUPING.

Witnesses:

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