No. 848,453.

PATENTED MAR. 26, 1907.

F. L. EMERSON.

ELEVATOR ROPE CLAMP.

APPLICATION FILED NOV. 20, 1905.

Fig. 3.

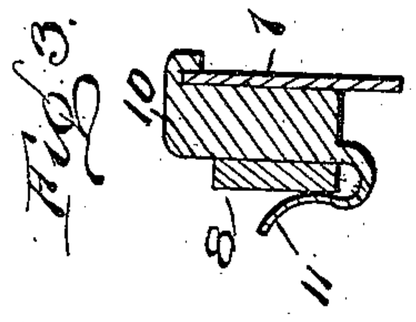

Fig. 1.

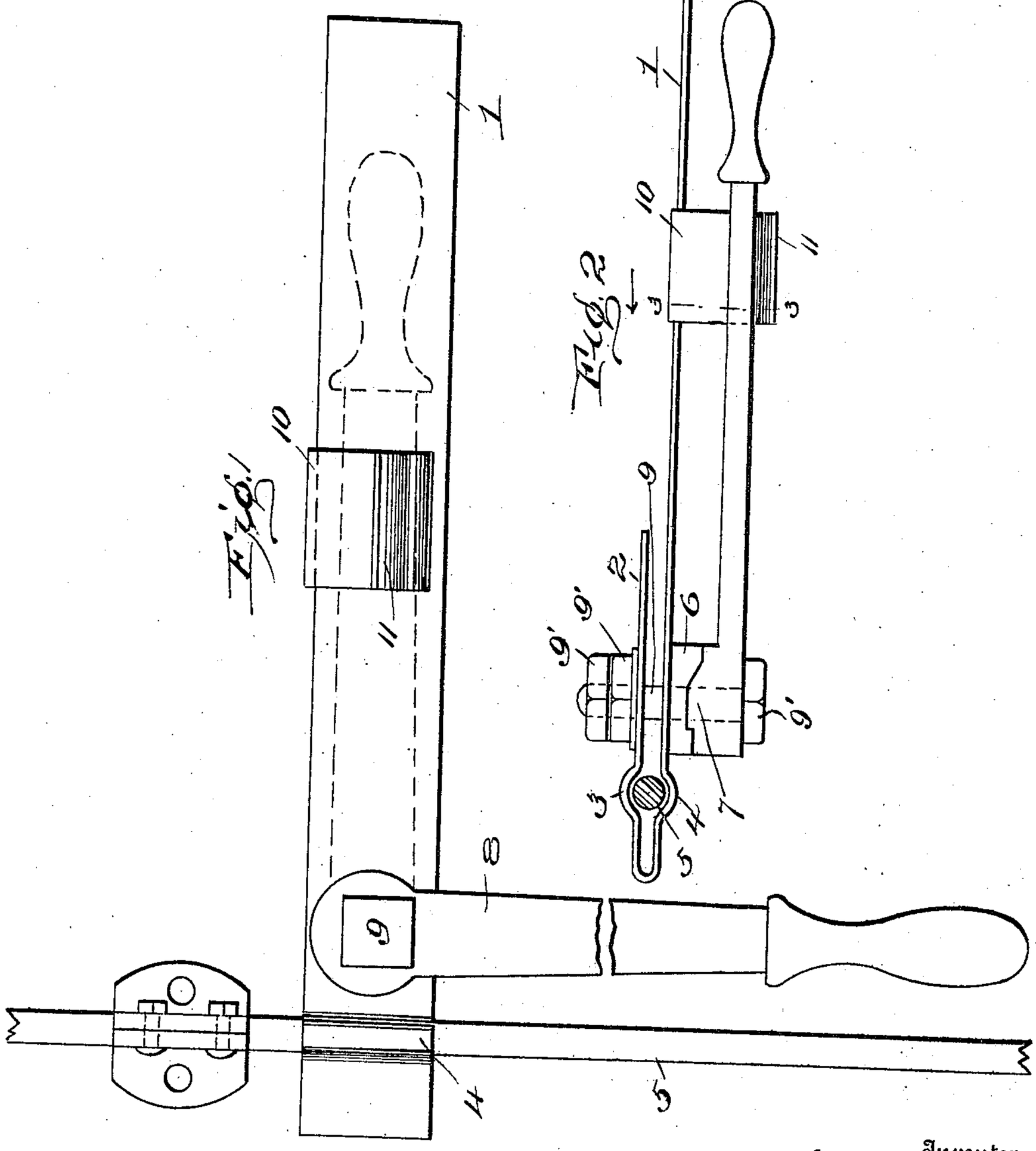

Fig. 2

Witnesses

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ELEVATOR-ROPE CLAMP.

No. 848,453. Specification of Letters Patent. Patented March 26, 1907.

Application filed November 20, 1905. Serial No. 288,295.

To all whom it may concern:

Be it known that I, FRED L. EMERSON, a citizen of the United States, residing at Denver, in the county of Denver and State of Colorado, have invented certain new and useful Improvements in Elevator-Rope Clamps; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in elevator-locks, and more particularly to means for temporarily preventing movement of the shifting cable with respect to the cage.

The object in view is to provide an easily-controlled and quickly-operated device for preventing accidental or undesirable movement of the elevator through an accidental or unauthorized operation of the elevator shifting cable.

With this and other objects in view the invention comprises certain novel features of construction and combination and arrangements of parts, as will be hereinafter fully described and claimed.

In the accompanying drawings, Figure 1 is a view in side elevation of the elevator-lock embodying the features of the present invention. Fig. 2 is a top plan view thereof. Fig. 3 is a transverse section taken on the plane of line 3 3 of Fig. 2 and looking in the direction indicated by the arrow.

In the operation of elevators it is often desirable to leave the same in a locked condition, and the present invention contemplates the provision of means which may be readily and easily operated for efficiently preventing undesirable operation of the cage. If the operator should leave the elevator, it is only necessary for him to lock the same against movement, and he will then be sure that no accidental or undesirable movement of the elevator will occur during his absence.

Referring to the illustrative embodiment of the invention disclosed in the accompanying drawings, 1 indicates a suitable plate which is designed to be attached to some part of the cage and rigidly secured in position. At the free end of the plate 1 the same is bent into the form of a clamping member 2. The material of the plate is of course such as to give a spring action to the clamping member 2. The clamping member 2 is preferably formed intermediate its length with a transverse bend 3, forming a transverse recess, and the plate 1 is correspondingly bent, as at 4, opposite the bend 3. The said bent portions 3 and 4 constitute jaws conforming to some extent to the contour of the elevator shifting cable 5, which extends between said jaws. A cam-plate 6 is preferably secured to the plate 1 on the opposite side from the jaw 3, and outside of said cam-plate 6 is arranged a second cam-plate 7, with its cam-face resting against the cam-face of the plate 6, the said plate 7 being carried by an operating handle or lever 8 of any suitable size and shape. A bolt 9 is passed through the cam-plates 7 and 6 and through the plate 1 and clamping member 2, said bolt being of course provided at opposite ends with a head and with suitable securing-nuts 9′ 9′. Arranged intermediate the length of and carried by the plate 1 is a block 10, provided with a hook 11, said block and hook being spaced from the bolt 9 a distance less than the length of the handle 8, so that said handle may normally rest within said hook and be supported thereby.

In operation the cable 5 is moved longitudinally in one direction or the other for causing the cage to ascend or descend, and when the operator wishes to lock his elevator he lifts the lever 8 free from the hook 11, and then draws the same downwardly to the position indicated in full lines in Fig. 1, which action causes the cams 6 and 7 to act for drawing the bolt 9 longitudinally. The longitudinal movement of the bolt 9 produces a movement of the clamping member 2 toward the plate 1 and causes the jaws 3 and 4 to firmly grip the cable 5. Thus the cable 5 is prevented from moving longitudinally independently of the cage and the cage is locked against movement.

While I have shown and described the hook 11 as the preferred means for supporting the lever 8 in an inoperative condition, I of course may provide any other form of support therefor and may make various other slight changes in the size, shape, and proportions of the details without departing from the spirit and scope of the present invention.

What I claim is—

1. In a device of the class described, the combination of a plate folded upon itself to inclose the shifting cable of an elevator, and means for producing a gripping action between the folds and upon said cable.

2. In a device of the class described, the combination of a plate adapted to be fixed to

an elevator-cage and folded to form spring-jaws positioned and proportioned for embracing the shifting cable of an elevator, and means carried by the plate adapted to draw the folds toward each other, for producing a gripping action on the cable.

3. In a device of the class described, the combination with a plate, bent into a spring-jaw, a bolt passed through said plate and jaw, and a cam engaging said bolt for moving the same longitudinally for drawing the jaw into a clamping position, said jaw being adapted to clamp the shifting cable of an elevator.

4. In a device of the class described, the combination with a folded plate adapted to be carried by an elevator-cage and arranged to engage the shifting cable thereof, of a lever, a cam carried by said lever, a second cam interposed between the first cam and the plate, and a bolt extending through the cams and the folds of the plate.

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

FRED L. EMERSON.

Witnesses:

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