

No. 643,070.

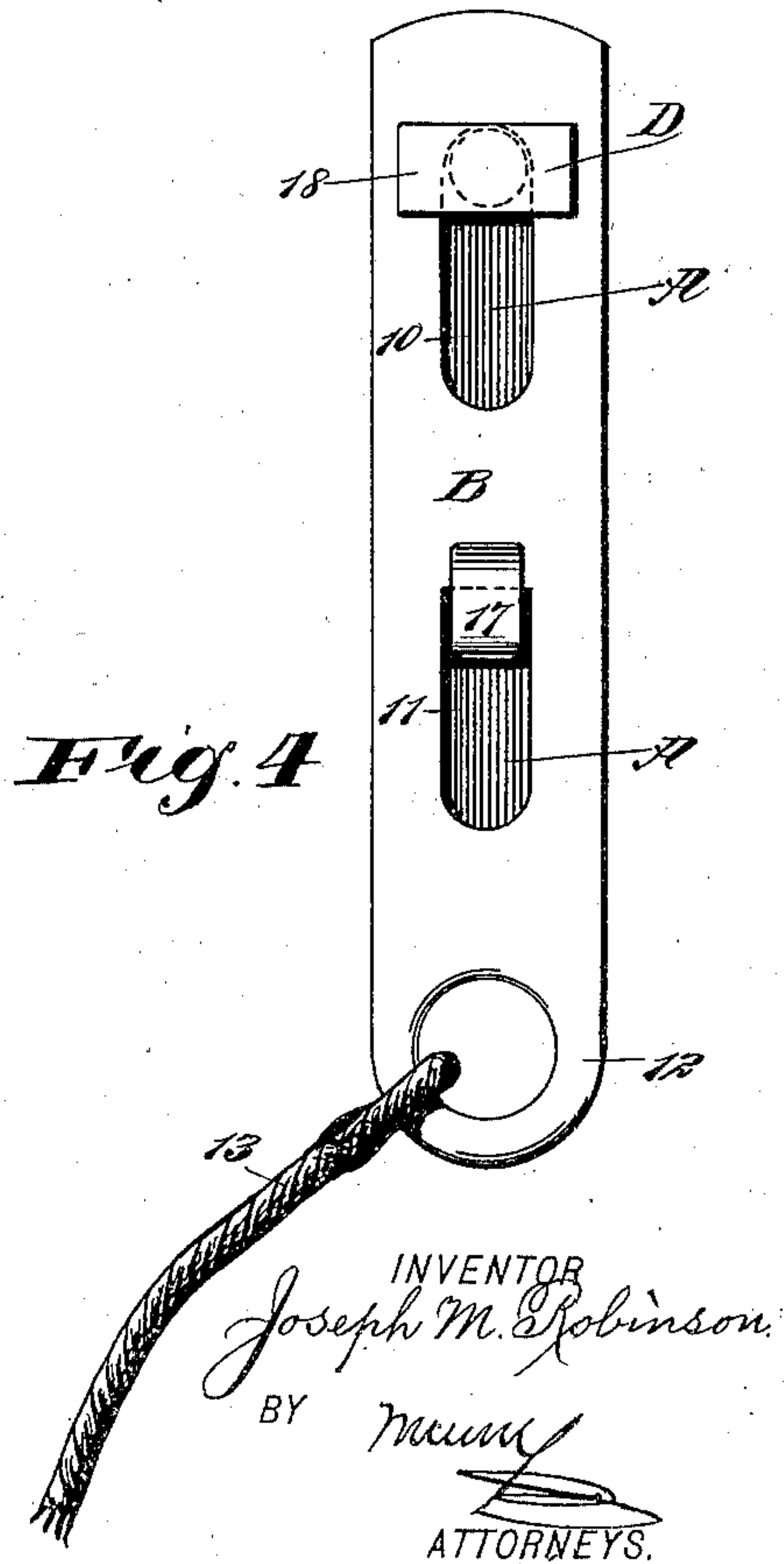
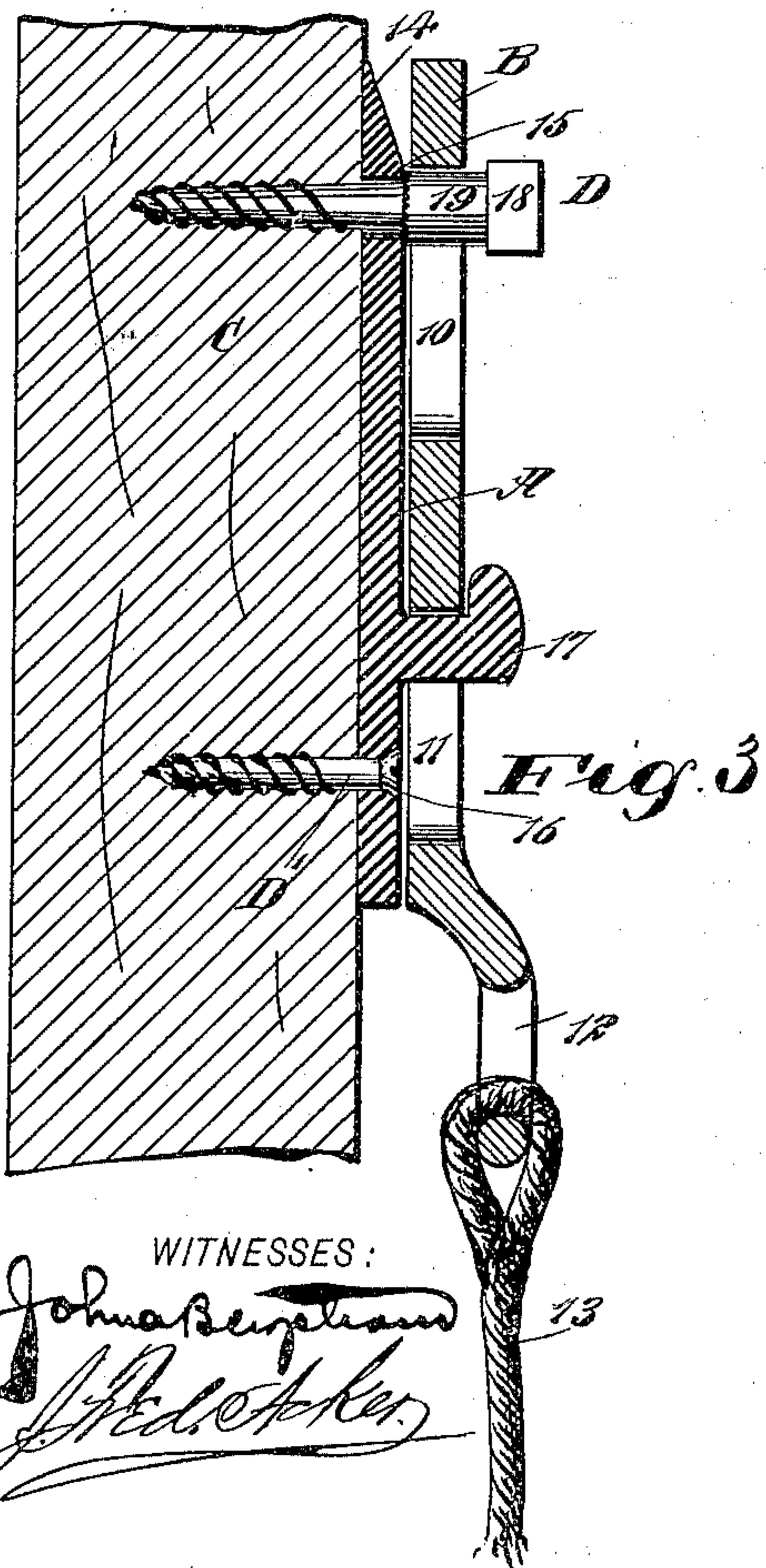
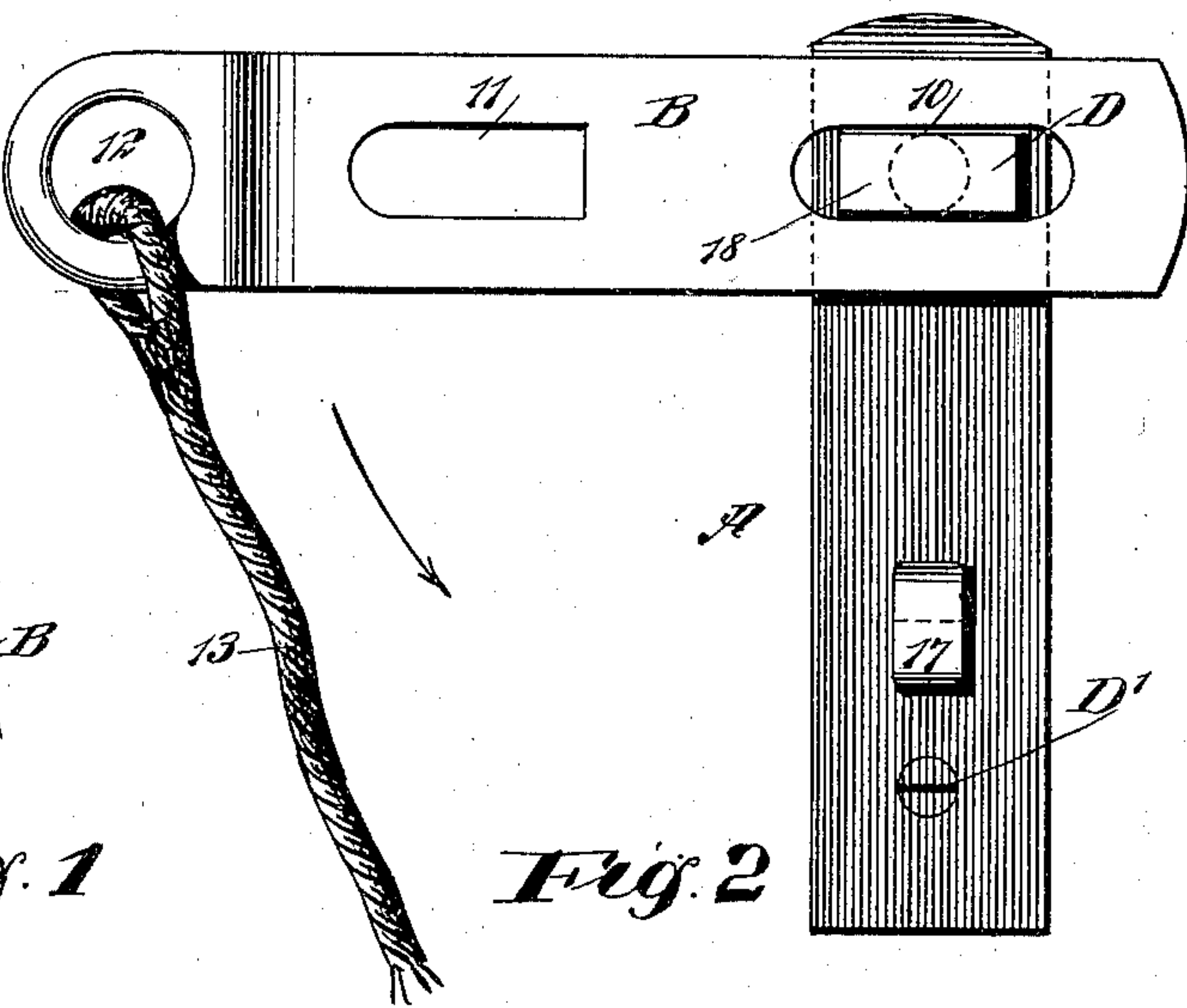
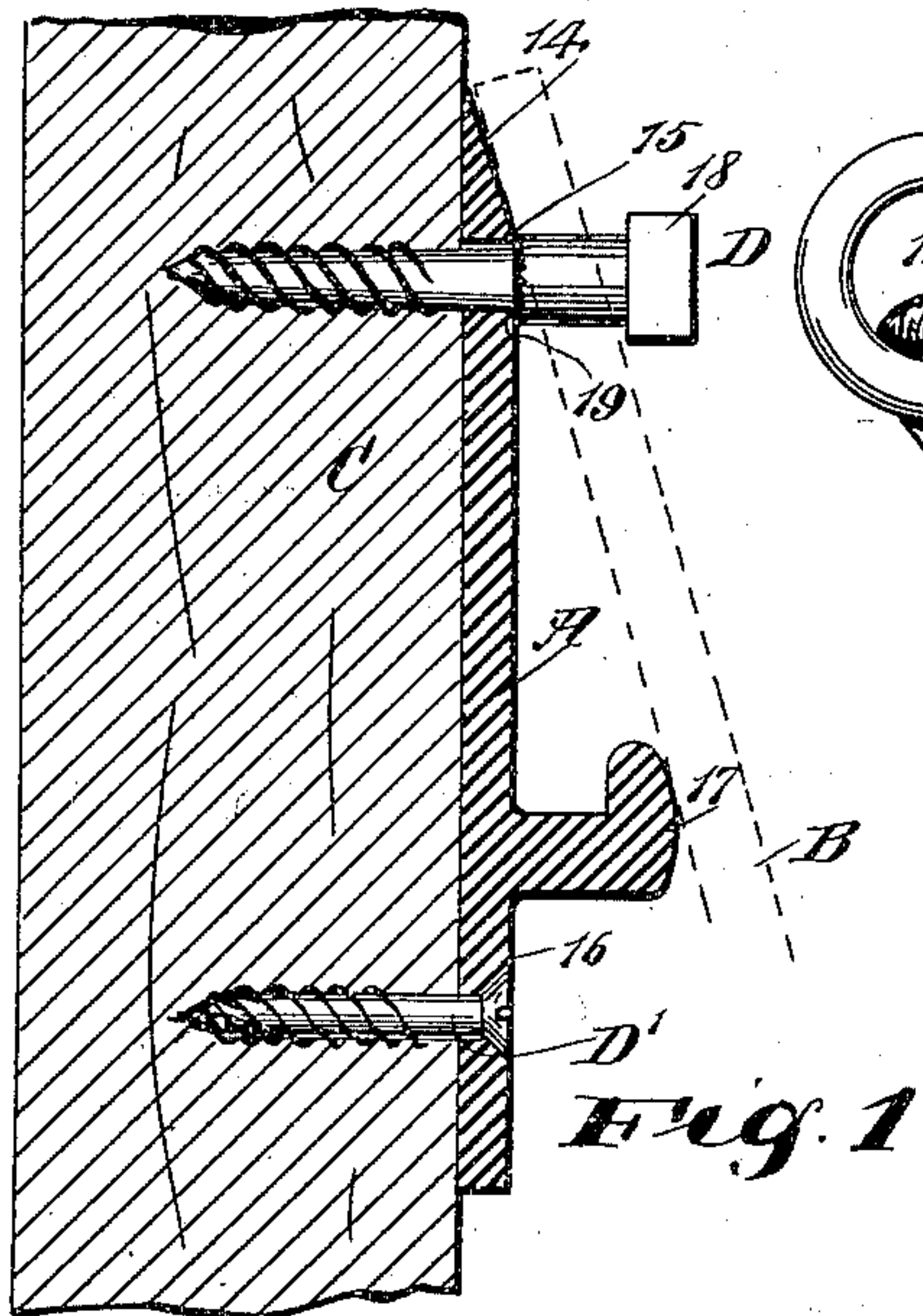
Patented Feb. 6, 1900.

J. M. ROBINSON.

SAFETY LOCK.

(Application filed Apr. 15, 1899.)

(No Model.)



THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

JOSEPH M. ROBINSON, OF NEW YORK, N. Y.

SAFETY-LOCK.

SPECIFICATION forming part of Letters Patent No. 643,070, dated February 6, 1900.

Application filed April 15, 1899. Serial No. 713,128. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH M. ROBINSON, of the city of New York, borough of Manhattan, in the county and State of New York, have invented a new and Improved Safety-Lock, of which the following is a full, clear, and exact description.

One object of my invention is to provide a safety-lock especially designed for attaching a window-cleaning device or belt to a window-frame or to another near-by support, but which may be advantageously employed wherever a safety-lock is needed.

Another object of the invention is to construct the device in practically two parts, one being designed for permanent attachment to a support and the other for connection with a window-cleaning belt or device, the two parts being arranged for interlocking engagement.

A further object of the invention is to provide a lock of the character described that will be perfectly safe in its operation and one free from all springs and which when once locked cannot be released without the aid of the person using the device and then only when all weight is removed from the ropes or other medium employed to attach the device to the cleaning device in connection with which it is used.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a longitudinal vertical section through the member of the device adapted for permanent attachment to a support and likewise a vertical section of the support, and also illustrates in dotted lines the position the other member of the device assumes relative to the first-named member just prior to interlocking. Fig. 2 is a front elevation of the two members of the device, illustrating the movable member in its first position relative to the fixed member. Fig. 3 is a longitudinal vertical section through the complete device in locked position and likewise a vertical section through the support to which the de-

vice is applied; and Fig. 4 is a front elevation of the complete device, the two members being in interlocking position.

The device practically consists of a back or keeper plate A and a front or latch plate B. These plates may be constructed of any suitable material and may be of any necessary dimensions or contour. The front or latch plate B has two slots 10 and 11 of suitable size for the purpose, and usually the slots have parallel sides and are longitudinally produced in said plate B. The latch-plate B also terminates at what is normally its lower end in an eye or loop 12; but while the longitudinal axis of the eye or loop is preferably parallel with the corresponding axis of the body of the latch-plate the eye or loop 12 for convenience is carried beyond the plane of the front face of the latch-plate, as is shown best in Fig. 3. The eye or loop 12 receives the ropes 13, straps, or their equivalents used to connect the belt or window-cleaning device with the latch member of the safety-lock.

The back or keeper plate A is usually provided with an outer inclined surface 14 at the top, as is shown in Figs. 1 and 3, and with an aperture 15 near the top and a second aperture 16 near the bottom, while between the two apertures 15 and 16 an outwardly-extending angular or upturned lug 17 is formed. This lug may be secured to the back plate or may constitute an integral portion of the same.

The back plate is adapted for attachment to a window-frame C or other support through the medium of a shouldered T-headed wood-screw or bolt D, adapted to be passed through the upper aperture 15, and an ordinary wood-screw D', that is passed through the lower aperture 16. The head 18 of the wood-screw stands transversely of the back plate, as shown in Fig. 2. The object of the shoulder 19 on the T-headed bolt or wood-screw is not only to press the plate A securely to the support C, but as the said shoulder is roughened where it engages with the plate it effectually prevents any tendency of movement of the T-headed screw or bolt when once securely entered to its proper place. It will be understood that a back or keeper plate A is secured to each upright section of the window-

frame to which the safety-lock is to be applied.

With reference to the operation of the device the keeper-plates A are securely and permanently fastened to the window-frame inclosing the sliding sash in the manner shown and described. A latch-plate B in duplicate is attached to the ropes 13, which ropes are secured by means of a belt to the body of the operator, who upon stepping upon the outer sill and holding the latch-plate B in the horizontal position (shown in Fig. 2) and pressing the latch-plate against the keeper-plate can force the head of the T-bolt through the slot 10 in the latch-plate. As soon as the latch-plate has passed over the bolt-head the operator will turn the plate and let it drop to the inclined position, (shown in dotted lines in Fig. 1,) which will bring the latch-plate in such relation to the keeper-plate that the lug 17 of the keeper-plate will enter the slot 11 in the latch-plate, and as soon as the latch-plate is released the latch-plate will then automatically settle to its locked position. (Shown plainly in Figs. 3 and 4.) It will be observed that by this simple operation—that is, bringing the latch-plate down from a horizontal to a perpendicular position—the T-head of the bolt D lies straight across the slot 10, as clearly shown in Fig. 4, and that the latch-plate cannot separate from the keeper-plate until released by a reversed movement by the operator, while the upturned lug 17 prevents any lateral movement, and the more weight that is placed upon the safety-ropes the tighter the device is locked. At the same time the operator can unlock the device instantly the moment he removes all the weight from the latch-plates and carries the latch-plates to their first or horizontal position.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A safety-lock consisting of a keeper-plate having two locking-points at angles to each

other, and a latch-plate removable from the keeper-plate and provided with openings extending in the same direction, each opening being arranged to receive a locking-point, as described.

2. A safety-lock comprising a keeper-plate provided with a T projection, the head whereof extends transversely of the plate, and an angle-lug one member of which extends longitudinally of the plate toward the T projection, and a latch-plate independent of the keeper-plate and provided with longitudinal openings, one opening being adapted to receive the said T projection, and the other opening being adapted to receive the shank of the said lug, as described.

3. In a safety-lock, the combination, with a keeper-plate provided with an angle-lug projected from its outer face, and a shouldered T-headed screw-bolt arranged to be passed through the keeper-plate and the head of said bolt to extend transversely across the plate, the shoulder of the said T-bolt having a roughened surface adapted for engagement with the outer face of the keeper-plate, the head member of the said lug extending in direction of the screw-bolt, of a latch-plate independent of the keeper-plate, the said latch-plate having longitudinal openings made therein, so arranged that one opening is capable of receiving the T-head of the screw-bolt and the other opening the said lug, for the purpose specified.

4. A lock, having a latch-plate and a keeper-plate, the keeper-plate having two headed projections, the heads being elongated in directions at angles to each other, and the latch-plate having two openings elongated in like directions and capable respectively of receiving the projections, the latch-plate being held in position by the heads of the projections.

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Witnesses:

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