

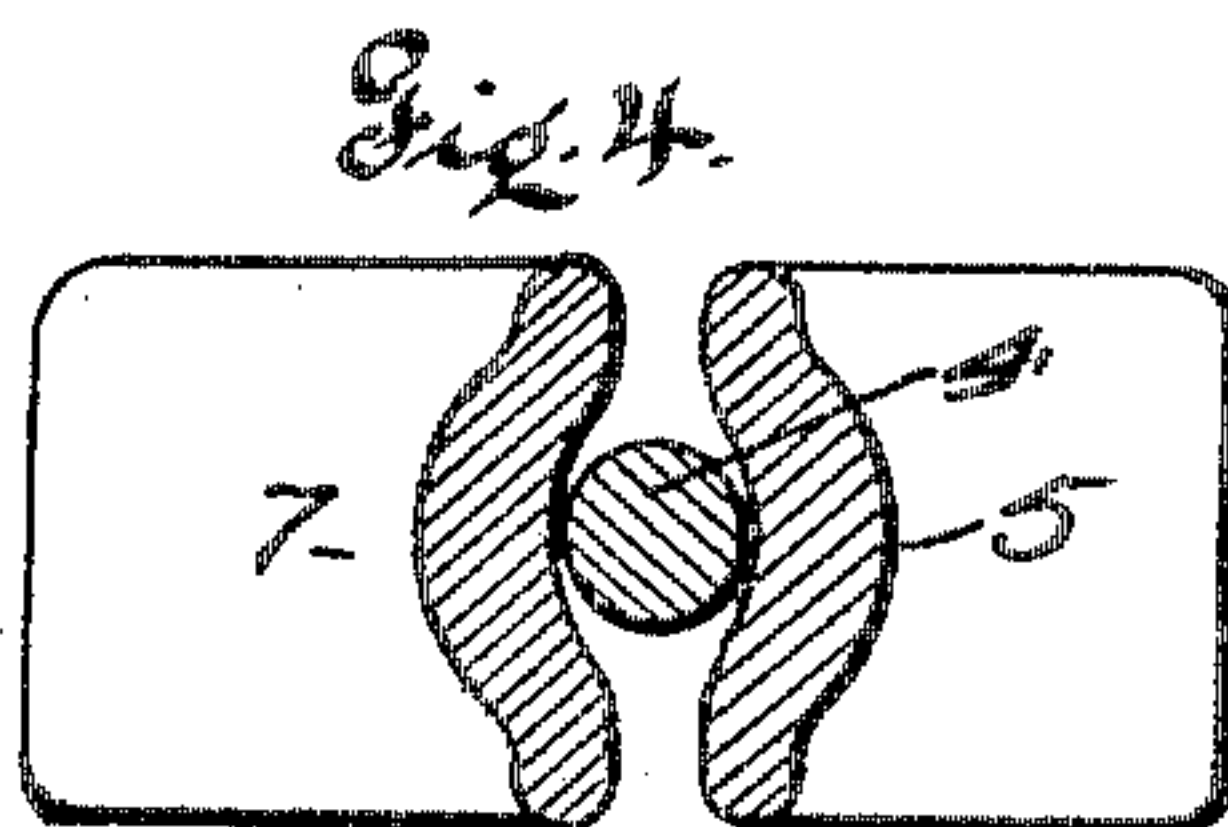
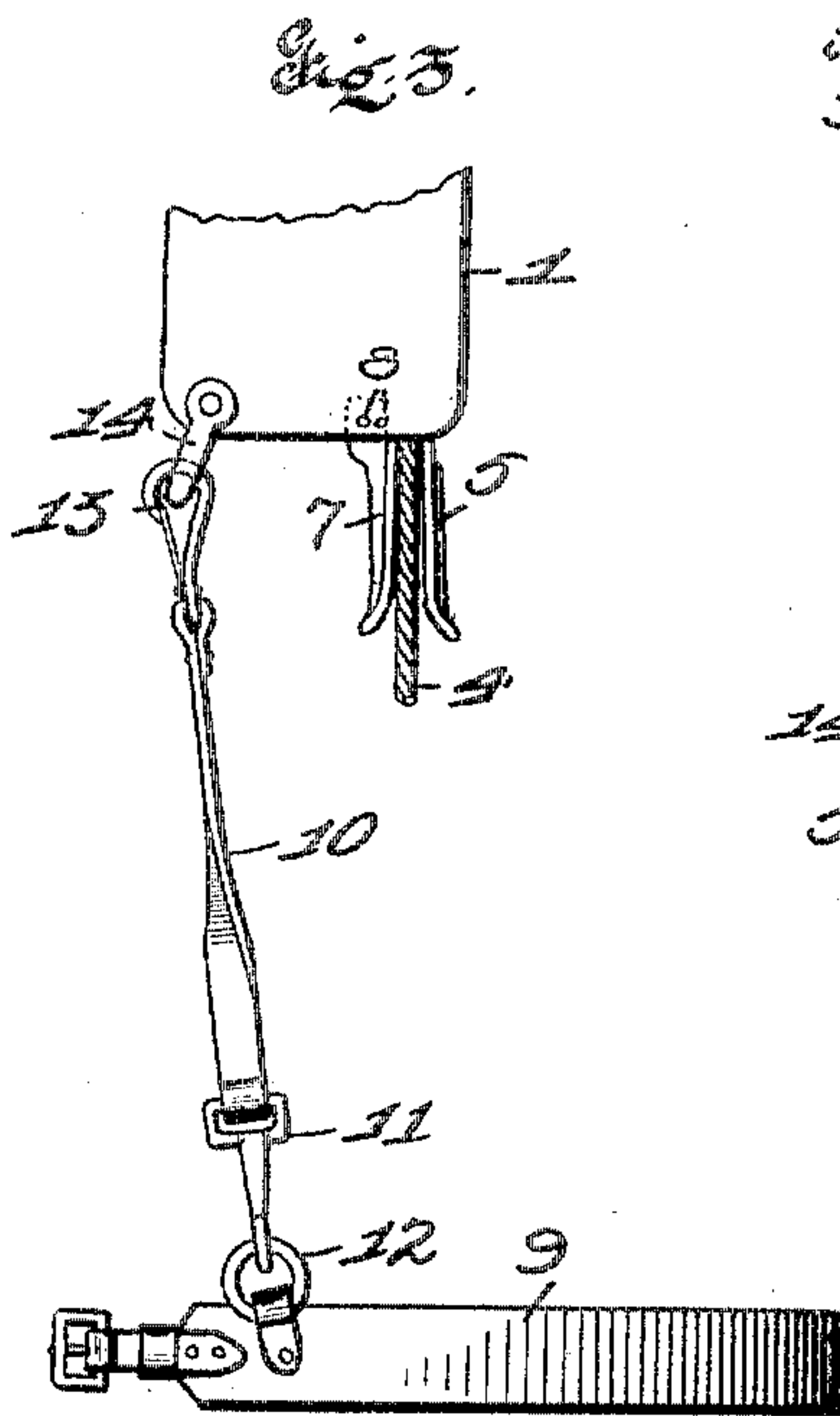
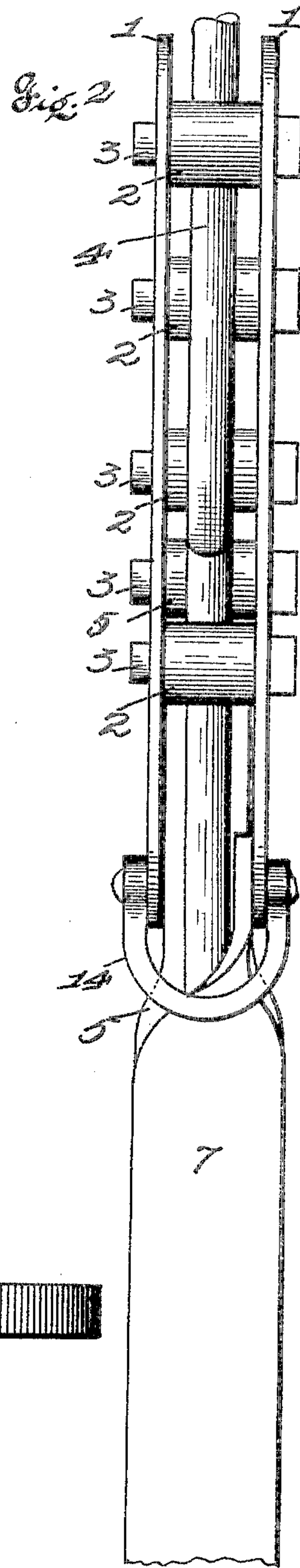
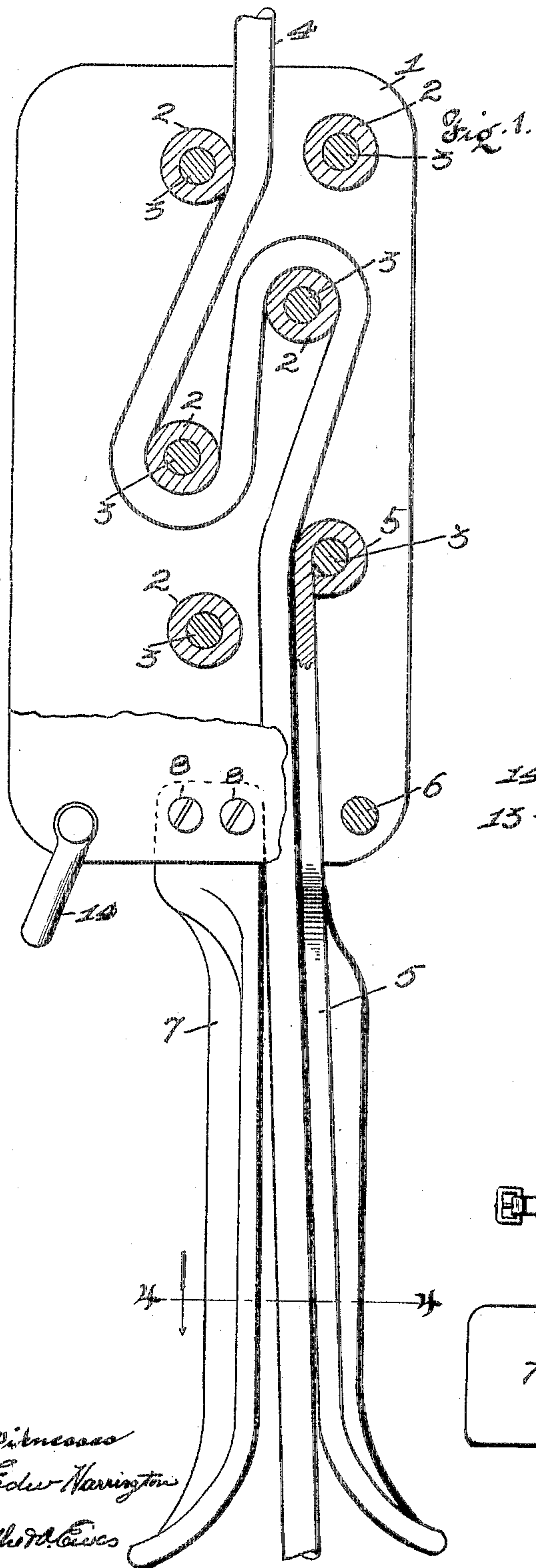
No. 794,100.

PATENTED JULY 4, 1905.

F. G. HENDRICKS.

FIRE ESCAPE.

APPLICATION FILED OCT. 5, 1903.



Witnesses  
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# UNITED STATES PATENT OFFICE.

FRANK G. HENDRICKS, OF ST. LOUIS, MISSOURI, ASSIGNOR TO DOMESTIC FIRE ESCAPE COMPANY, OF ST. LOUIS, MISSOURI, A CORPORATION OF MISSOURI.

## FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 794,100, dated July 4, 1905.

Application filed October 5, 1903. Serial No. 175,754.

*To all whom it may concern:*

Be it known that I, FRANK G. HENDRICKS, a citizen of the United States, residing at St. Louis, State of Missouri, have invented certain new and useful Improvements in Fire-Escapes, of which the following is a specification containing a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention relates to improvements in fire-escapes; and it consists of the novel construction, combination, and arrangement of parts hereinafter shown, described, and claimed.

The object of my invention is to provide a fire-escape with an improved hand-brake whereby the operator may have more complete control in making a descent from a burning building.

In the drawings, Figure 1 is a sectional side elevation of my improved hand-brake apparatus. Fig. 2 is an edge elevation of the same. Fig. 3 is a side elevation of the lower end of the friction-frame having the body-sling attached thereto. Fig. 4 is a section on the line 4 4 of Fig. 1.

1 indicates the twin side plates of the friction-frame, being preferably composed of metal spaced apart by fixed washers 2, which are clamped between said plates by means of bolts 3. The rope 4 passes longitudinally between said plates 1 and between two of the washers 2 at the upper end of the friction-frame, and thence said rope passes downwardly and beneath and around another one of said washers 2, thence upwardly and over and around another washer 2, and thence downwardly between the lower washer 2 and the upper end of the movable grip-jaw 5, which is bent around the bolt 3, which supports it. Said movable grip-jaw is thus pivotally secured to the friction-frame, and said jaw projects beneath said frame a sufficient distance to form a convenient handhold for the operator. The outward movement of said jaw is limited by contact with the bolt 6, fixed between the plates 1 near the lower end of same. Mounted opposite the movable grip-jaw 5 is a fixed grip-jaw 7, the upper end of which is

secured to one of the plates 1 by means of suitable screws or rivets 8, and said fixed grip-jaw extends parallel to said movable grip-jaw and has its lower end curved outwardly, as shown. The lower end of said movable grip-jaw 5 is also curved outwardly. This curvature is provided in order that the operator's hand will be prevented from slipping off of the grip-jaws during use. The inner faces of both grip-jaws are concaved, as shown in Fig. 4, to fit the rope.

My improved body-sling is preferably composed of a belt 9, provided with suitable fastening devices at its ends and adapted to encircle the operator's body, and one or more straps 10, having a snap-hook 11 at its lower end adapted to engage a ring 12, carried by said belt 9. The upper end of said strap 10 is provided with a snap-hook 13, which engages a loop or clevis 14, secured to the lower end of the friction-frame.

The operation is as follows: In making a descent the operator fastens the belt 9 around some portion of his body, preferably beneath the arms, and then grasps the friction-frame or the strap 10 with one hand and takes the grip-jaws 5 and 7 in the opposite hand and then begins the descent. The friction of the rope 4 upon the washers 2 and against the upper end of the movable grip-jaw 5 causes the descent to be comparatively slow, and the rapidity of the descent may be readily controlled by gripping the rope between the movable and fixed grip-jaws 5 and 7, respectively—that is, if the operator desires to descend faster he loosens his grip upon said jaws, and if he desires to move with lesser speed he tightens his grip upon said jaws.

I claim—

In a fire-escape: the two side plates 1; the spacing-washers 2 between said side plates; the bolts 3 inserted through said plates and through said washers to hold the parts together; the rope 4 passing downwardly inside of one washer, then outside of the and around under second washer; and then upwardly over a third washer and downwardly; the movable grip-jaw 5 pivotally mounted on a bolt 3 between said plates and extending below said

plates to form a handhold; said rope passing  
downwardly inside of said grip-jaw; the bolt  
6 inserted through said plates to limit the out-  
ward movement of said jaw; the grip-jaw 7  
5 rigidly mounted between the plates 1 and ex-  
tending below said plates in opposition to the  
movable jaw 5, and forming a second handle;  
said rope 4 passing between said jaws 5 and 7,  
and said jaws being concavo-convex in cross-  
10 section, and said rope being deflected as it  
passes over the said third washer to the mov-

able jaw, and the friction of said jaws upon  
the rope being controlled by the hand of the  
operator; and means of attaching a belt to  
said plates 1; substantially as specified. 15

In testimony whereof I have signed my name  
to this specification in presence of two sub-  
scribing witnesses.

FRANK G. HENDRICKS.

Witnesses:

ALFRED A. EICKS,  
M. G. IRION.