

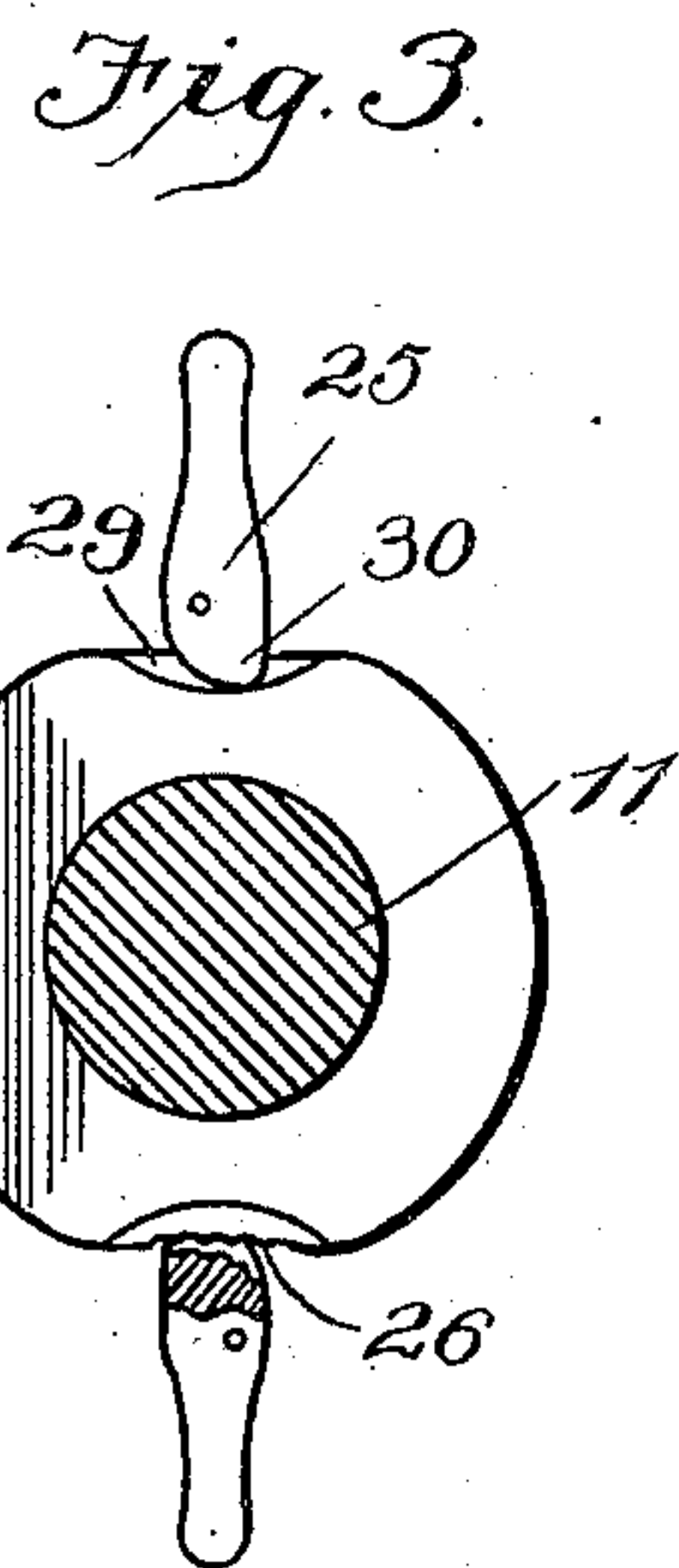
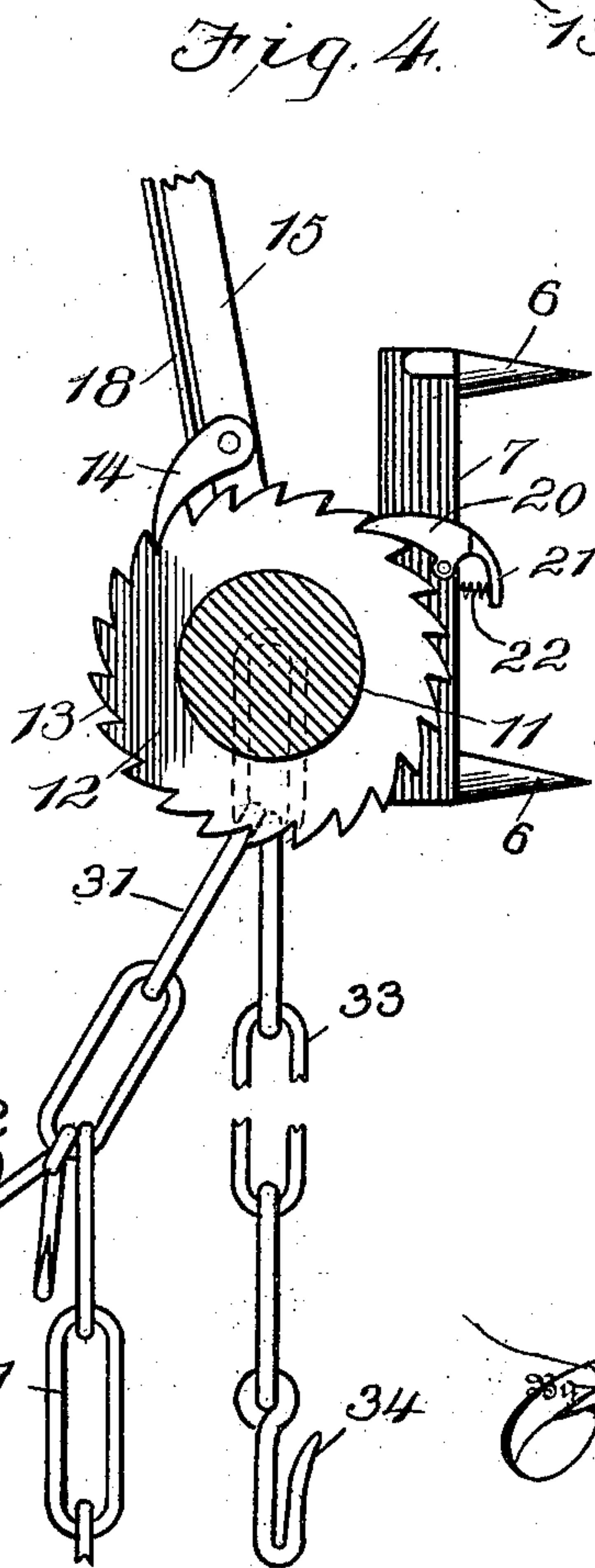
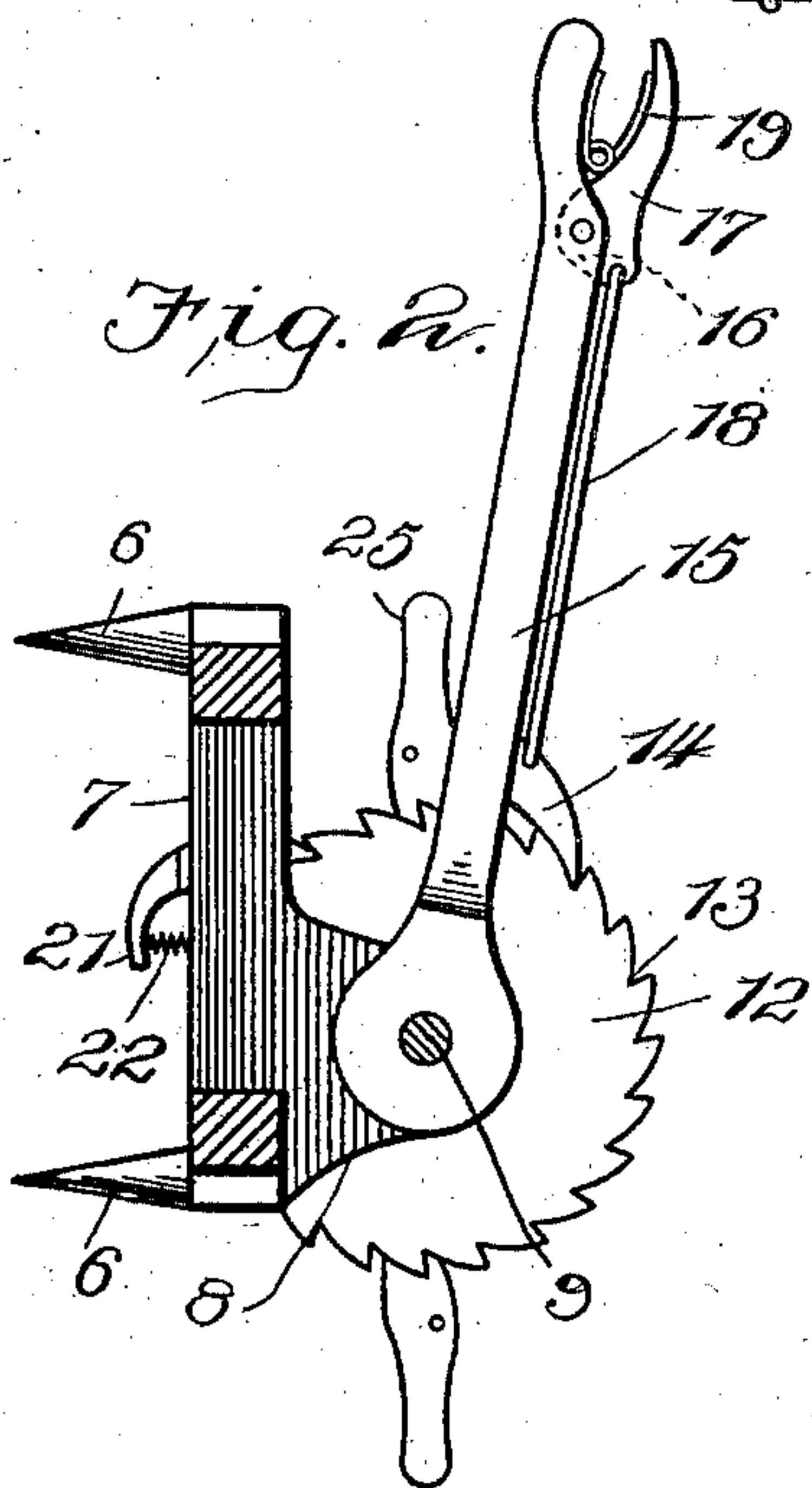
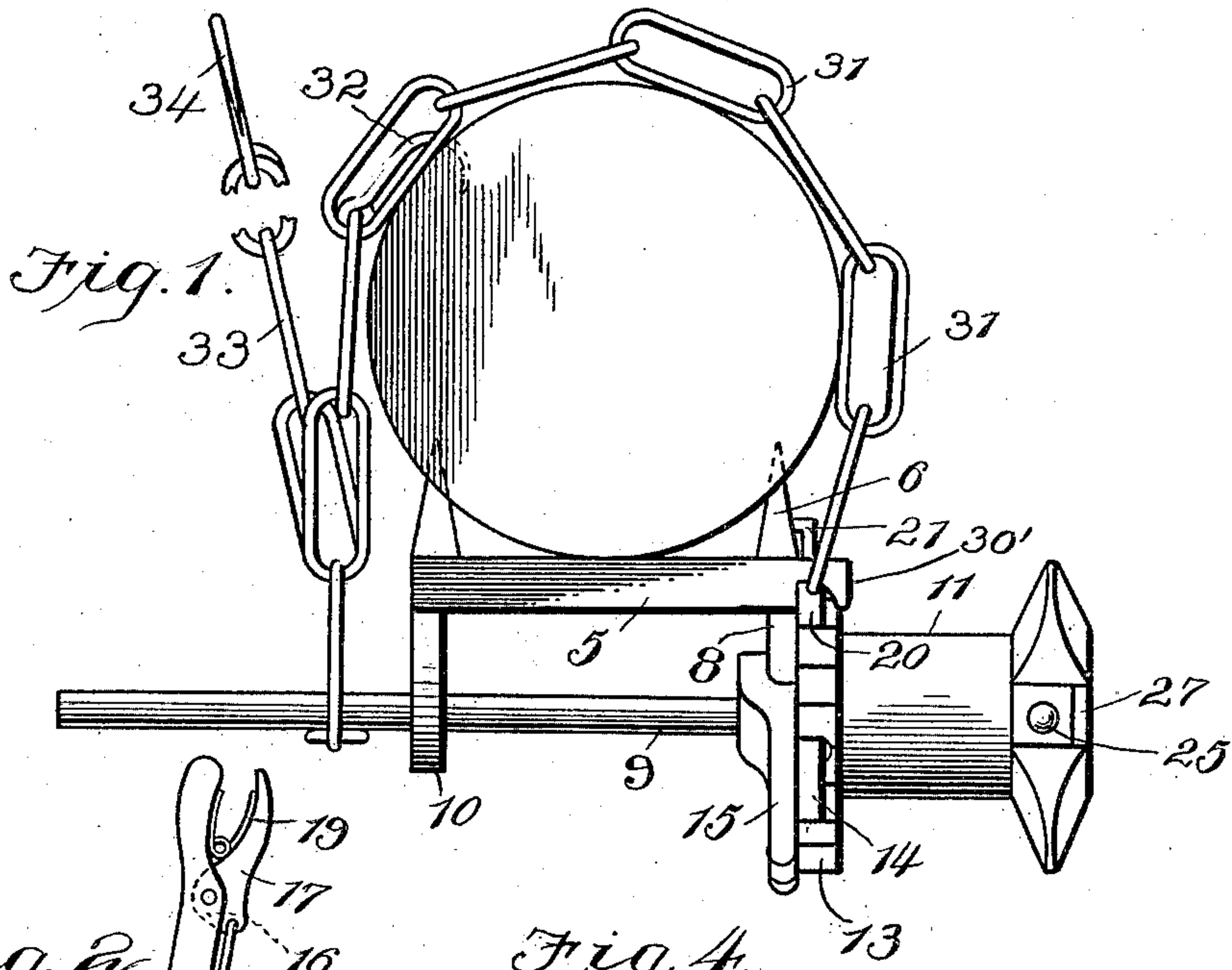
No. 696,881.

Patented Apr. 1, 1902.

J. A. WALLS & R. L. BOYTER  
WIRE STRETCHER.

(Application filed July 5, 1901.)

(No Model.)



Witnesses:

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# UNITED STATES PATENT OFFICE.

JOSEPH A. WALLS AND ROBERT L. BOYTER, OF NERI, TEXAS.

## WIRE-STRETCHER.

SPECIFICATION forming part of Letters Patent No. 696,881, dated April 1, 1902.

Application filed July 5, 1901. Serial No. 67,214. (No model.)

*To all whom it may concern:*

Be it known that we, JOSEPH A. WALLS and ROBERT L. BOYTER, citizens of the United States, residing at Neri, in the county of Hood, State of Texas, have invented certain new and useful Improvements in Wire-Stretchers; and we 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 wire-stretchers; and it has for its object to provide a device of this nature particularly adapted for stretching fence-wires and which while being simple and cheap of construction will be most efficient in operation.

In the drawings forming a portion of this specification and in which like numerals of reference indicate similar parts in the several views, Figure 1 is a top plan view showing the stretcher in position upon a fence-post. Fig. 2 is a transverse section through the shaft and showing the end of the drum and the operating-lever in elevation. Fig. 3 is a transverse section through the drum looking to the right. Fig. 4 is a transverse section through the drum and looking to the left.

Referring now to the drawings, the present stretcher comprises a triangular frame 5, one side of which is provided with spikes 6 for engagement with the face of a post against which the frame is disposed in the operation of the stretcher. The side of the frame having the spikes is shown at 7 and is provided with an extension 8, in which is received a shaft 9, which is also engaged with an extension 10 at the opposite angle of the frame. Upon this shaft and at the outer side of the side 7 of the frame is a winding-drum 11, the flange 12 of which adjacent to the frame is provided with ratchet-teeth 13 for engagement by a pawl 14, which is pivoted upon the lever 15. This lever 15 has an eye at its end which receives the shaft and is disposed within the frame, the lever being laterally offset at a point above the shaft for the pawl to engage the ratchet-teeth. In the upper portion of the lever is a recess 16, in which is seated a rocker 17, pivotally mounted, one end of which is connected with the pawl by means of a rod 18 for raising the pawl from the

ratchet, the pawl being held normally and yieldably engaged by means of the spring 19 behind the rocker. Thus by rocking the lever its pawl will be engaged with the ratchet-teeth to rotate the drum, and to hold the drum against return movement when the lever is rocked in an opposite direction a retaining-pawl 20 is employed. This pawl 20 is pivoted upon the outer face of the side 7 of the frame in operative relation to the ratchet-teeth, and to hold the pawl yieldably engaged with the teeth it is provided with a foot 21, which lies above the side 7 and extends rearwardly from the pawl, and between this foot and the upper edge of the side 7 is disposed a helical spring 22, which by pressing the foot upwardly holds the pawl yieldably engaged with the ratchet-teeth.

To attach wires to the winding-drum in such manner that they may be wound thereon to place the wires under tension when the drum is rotated, wire clips or clutches 25 are provided. Each of these clutches consists of an eccentrically-pivoted block having an arcuate corrugated gripping-face, which operates against the gripping-face 26 at the base of a radiating lug 27, formed on the drum, there being two of these clutches shown in the present instance. At the inner ends of the gripping-faces of the drum are cut-away portions or rabbets 29, in which work the flanges 30 at the outer edges of the blocks, these flanges preventing lateral displacement of the wires from between the gripping-surfaces. Thus if wires be engaged with the clutches and the lever be then operated the winding-drum will be turned upon the shaft to wind up the wires, and when the drum is to be reversely rotated the foot of the retaining-pawl is depressed and the drum is released.

To hold the stretcher in position against the post, a chain 31 is provided, and one end of this chain is engaged over the shaft 9, the chain being then taken around the post, and after being drawn tight a link thereof is engaged over a stud 30'. Engaged with the chain 31 is a grapple-hook 32, which is engaged with the post, as shown in Fig. 1. To the chain 31 is connected a chain-section 33, having a wire-clip 34 at its free end. This wire-clip is engaged with the wire beyond the



post after the wire has been stretched, so that it will be held tight while being disengaged from the drum for adjustment to the post.

What is claimed is—

5 1. A wire-stretcher comprising a frame, a shaft mounted in the frame and provided with a winding-drum and means for rotating it, said frame having a stud, and a chain having connection with the frame having a hook for  
10 engagement with a post and adapted to be passed around the post and to engage its links interchangeably with the stud, and a chain-section attached to the first chain and having a clip for engagement with a wire to be  
15 stretched.

2. A wire-stretcher comprising a frame adapted to rest against a post and having teeth for engagement therewith, a shaft mounted in the frame and projecting there-  
20 beyond, a winding-drum upon the shaft beyond the frame and having clutches for engagement with a wire, a ratchet upon the drum, a lever pivoted upon the shaft and hav-

ing a pawl for engagement with the ratchet to rotate the drum, a retaining-pawl pivoted to 25 the frame for engagement with the ratchet and having a rearwardly-directed foot, a spring disposed between the foot and frame to hold the pawl yieldably engaged with the ratchet, means for holding the frame against 30 a post, a stud, and a chain having connection with the frame and having a hook for engagement with a post, said chain being adapted to be passed around the post and to engage its links interchangeably with the 35 stud, and a chain-section attached to the first chain and having a clip for engagement with a wire to be stretched.

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

JOSEPH A. WALLS.  
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Witnesses:

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