

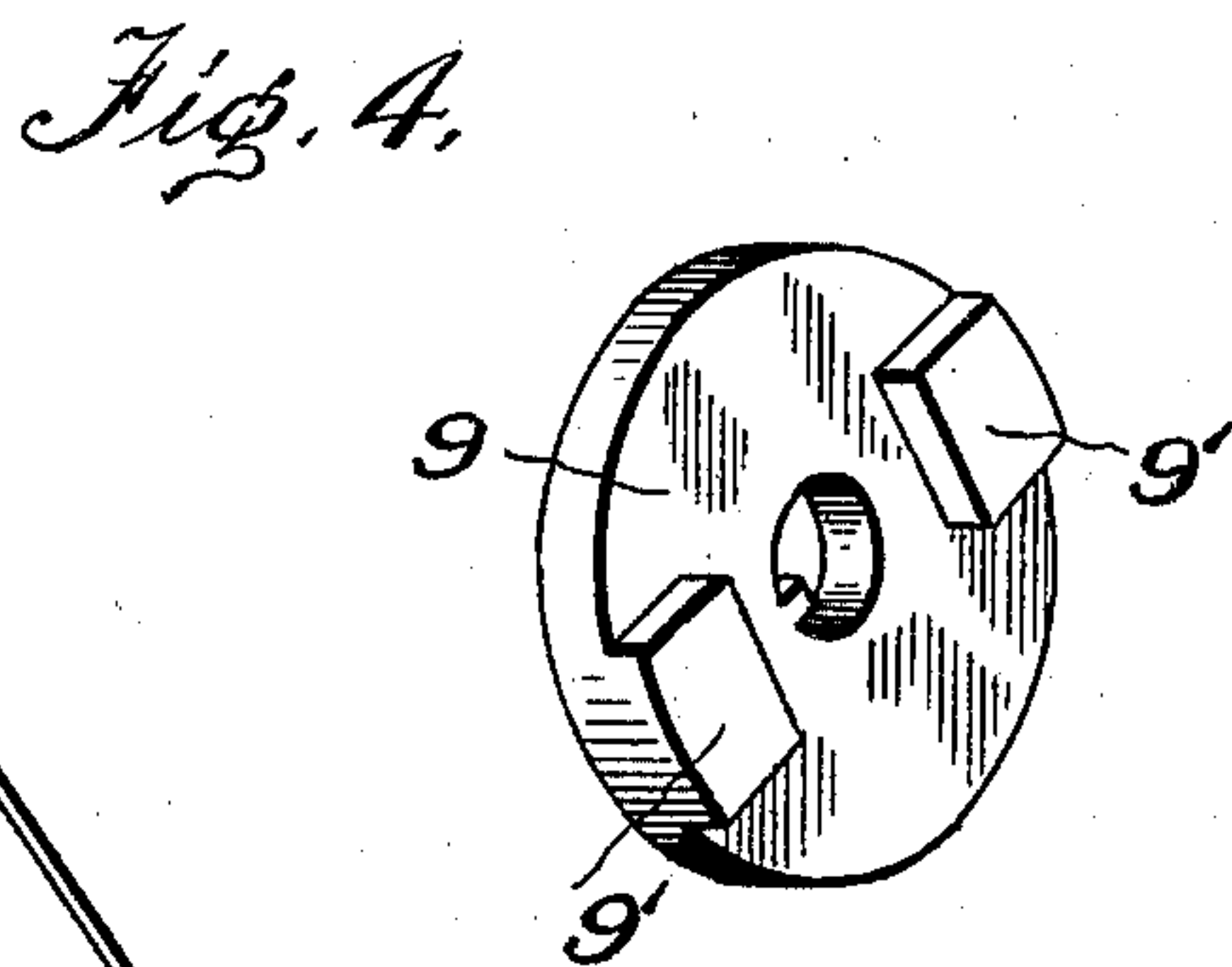
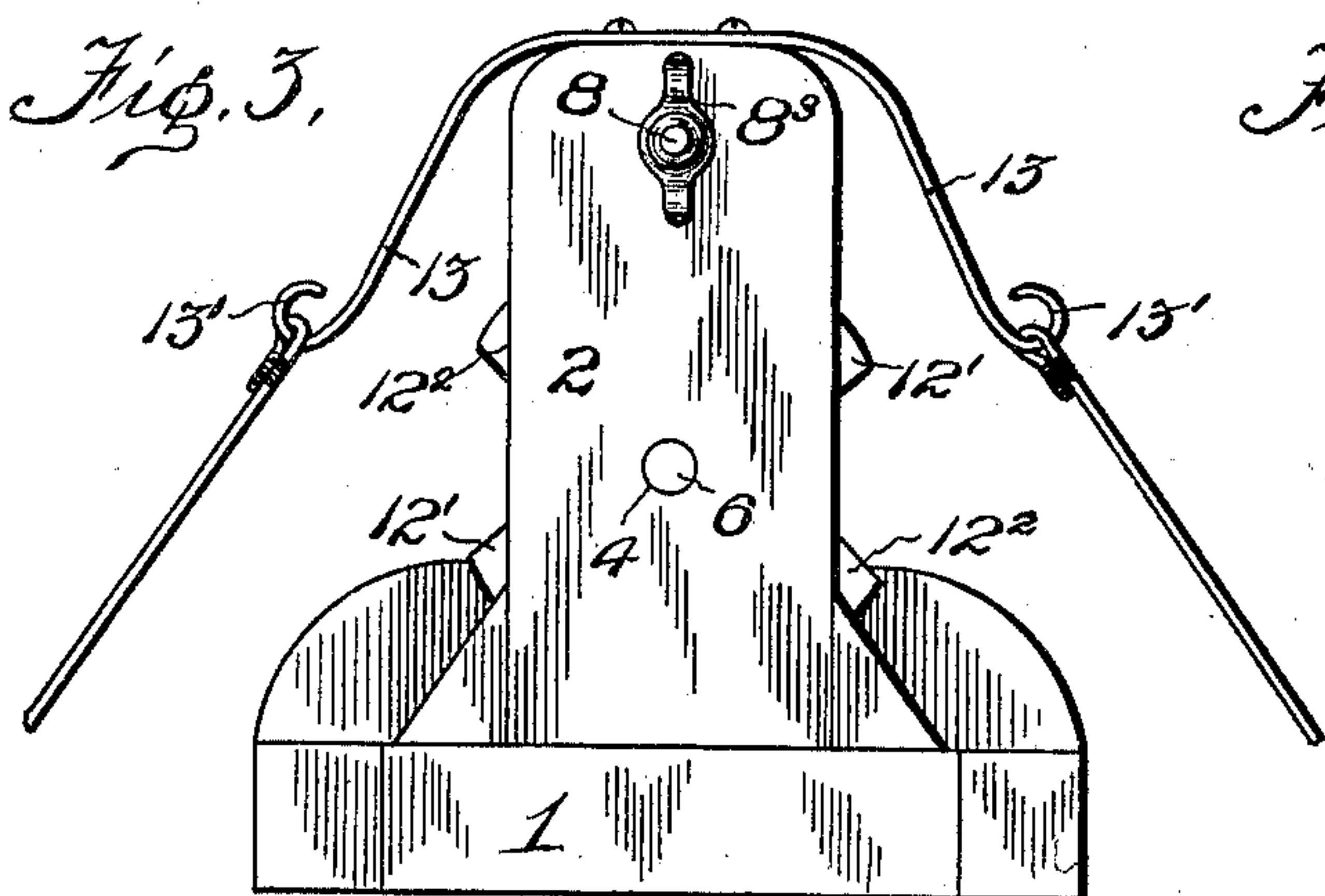
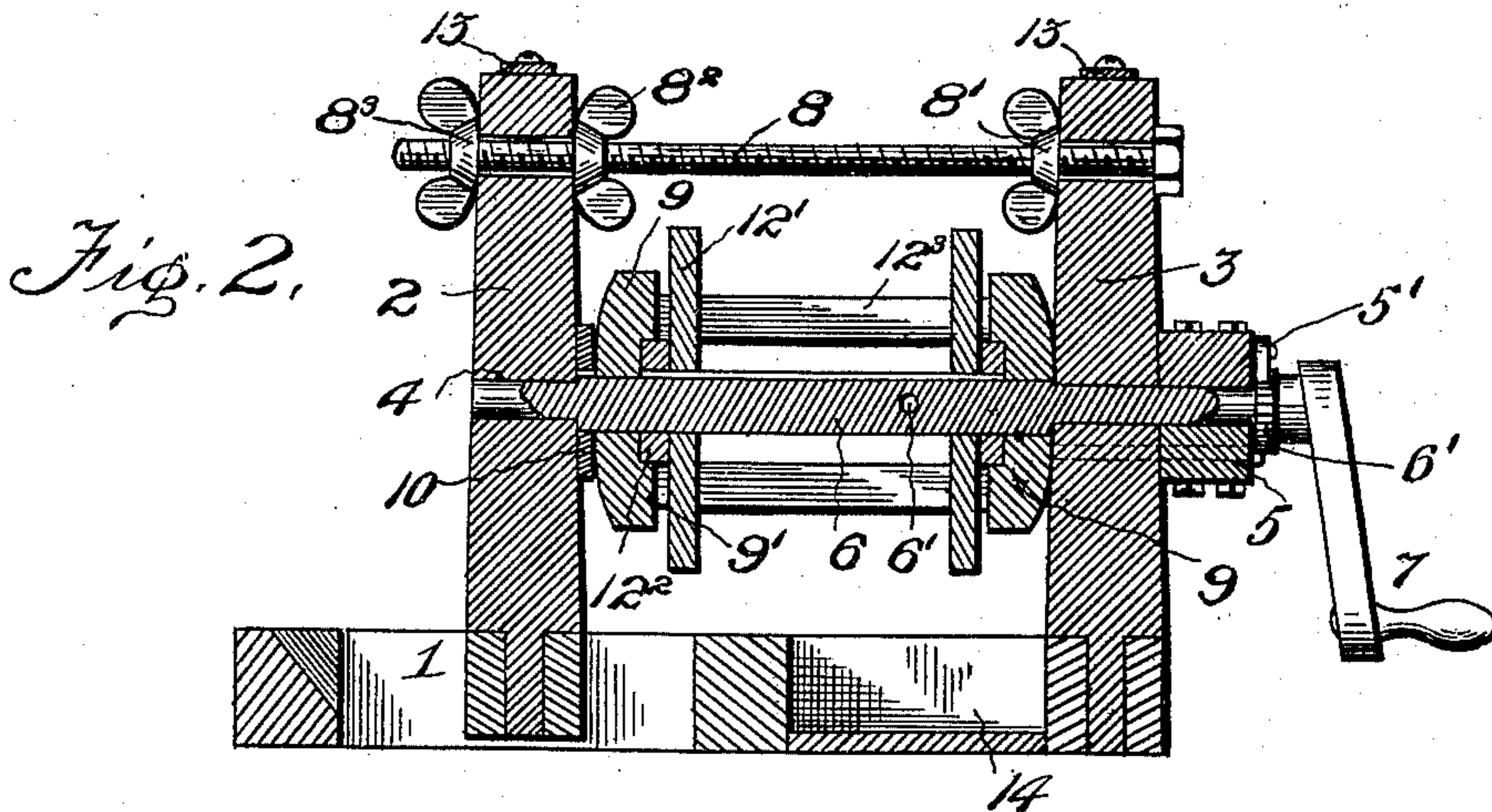
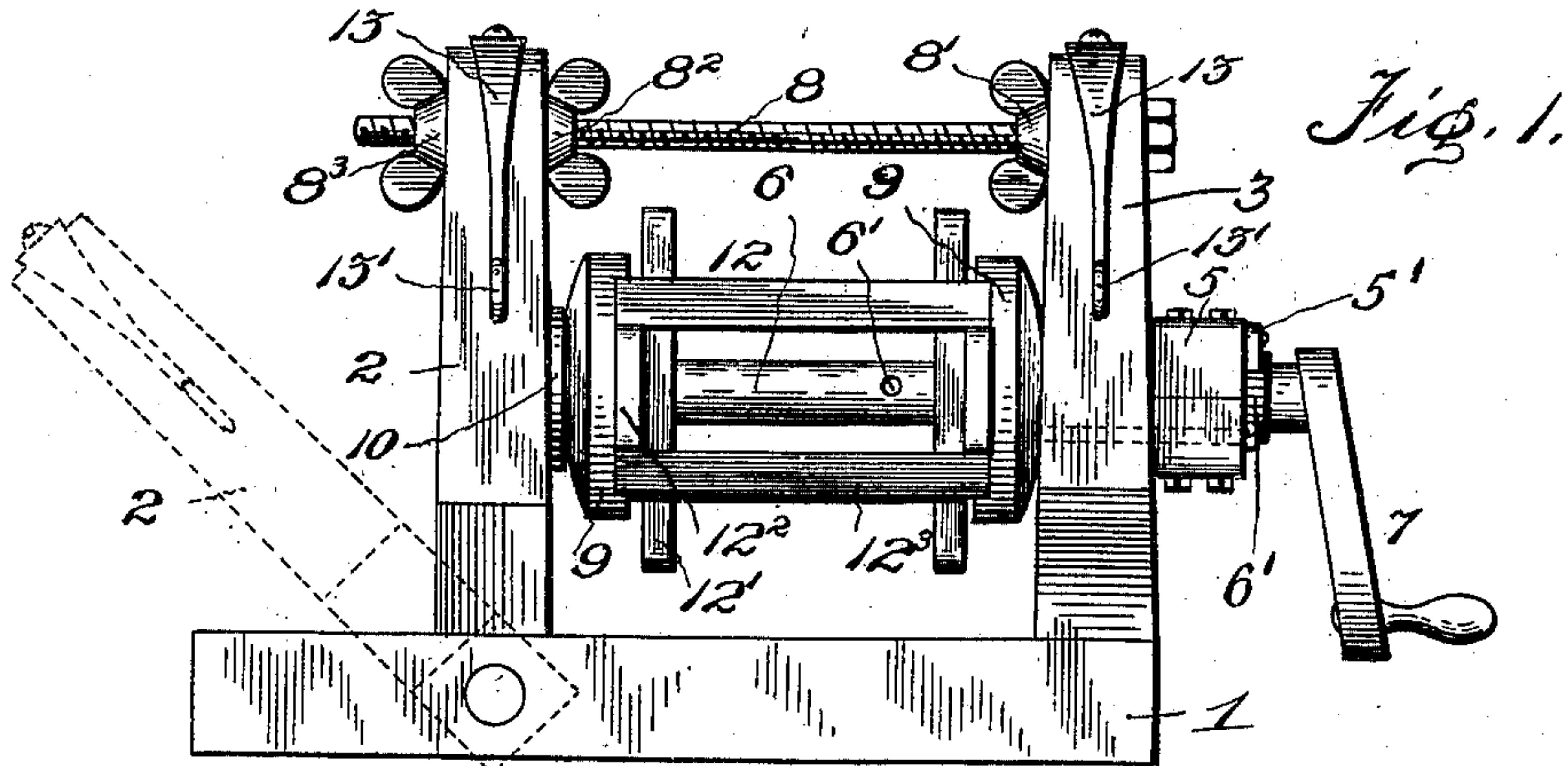
No. 654,497.

Patented July 24, 1900.

H. A. THOMAS.  
WIRE REEL.

(Application filed Apr. 26, 1900.)

(No Model.)



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# UNITED STATES PATENT OFFICE.

HENRY A. THOMAS, OF LACLEDE COUNTY, MISSOURI.

## WIRE-REEL.

SPECIFICATION forming part of Letters Patent No. 654,497, dated July 24, 1900.

Application filed April 26, 1900. Serial No. 14,437. (No model.)

*To all whom it may concern:*

Be it known that I, HENRY A. THOMAS, a citizen of the United States, residing in the county of Laclede, in the State of Missouri, have invented certain new and useful Improvements in Wire-Reels; and I do 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 reels and stretchers to be used in building fences, winding and stretching new wire, or in rewinding old wire.

The object of this invention is to produce a device of this character that will be simple in construction, strong and durable, which can be cheaply manufactured, and which will perform its functions in an efficient manner.

With this and other objects in view my invention consists in the construction and arrangement of parts, as will be hereinafter more fully described and claimed.

In the drawings, Figure 1 is a side elevation of my improved wire-reel, one of the supporting-standards shown swung down in dotted lines. Fig. 2 is a vertical longitudinal section of the same. Fig. 3 is an end elevation, and Fig. 4 is a detail perspective view, of one of the spool-clamping heads looking at the inner side thereof.

Like characters of reference denote like parts throughout the drawings.

1 denotes the base of the machine, 2 and 3 the reel-supporting standards, the standard 2 having a hinged connection with the base 1 and is provided with a journal-bearing 4. The standard 3 is rigid with the base and is provided with an orifice in line with the journal-bearing 4 of the standard 2 and is also provided with a two-part journal-box 5, which receives the reduced portion of the reel-shaft 6, the opposite end of which is reduced and journaled in bearing 4 of the standard 2. The end of the reel-shaft adjacent to the bearing 5 is provided with a crank-handle 7.

6' denotes a ratchet-wheel fixed on the shaft 6 between the crank-handle 7 and the bearing 5, and 5' denotes a pivoted pawl mounted on the bearing 5 and adapted to be dropped into engagement with the ratchet-wheel 6',

thereby locking said wheel and shaft against rotation to hold the wire stretched while a staple is being driven or for any other purpose.

8 denotes a threaded tie-rod connecting the upper ends of the standards 2 and 3 and is provided on its outer end, adjacent to the standard 3, with a head, and on the other side of the said standard is a clamping-nut 8', which when screwed up on the rod 8 will clamp the standard 3 between said nut and the said head. The opposite end of the tie-rod 8 is also provided with clamping-nuts 8<sup>2</sup> and 8<sup>3</sup>, which when screwed up clamp the standard 2, thus rigidly bracing the same.

9 denotes two circular clamping plates or heads splined to the reel-shaft and having formed upon their inner faces two diametrically-opposite lugs or offsets 9' for a purpose hereinafter to appear.

10 denotes a washer located upon the shaft 6 between the outer face of one of the clamping-heads 9 and the hinged standard 2, so that by adjusting the nuts 8<sup>2</sup> and 8<sup>3</sup> on the tie-rod 8 the standard 2 will be brought to bear more or less tightly against the washer 10, causing a frictional contact between the washer 10 and the clamping-head 9, thereby forming a brake to the reel-shaft and giving more or less tension to the wire when the same is being unreeled.

12 denotes the usual form of wire-spool used for winding heavy wire upon, consisting of the crossed pieces 12' and 12<sup>2</sup>, forming the two ends of the spool and being spaced apart and connected together by four bars 12<sup>3</sup>, which are triangular in cross-section, so that they may fit snugly in the corners formed by the crossed end pieces 12' and 12<sup>2</sup> and having two of their faces lying flat against the parallel sides of the crossed end pieces. When the spool is slipped upon the shaft 6, the outside pieces 12<sup>2</sup> of the spool are engaged on both sides by the lugs 9' of the clamping-heads 9 and held against rotation on said shaft by reason of the heads 9 being splined thereon. To allow the heads 9 and the spool 12 to be slipped on and off the shaft 6, the nut 8<sup>2</sup> must be first unscrewed from the tie-rod 8, which will permit the standard 2 to be swung clear of the shaft 6, and the parts may then be removed or replaced, as the case



may be. The shaft 6 is provided midway its length with a transverse orifice 6' to receive and hold the end of the wire to be stretched.

13 denotes bars bolted to the upper ends of the standards 2 and 3 and curving downwardly to the front and rear thereof and formed on their ends with the upturned hooks 13' to receive the upper ends of guy-ropes or stays fastened in the ground. The base is also provided with vertical holes through which stakes may be driven to hold the reel-frame down firmly.

14 denotes a box formed by the cross-pieces of the base and a bottom connecting the said cross-pieces for the reception of staples, tools, &c.

From the foregoing description, taken in connection with the drawings, the construction and operation of my device will be readily understood and a further description is not deemed necessary.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

Having thus described my invention, what

I claim, and desire to secure by Letters Patent, is—

In a wire reel and stretcher, the combination of the base, the rigid and the hinged supporting-standards, a reel-shaft journaled in said supporting-standards, clamping-heads splined upon said shaft for clamping between them a wire spool or reel, a friction-washer on said shaft between one of the clamping-heads and the hinged standard, a threaded tie-rod connecting the upper ends of the standards, adjusting-nuts for drawing the hinged standard toward the fixed standard causing a frictional contact between clamping-heads and said washer, thereby regulating the speed of the reel-shaft and giving tension to the wire, a ratchet-wheel mounted on said shaft and a locking-pawl adapted to engage said ratchet-wheel to lock said shaft against rotation, substantially as set forth.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

HENRY A. THOMAS.

Witnesses:

JACOB DEBERY,

THOMAS W. WAITE.