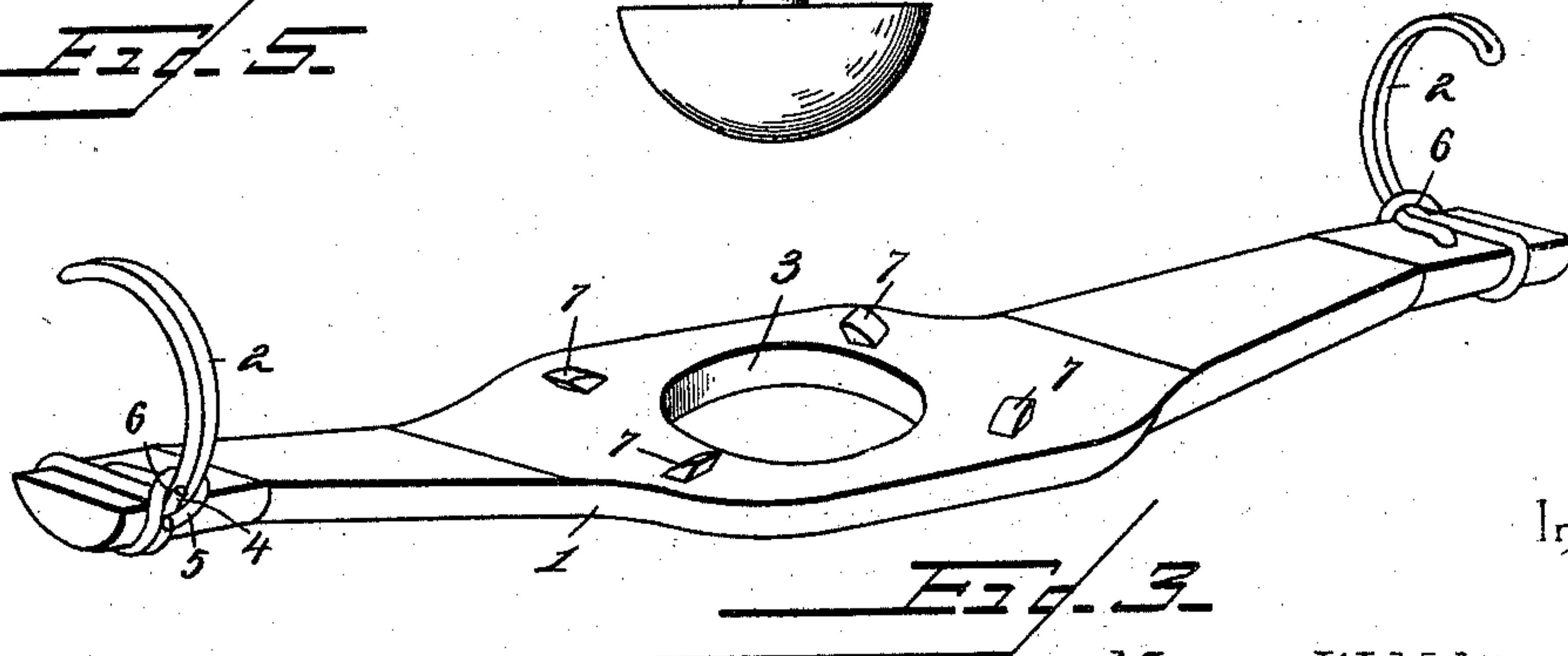
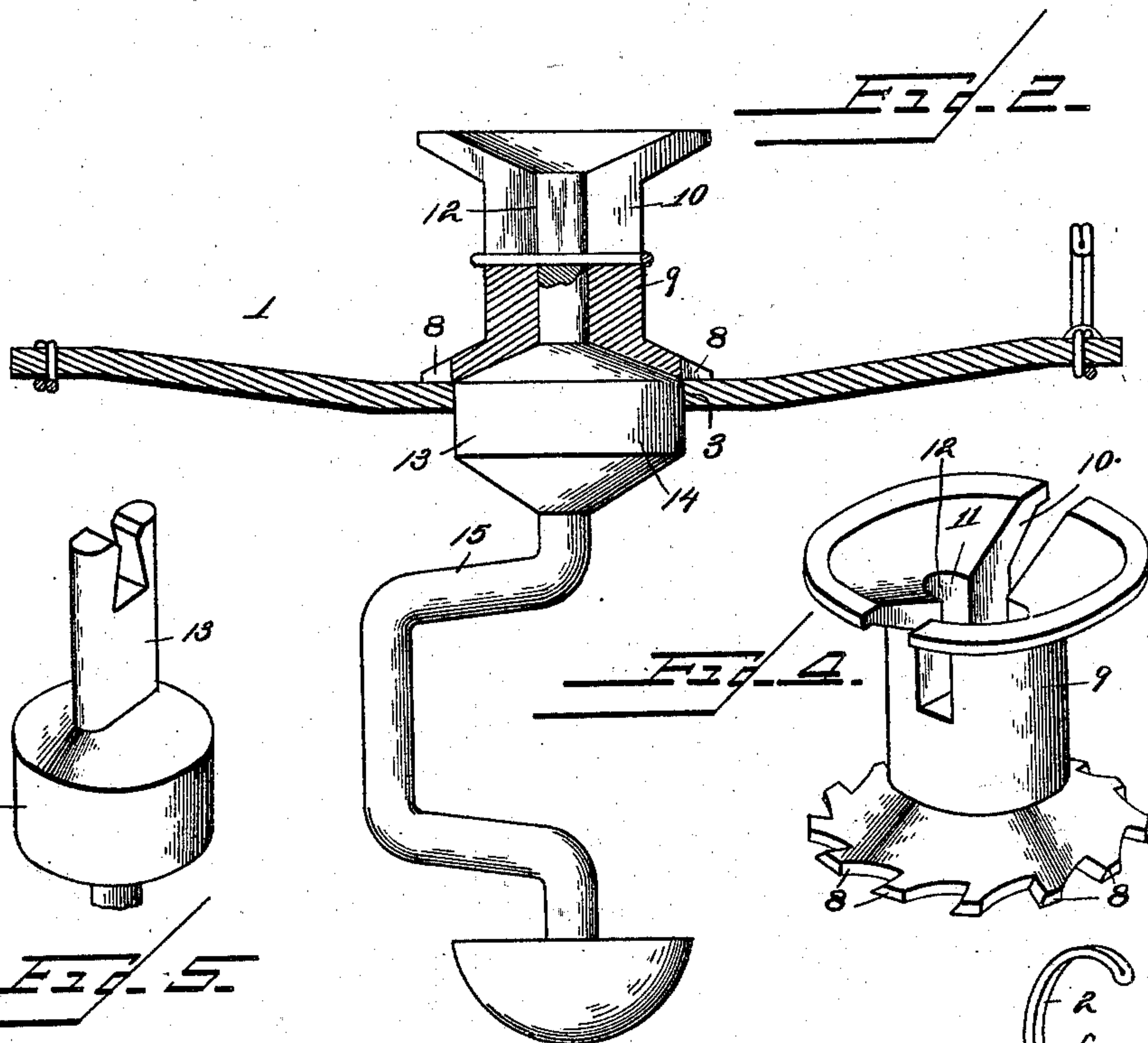
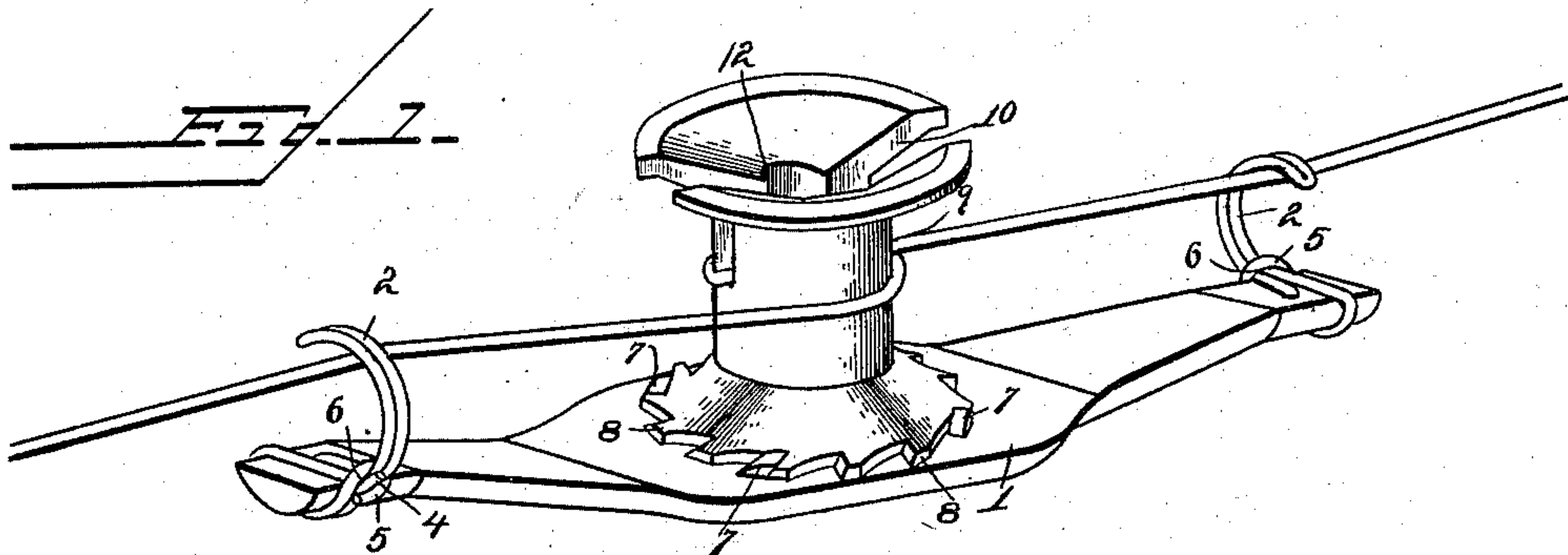


(No Model.)

M. W. HOLDEN.
WIRE STRETCHER.

No. 559,133.

Patented Apr. 28, 1896.



Inventor

Myron W. Holden.

By His Attorneys.

Witnesses

T. W. Riley.
J. F. Riley

C. A. Snow & Co.

UNITED STATES PATENT OFFICE.

MYRON W. HOLDEN, OF WILLIAMSBURG, IOWA.

WIRE-STRETCHER.

SPECIFICATION forming part of Letters Patent No. 559,133, dated April 28, 1896.

Application filed May 14, 1895. Serial No. 549,302. (No model.)

To all whom it may concern:

Be it known that I, MYRON W. HOLDEN, a citizen of the United States, residing at Williamsburg, in the county of Iowa and State of Iowa, have invented a new and useful Wire-Stretcher, of which the following is a specification.

The invention relates to improvements in wire-stretchers.

The object of the present invention is to improve the construction of that class of wire-stretchers known as "mid-wire take-ups" and to provide a simple and inexpensive device capable of being readily applied to a fence-wire at a point between fence-posts and of readily taking up the slack of a wire and of holding the same at the desired tension.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is a perspective view of a wire-stretcher constructed in accordance with this invention. Fig. 2 is a longitudinal sectional view of the same. Fig. 3 is a detail perspective view of the wire-engaging bar or frame. Fig. 4 is a similar view of the spool. Fig. 5 is a detail perspective view of the spool-engaging end of the winding-key.

Like numerals of reference indicate corresponding parts in all the figures of the drawings.

1 designates a bar provided at its ends with oppositely-disposed hooks 2 for engaging a fence-wire and having its central portion enlarged and provided with a circular opening 3. The hooks, which may be of any desired construction, are preferably composed of wire, each constructed of a single piece of wire doubled and curved to form engaging portions. One terminal of the wire is passed through a perforation of the bar, and the other terminal, 5, is bent around and embraces the end of the bar and is provided with an eye 6, receiving the other terminal, 4, and engaging the doubled curved portion of the wire adjacent to the bar. The bar is provided adjacent to the opening 3 with beveled teeth 7, arranged to engage ratchet-teeth 8 of an inner flange of a spool 9, which is adapted to

engage a fence-wire and to have the same wound around it to a greater or less extent, according to the slack to be taken up. The outer portion of the spool is provided with a transverse slot 10 to receive the fence-wire and to permit the same to be placed in position to be wound around the central portion of the spool, and the latter is provided with an oblong bore or opening 11, adapted to receive a stem 12 of a winding-key 13.

The winding-key 13 has a flattened stem to correspond with the oblong opening or bore of the spool and is provided with an enlarged annular portion 14, adapted to fit in the opening 3 of the bar 1, and the outer extremity of the stem 12 is notched or slotted to correspond with the slot 10 of the spool in order not to interfere with the wire to be stretched. The key is provided with a crank-handle or brace-like handle 15 to enable the spool to be readily rotated to tighten a wire to the desired degree, and the tension of a fence-wire will securely hold the ratchet-flange of the spool in engagement with the teeth of the bar 1. The beveling of the teeth of the bar 1 permits the spool to be rotated freely in the direction for winding a wire on the spool, and the shoulders of the teeth lock the spool against retrograde rotation.

After a wire has been wound around the spool to the desired extent the key is removed, and only one key is necessary for winding a series of wire-stretchers.

It will be seen that the wire-stretcher is exceedingly simple and inexpensive in construction, that it is adapted to be readily applied to a fence-wire at a point between fence-posts, and that it is capable of enabling a fence-wire to be stretched to the desired tension and of enabling any slack to be readily taken up from time to time.

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.

What I claim is—

1. A wire-stretcher, comprising a bar provided with wire-engaging devices, and having a central opening, and provided adjacent to the opening with a series of teeth, a wire-receiving spool provided at its inner end with

an integral ratchet-flange bearing against one face of the bar and engaging the teeth of the same, and a removable winding-key passing through the opening of the bar and engaging the spool, substantially as described.

2. A wire-stretcher, comprising a bar having wire-engaging devices, and provided with a circular opening, and having a series of teeth adjacent to the opening, a wire-receiving spool having an oblong bore or opening and provided at its outer end with a slot and having at its inner end an integral ratchet-flange bearing against one face of the bar and engaging the teeth thereof, and a removable winding-key having an annular enlargement to fit the opening of the bar, and provided with a slotted stem arranged in the bore of the spool, substantially as and for the purpose described.

3. A wire-stretcher, comprising a bar, the oppositely-disposed wire-engaging hooks located at the ends of the bar, and each constructed of a single piece of wire doubled and curved to form engaging portions, one terminal of the wire being passed through the bar and bent against the same, and the other terminal of the wire being bent around the bar and provided with an eye receiving the double portion of the wire and engaging the other terminal, and a wire-engaging spool, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

MYRON W. HOLDEN.

Witnesses:

D. E. EVANS,

T. T. HALL.