No. 711,372. Patented Oct. 14, 1902.

J. W. ANGLE.

WIRE GRIPPER.

(Application filed Apr. 21, 1902.)

(No Model.)

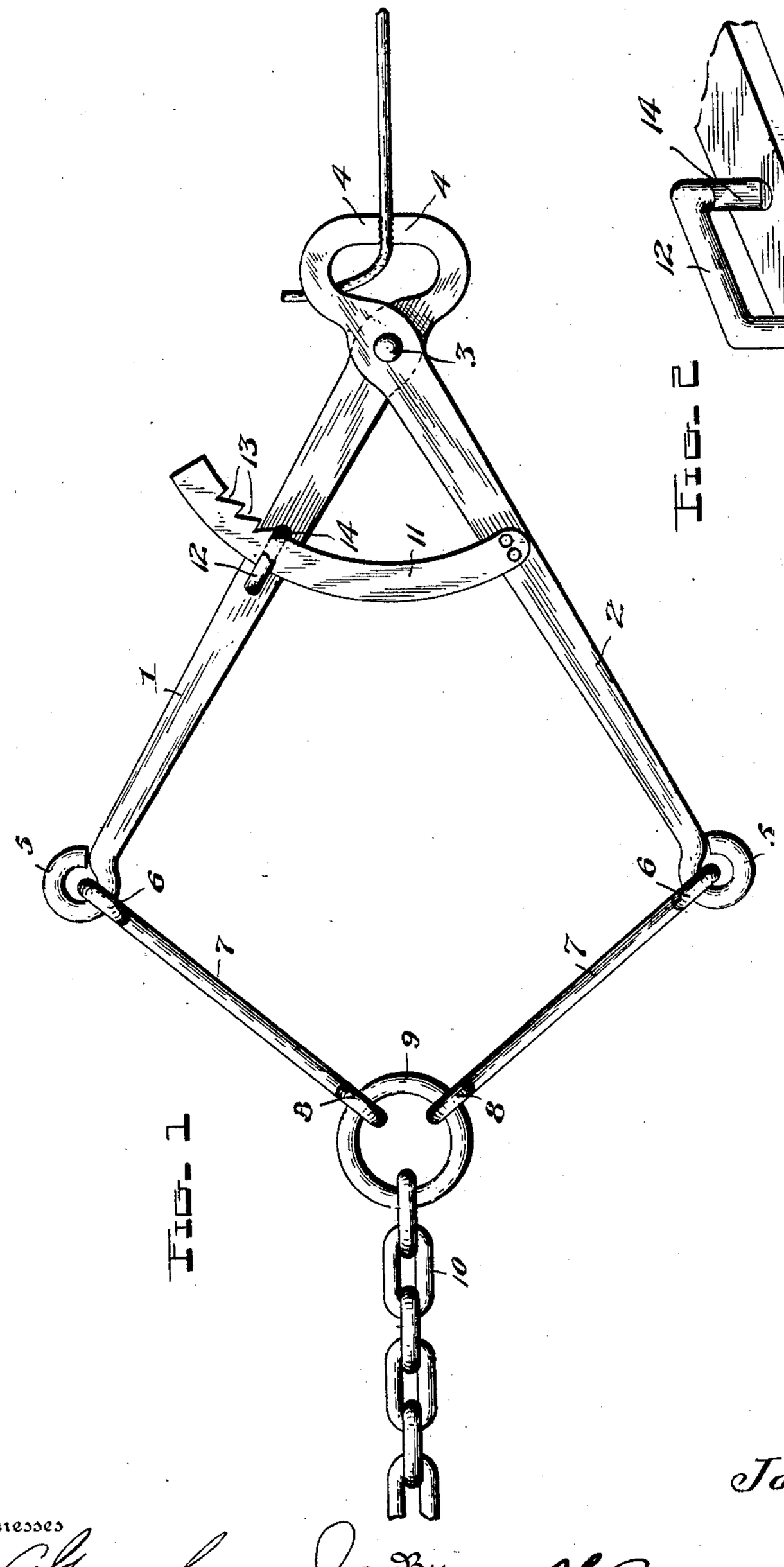

Fig. 1

Fig. 2

Witnesses
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JOHN W. ANGLE, OF NEVADA, MISSOURI.

WIRE-GRIPPER.

SPECIFICATION forming part of Letters Patent No. 711,372, dated October 14, 1902.

Application filed April 21, 1902. Serial No. 103,911. (No model.)

To all whom it may concern:

Be it known that I, JOHN W. ANGLE, a citizen of the United States, residing at Nevada, in the county of Vernon and State of Missouri, have invented certain new and useful Improvements in Wire-Grippers; 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.

The invention relates to wire-grippers, and more particularly to that class of inventions designed for use in connection with wire-fence stretchers to grip and hold the wire when the stretching devices are being operated to stretch the wire.

The object of the invention is to provide an improved form of grippers which shall be simple of construction, durable in use, comparatively inexpensive of production, efficient in operation, and which will automatically lock itself to the wire and be prevented from becoming detached should for any reason the anchor or stretcher chain become slack, thus overcoming a serious objection in tools of a like character where no provision is made for holding the gripping-jaws to the wire in the event of the slackening of the anchor or stretcher chain or rope.

In the accompanying drawings, Figure 1 is a side elevation of my improved gripper, showing the jaws thereof engaged at the end of a piece of wire and showing the ring connected to a chain which may be fastened to a post and in that event would take the term "anchor-chain" or which may be connected to a windlass or other form of wire-stretcher and in that event would be termed a "stretcher-chain;" and Fig. 2 is a perspective view of the combined catch and guide.

In the drawings, 1 and 2 denote two levers crossed and pivotally connected together by a pivot 3 and formed with clamping-jaws 4. The opposite ends of these levers are preferably formed with eyes 5, to which are connected eyes 6 of links 7, the opposite ends of said links being formed with eyes 8, to which is attached a ring 9. To this ring 9 is fastened a chain or rope 10.

11 denotes a spring locking-bar, one end of which is fixed to the lever 2 and the other end of which extends through a combined guide and catch 12. This bar is curved in the arc of a circle the center of which is the pivot 3 and is provided on one edge with a series of ratchet-teeth 13, which are adapted to be held in normal engagement with the beveled tooth 14 of the combined guide and catch by the resiliency of said bar. The teeth of the bar are arranged to prevent the accidental spreading of the jaws and when said jaws are spread to permit of the closing of said jaws.

In operation assuming the jaws to be separated the end of the wire is placed between them and the handles closed, thus allowing the ratchet-teeth to ride over the beveled tooth 14 and lock the jaws firmly to the end of the wire. As strain is applied by means of the rope or chain 10—as, for instance, in winding up the windlass of the wire-stretcher—these jaws will be forced into tighter engagement with the wire and be locked in such engagement by the locking-bar. Should for any cause the stretcher chain or rope become slack, the jaws cannot possibly become disengaged from the wire, for the reason that the locking-bar holds said jaws securely in closed position. To separate the jaws for the purpose of releasing the wire, the free end of the locking-bar is moved so as to free its teeth from the tooth 14, thus permitting of the spreading of the gripper-jaws.

While I have described this device with special reference to wire-stretchers, I would have it distinctly understood that I reserve to myself the right to use it for any purpose for which I may find it adaptable, and while I have shown the preferred construction I would have it distinctly understood that I reserve to myself the right to make such changes in the construction as would suggest themselves to an ordinary mechanic without departing from the spirit of my invention.

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

1. A wire-gripper, comprising handle-bars pivoted together and provided at their outer ends with gripping-jaws, one of said bars being provided with a catch-tooth and the other with a toothed fixed spring-bar curved in the arc of a circle whose center is coinci-

dent with the pivot connecting the handle-bars, the said bar being normally in engagement with the catch-tooth, substantially as set forth.

2. A wire-gripper, comprising handle-bars pivoted together and provided at their outer ends with gripping-jaws, one of said bars being provided with a catch-tooth and the other with a toothed fixed spring-bar curved in the arc of a circle whose center is coincident with the pivot connecting the handle-bars, the said bar being normally in engagement with the catch-tooth, and links connected to the inner ends of the handle-bars and connected together, substantially as set forth.

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

JNO. W. ANGLE.

Witnesses:
WILL DOUGLAS,
MATTHEW MCDONOUGH.