

No. 621,498.

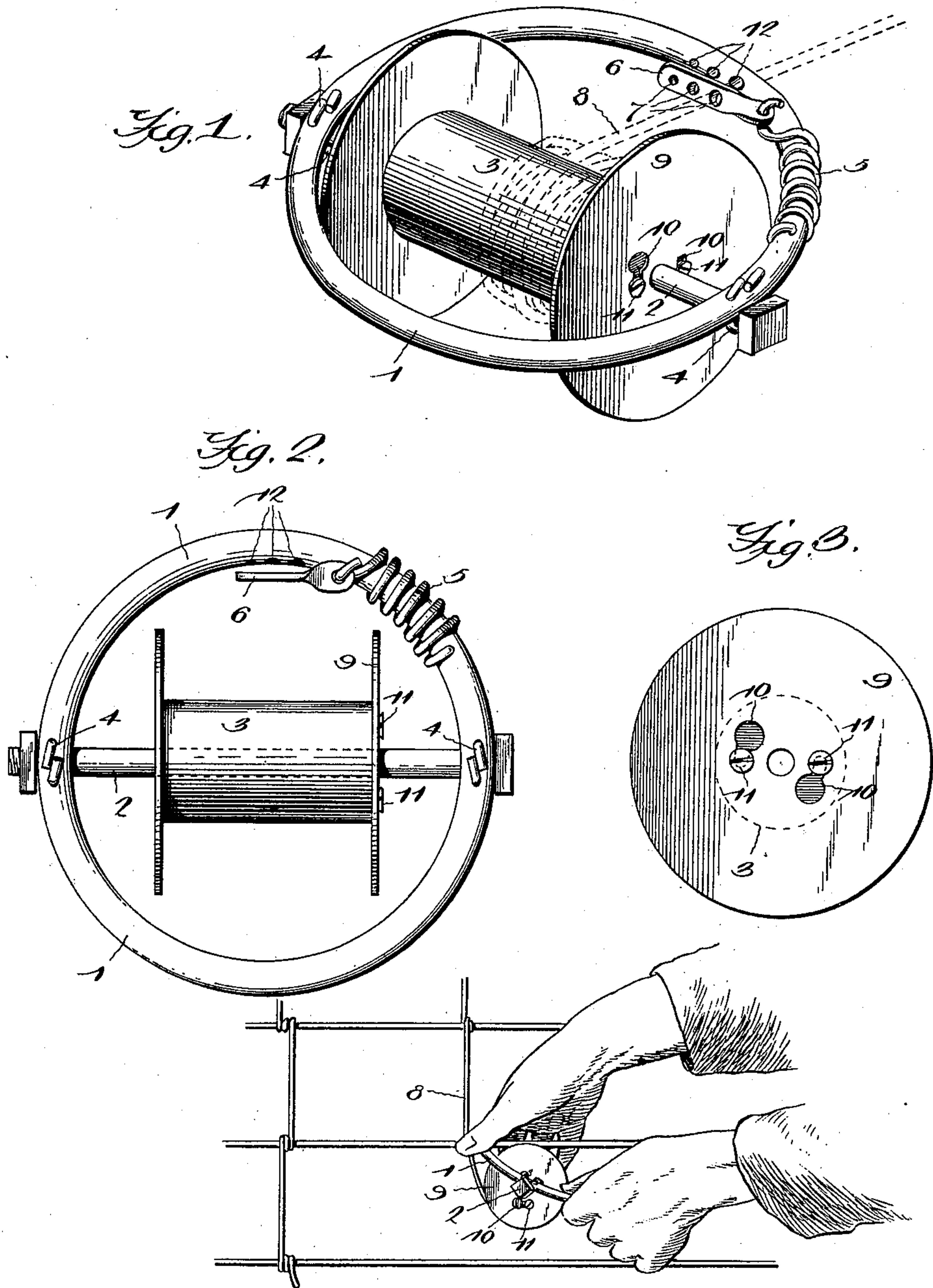
Patented Mar. 21, 1899.

J. KUHN.

HAND TOOL FOR APPLYING WIRE STAYS.

(Application filed Apr. 30, 1898.)

(No Model.)



Witnesses

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# UNITED STATES PATENT OFFICE.

JOSEPH KUHN, OF MAPLE GROVE, MICHIGAN.

## HAND-TOOL FOR APPLYING WIRE STAYS.

SPECIFICATION forming part of Letters Patent No. 621,498, dated March 21, 1899.

Application filed April 30, 1898. Serial No. 679,384. (No model.)

*To all whom it may concern:*

Be it known that I, JOSEPH KUHN, a citizen of the United States, residing at Maple Grove, in the county of Saginaw and State of Michigan, have invented a new and useful Wire-Fence Machine, of which the following is a specification.

This invention relates to hand-tools for applying wire stays or securing wooden pickets to wire fences in the construction of the latter and after the runner-wires have been attached to the fence posts or supports along the prescribed line of fencing.

For a full understanding of the merits and advantages of the invention reference is to be had to the accompanying drawings and the following description.

The improvement is susceptible of various changes in the form, proportion, and the minor details of construction without departing from the principle or sacrificing any of the advantages thereof, and to a full disclosure of the invention an adaptation thereof is shown in the accompanying drawings, in which—

Figure 1 is a perspective view of the tool. Fig. 2 is a top plan view. Fig. 3 is an end view of the spool. Fig. 4 is a detail view showing the manner of using the tool.

Corresponding and like parts are referred to in the following description and indicated in the views of the drawings by the same reference characters.

The frame 1 for supporting the operating parts may be of any desired form and size and is preferably of circular outline, thereby obviating sharp corners and projecting parts. An axle or support 2 is secured at its ends to opposite sides of the frame and supports a spool 3, which is mounted so as to turn and slide thereon. Staples 4 are the means provided for securing the axle to the frame and pass through openings therein and have their projecting end portions bent, thereby serving to retain them in place. A tension-spring 5 is mounted upon the frame 1, and consists of a wire coil having one end secured to the frame by passing through an opening therein and having its opposite end secured to a tension bar or plate 6, formed with a series of openings 7 of different size, so as to corre-

spond with the gage of wire wrapped upon the spool 3.

The spool is provided with a removable head or plate 9 at one end, so as to admit of a new coil of wire being slipped upon the body of the spool when replenishing it or supplying wire thereto. This head 9 is formed with keyhole-slots 10 to receive screws 11, let into the head of the spool. When it is required to place a coil of wire upon the spool, the screws 11 are loosened, thereby permitting the head 9 to be turned so as to bring the larger ends of the slots 10 in register with the heads of the screws, so that the said plate may be detached for the desired purpose. When replenishing the spool, it will be necessary to remove it from the axle 2 and disconnect it from the frame 1, and in order to effect this result the axle is provided at one end with a nut, which can be removed so as to permit the axle to be slipped endwise from the staples or keepers 4.

The frame is provided at an intermediate point with a series of openings 12 of different size corresponding with the openings 7 of the tension bar or plate 6, thereby enabling the wire 8, wrapped upon the spool, to be passed through an opening of corresponding size, so as to secure a slight friction or tension thereon. This friction is increased by the action of the tension-spring 5 upon the tension bar or plate 6, through an opening of which the said wire 8 passes.

The device provides a simple and effective means for supporting a spool of wire and maintaining a tension upon the wire, so as to prevent it from paying off the spool too rapidly. In practice the end portion of the wire 8 is passed through an opening of the tension-bar 6 and through a corresponding opening 12 of the frame 1 and is used for securing wire stays or wooden pickets to fencing or weaving the latter, as desired, the wire running from off the spool as rapidly as used.

Within the spirit of the invention a reel or coil of wire formed in any manner may be slipped upon the axle or support 2 without the necessity of mounting it upon the spool 3.

Having thus described the invention, what is claimed as new, and desired to be secured by Letters Patent, is—



1. A tool or device for applying wire stays or pickets to wire fences comprising a frame having an opening for the passage of the stay-wire, a spool supported by the frame, a plate  
5 or bar having an opening therein for the passage of the stay-wire, and a spring normally exerting a pressure upon the bar tending to throw its opening out of register with the opening of the frame, substantially as and for  
10 the purpose set forth.

2. A device for securing stays or pickets to wire fences comprising a frame having an opening for the passage of the stay-wire, an axle applied to the frame, a spool mounted  
15 upon the axle to turn and slide thereon, and a tension device for preventing the wire paying out too rapidly, consisting of a plate having an opening to receive the stay-wire, and a spring exerting a pressure upon the plate  
20 tending to throw its opening out of register with the opening of the frame, substantially as set forth for the purpose described.

3. A tool or device for applying wire stays or securing wooden pickets to wire fencing,

consisting of a frame having a series of different-sized openings formed therein, an axle, a spool mounted upon the axle and having its wire passing through one of the openings of the frame, a plate having a corresponding series of different-sized openings to the frame,  
30 and having the aforescribed wire passing through one of its openings, and a tension-spring connecting the plate with the frame, substantially as and for the purpose set forth.

4. In combination with the frame, an axle  
35 having detachable connection with the frame, a spool removably fitted upon the axle, a head detachably connected with an end of the spool and having keyhole-slots, and screws let into the end of the spool and serving to secure the  
40 head thereto, 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.

JOSEPH KUHN.

Witnesses:

CHAS. W. CHEENEY,  
OTIS C. SPERRY.