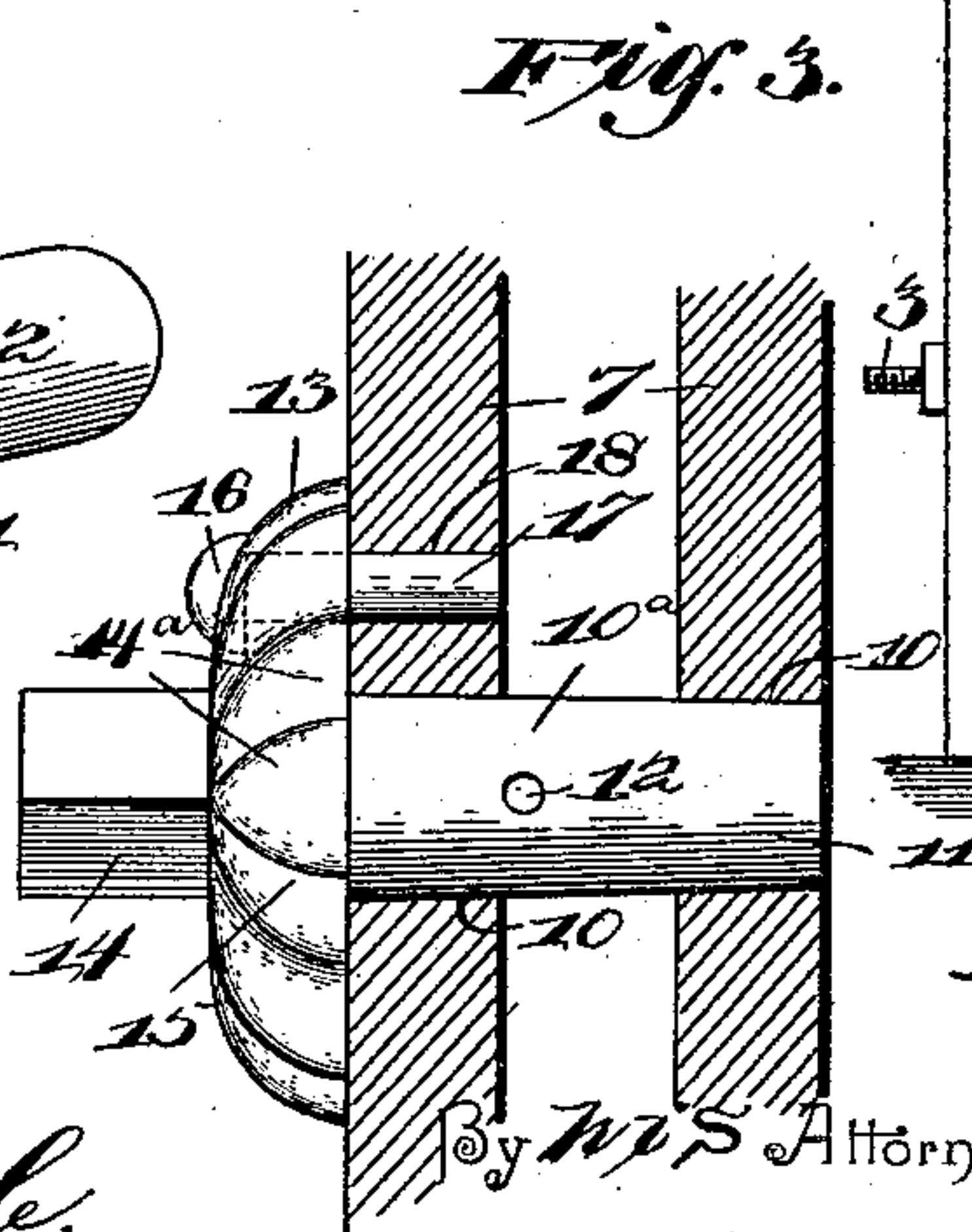
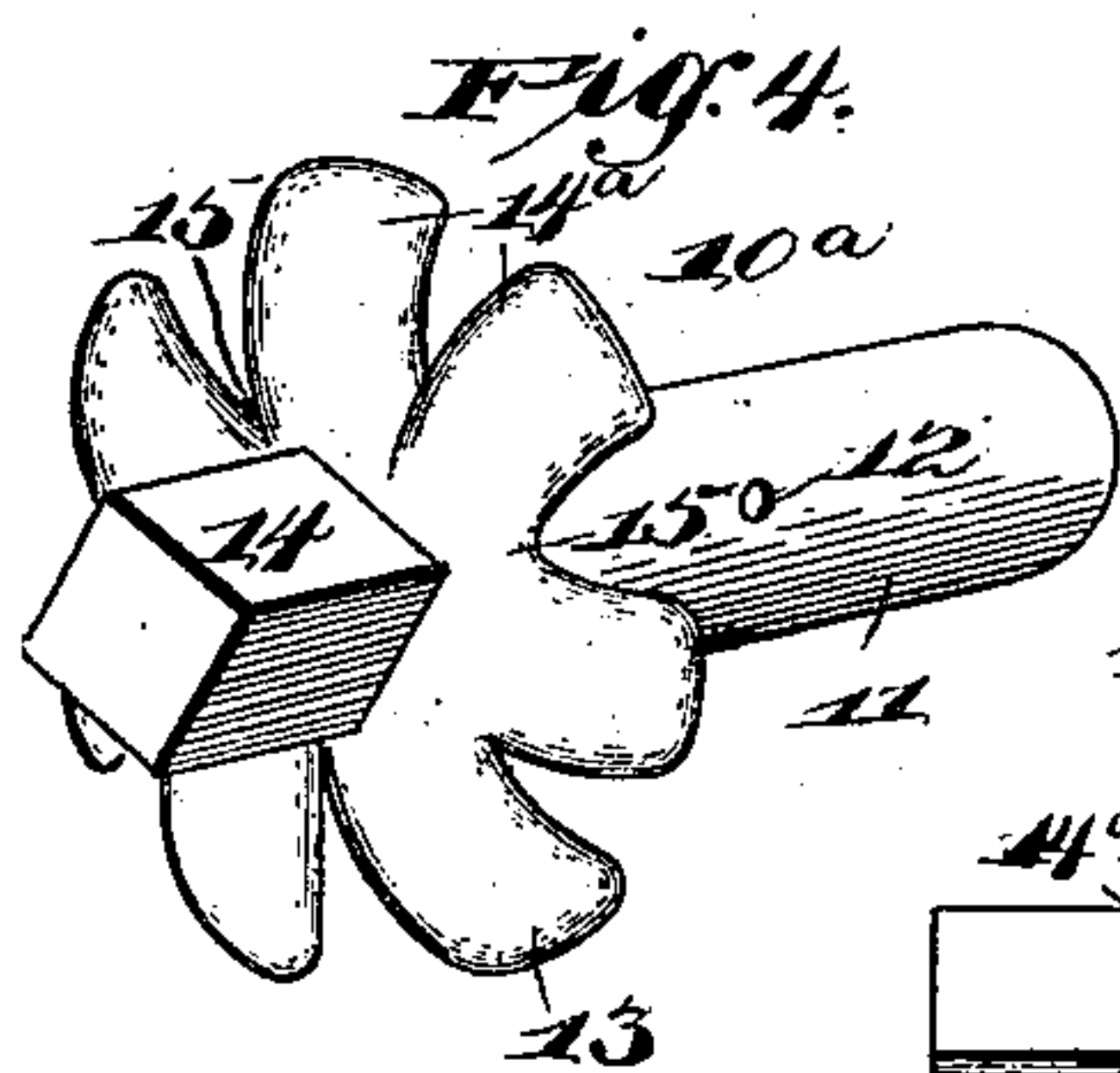
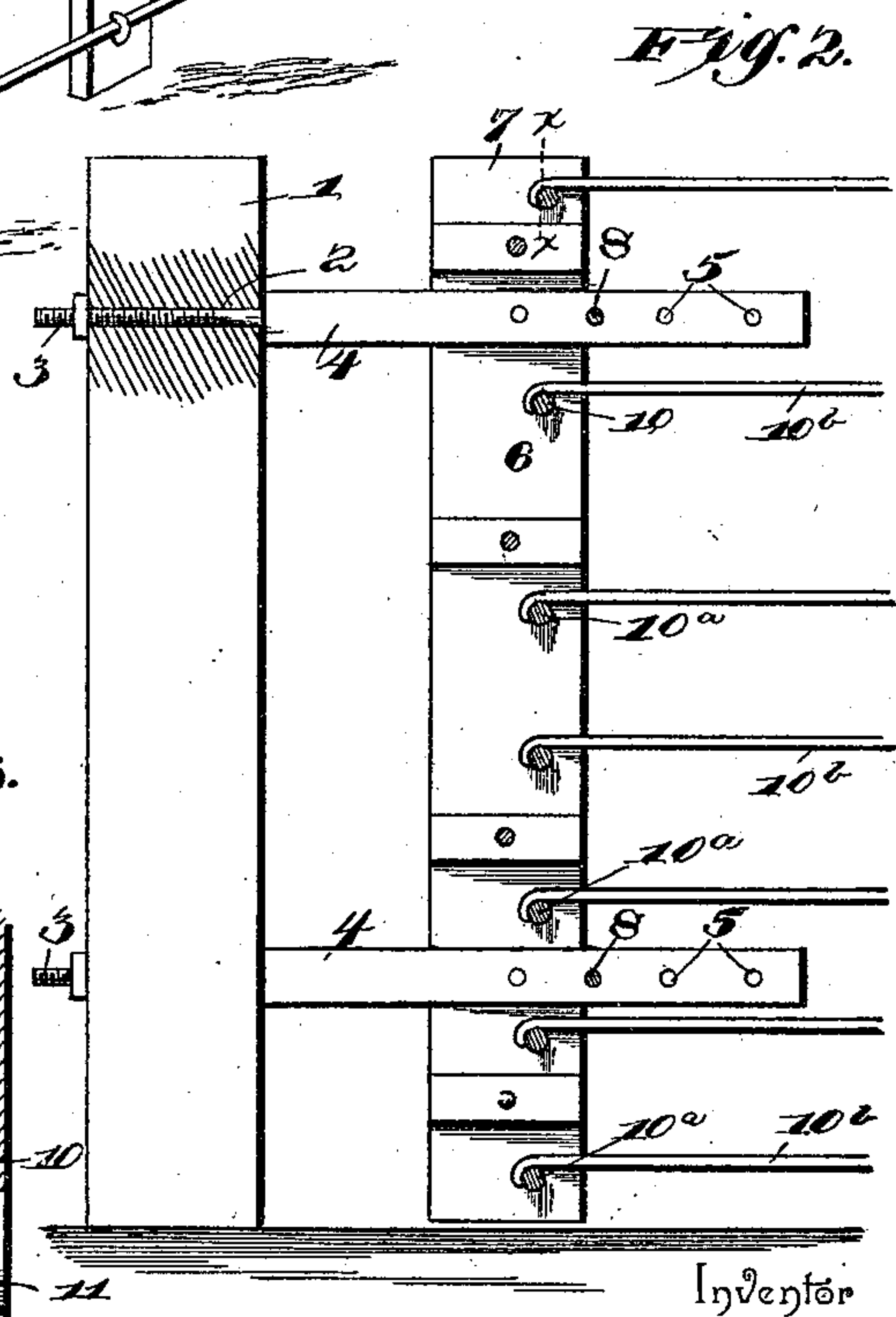
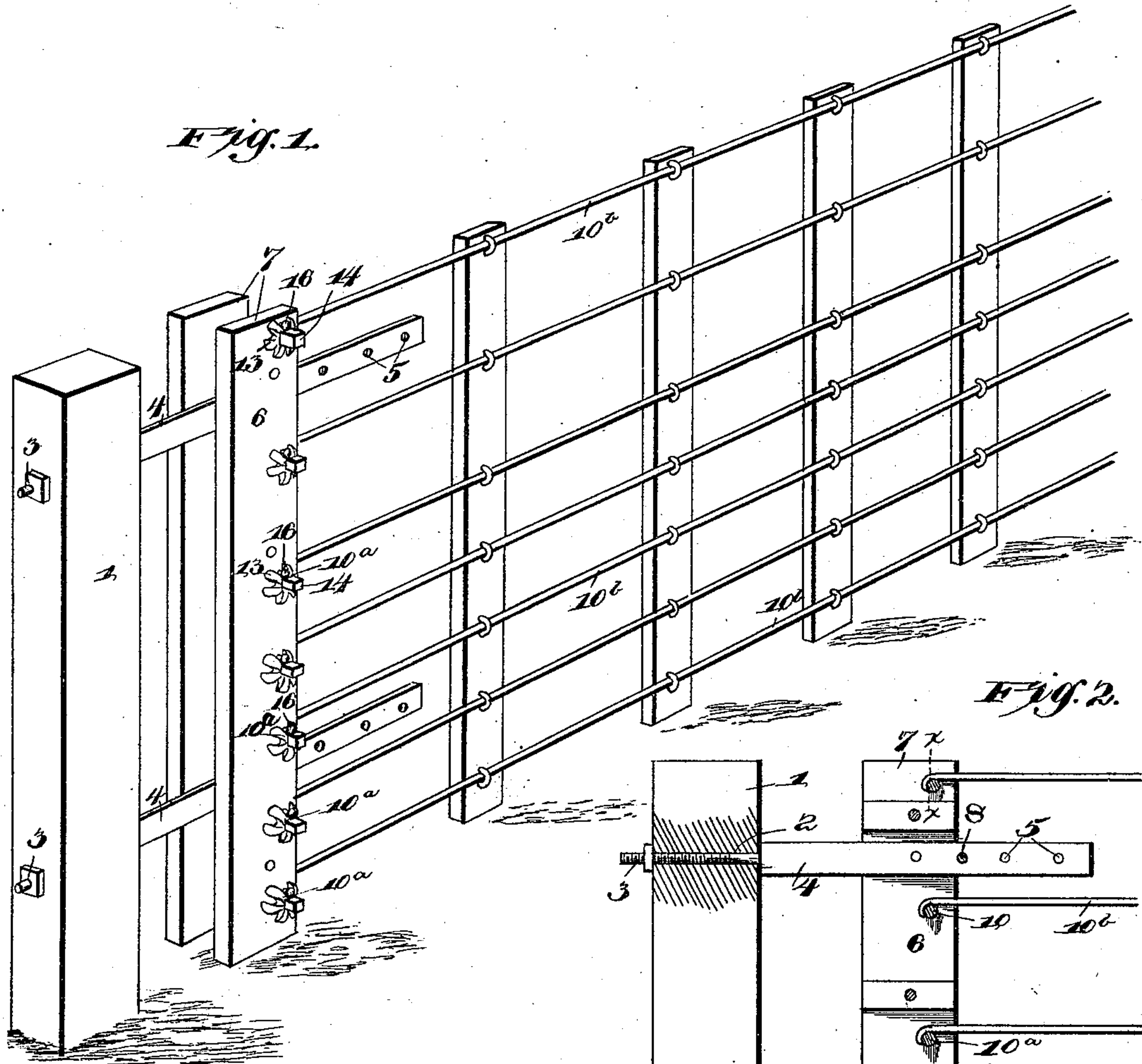


(No Model.)

W. H. DUNGAN.  
WIRE STRETCHER.

No. 534,366.

Patented Feb. 19, 1895.



Witnesses

*W. F. Doyle.*  
*S. P. Thompson.*

By *W. H. S.* Attorneys.

Inventor  
*William H. Dungan.*

*C. A. Snow & Co.*



# UNITED STATES PATENT OFFICE.

WILLIAM H. DUNGAN, OF ROCK LANE, INDIANA.

## WIRE-STRETCHER.

SPECIFICATION forming part of Letters Patent No. 534,366, dated February 19, 1895.

Application filed July 18, 1894. Serial No. 517,890. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM H. DUNGAN, a citizen of the United States, residing at Rock Lane, in the county of Johnson and State of Indiana, have invented a new and useful Wire-Stretcher, of which the following is a specification.

This invention relates to wire stretchers; and it has for its object to provide a new and useful device of this character which shall be simple, inexpensive, and extremely strong.

To this end the main and primary object of the present invention is to construct a wire stretcher in a simple and inexpensive manner while at the same time providing a stretcher that will possess every necessary qualification and one which can be very easily positioned and adjusted.

With these and other objects in view, which will readily appear as the nature of the invention is better understood, the same consists in the novel construction, combination, and arrangement of parts hereinafter more fully described, illustrated, and claimed.

In the accompanying drawings:—Figure 1 is a perspective view of a portion of a wire fence equipped with the herein described wire stretcher. Fig. 2 is a vertical sectional view at one end of the fence including the stretcher. Fig. 3 is an enlarged detail sectional view on the line  $x-x$  of Fig. 2. Fig. 4 is a detail in perspective of the herein described wire stretcher.

Referring to the accompanying drawings, 1 designates a stationary fence post of the ordinary construction, which, as shown, is provided near the upper and lower ends thereof with the horizontal bolt openings 2, that removably receive the bolt ends of the horizontal adjusting bars 4. Beyond their bolt ends 3, the said horizontal adjusting bars 4, are flattened and are provided with a longitudinal series of adjustment openings 5, and said horizontal adjusting bars are adapted to extend through the movable tension post or standard 6. The movable tension post or standard 6, may simply consist of a solid post provided with the necessary openings therein, but is usually constructed as illustrated in the drawings, and as shown in my former patent, No. 391,033, in which the said movable tension post or standard essentially comprises the

parallel connected and spaced bars, 7, but in the present invention the said bars are of the same width. The said movable tension post or standard 6, is held firmly in its adjusted position at one side of the stationary fence post 1, by means of the adjustable securing pins 8, which engage with any of the perforations 5, in the bars 4, at one side of the said movable tension post or standard. The said tension post or standard 6, is provided in both sides thereof with a vertically aligned series of bearing openings 10, in which are mounted to revolve the removable wire stretchers 10<sup>a</sup>, to which are connected one end of the fence wires 10<sup>b</sup>, for the purpose of maintaining said wires properly stretched or at the proper tension.

Each wire stretcher 10<sup>a</sup>, essentially comprises a tapered winding axle 11 that is adapted to be inserted from the outside of the tension post or standard designed for its reception, and said axle 11, is provided with a wire opening 12, which receives the end of the fence wire connected thereto, at such a point that when the said axle is inserted in the bearing openings designed therefor the said wire opening is close to the inner side of the side bar 7, through which the axle is first inserted, so that the tension of the wire holds the axle firmly in place with the spider catch disk 13, drawn closely against the outside of the said movable tension post or standard. The said spider catch disk 13, is formed integrally on the axle 11, near one end thereof and beyond said disk the outer end of the axle is squared to form a squared wrench end 14, on which is fitted a wrench or other suitable tool for turning the stretcher. The catch disk 13, essentially comprises a radial series of spider arms 14<sup>a</sup>, having inner flattened sides adapted to be drawn close up against the outside of the tension post or standard, and with outer rounded or beveled sides which form rounded crotches 15, that snugly receive the head 16, of a stop pin 17, adapted to be removably inserted in a pin opening 18, formed in one side of the movable tension post or standard. By removing the pins 17, the stretchers can be individually and separately adjusted as may be found necessary, and when the said pins are in position between the arms of the spider catch disks the stretchers are held firmly



locked in position by the tension of the fence wires themselves. It will also be observed that the stretchers as well as the stop or check pins therefor can be easily removed and again  
5 inserted in position from the outside of the movable tension post or standard.

By reason of the specific shape of the outer sides of the spider arms 14<sup>a</sup>, it will be obvious that the heads of the stop pins will be received sufficiently snug within the crotches  
10 between the spider arms to prevent the accidental displacement of such pins, while at the same time the heads of the pins will be held sufficiently out from the side of the post or  
15 standard so that the same can be readily engaged between the spider arms, when it is necessary to remove the pins.

While I have specifically described the stretchers as adapted for use in connection  
20 with the movable tension post or standard, it will of course be understood that the same may be used on stationary solid posts or in other positions requiring wire stretchers, and changes in the form, proportion, and the  
25 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 the invention, what is claimed, and desired to be secured by Letters Patent, is— 30

In a wire stretcher, the combination of a post or standard provided with opposite bearing openings and a pin opening adjacent to one of said bearing openings, a revoluble  
35 stretcher comprising an axle adapted to be inserted in said bearing openings and provided with a wire opening, an outer squared end, and an integral spider catch disk consisting of a radial series of spaced spider arms  
40 having inner flattened sides, and outer rounded or beveled sides, said latter sides forming rounded crotches therebetween, and a headed stop pin adapted to be inserted in said pin  
45 opening between the spider arms and adapted to have the head thereof fit in the crotches between the spider arms, substantially as set forth.

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

WILLIAM H. DUNGAN.

Witnesses:

H. STEVENS,

L. A. RHYNEARSON.