

No. 886,020.

PATENTED APR. 28, 1908.

A. W. SPRAGUE.  
WIRE STRETCHER.

APPLICATION FILED AUG. 23, 1907.

Fig. 3.

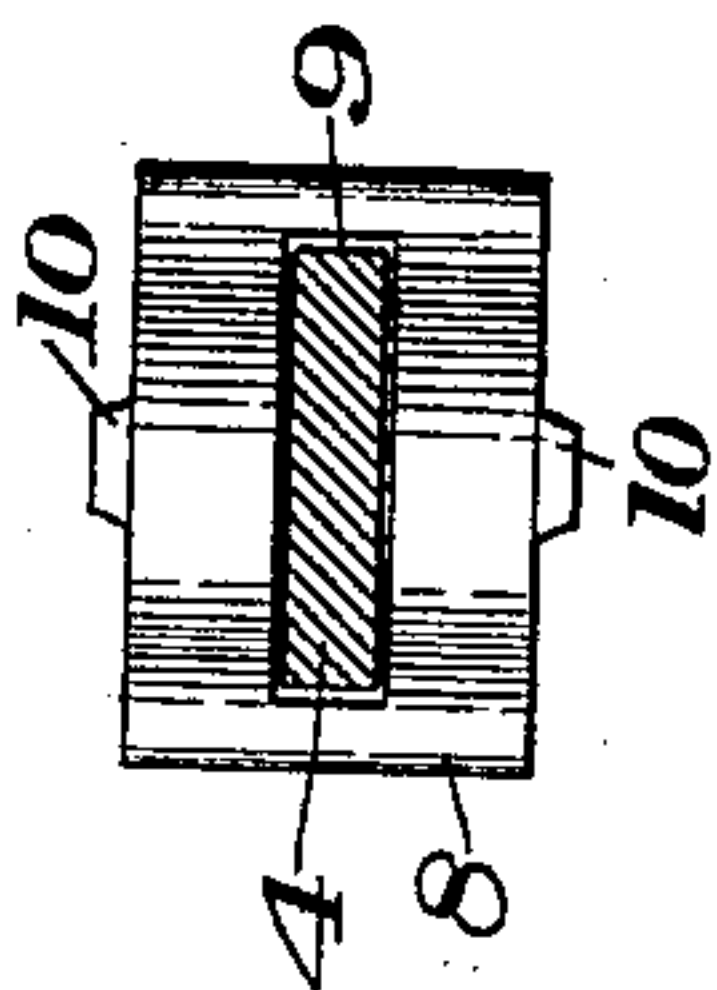
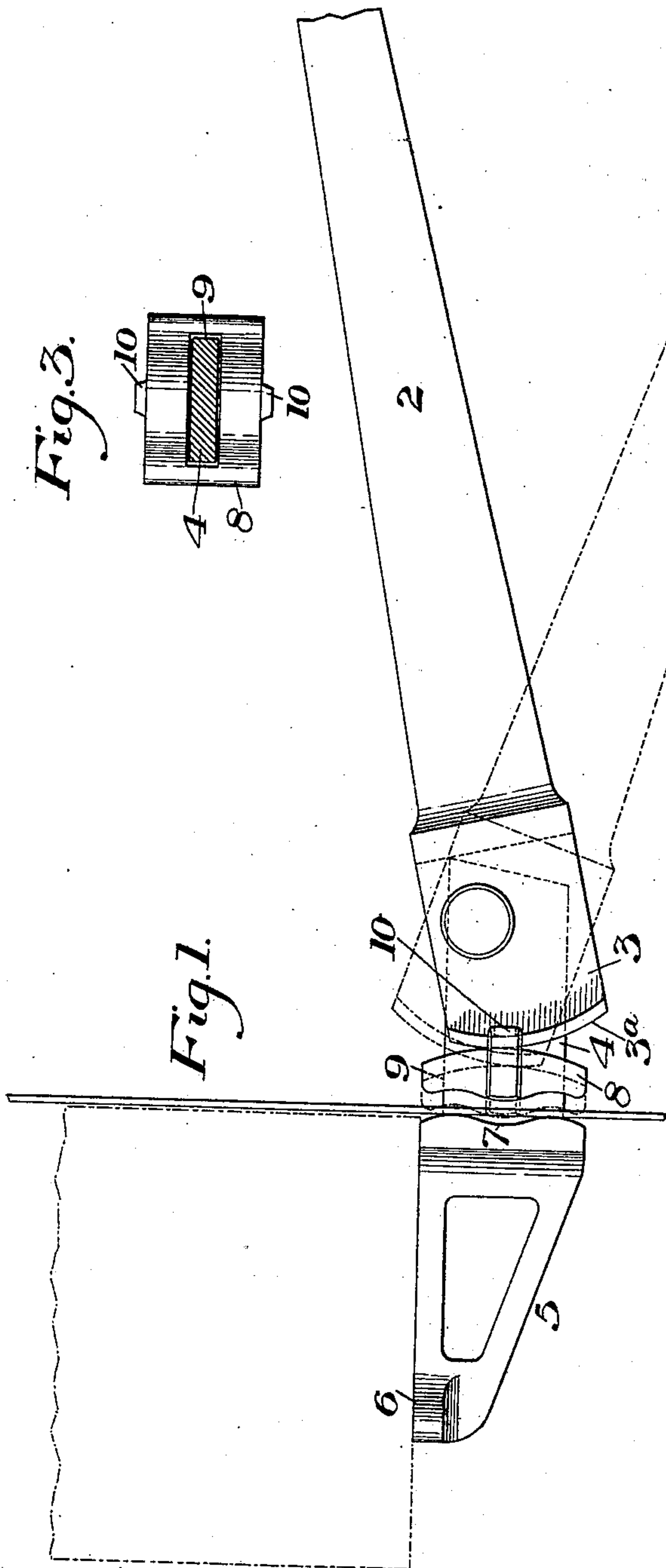


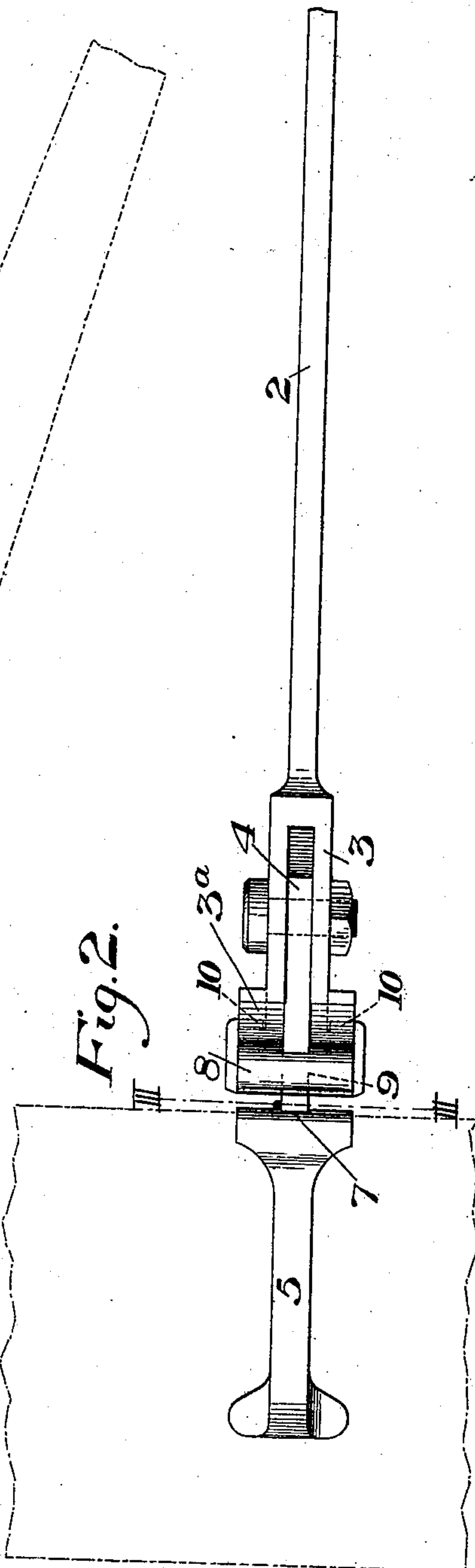
Fig. 1.



WITNESSES

W. W. Swartz,  
Laumatt & Lee,

Fig. 2.



INVENTOR

A. W. Sprague,  
by Babcock, Byrnes & Parmelee,  
his Attys.

# UNITED STATES PATENT OFFICE.

ARTHUR W. SPRAGUE, OF LA GRANGE, ILLINOIS, ASSIGNOR TO AMERICAN STEEL & WIRE COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF NEW JERSEY.

## WIRE-STRETCHER.

No. 886,020.

Specification of Letters Patent.

Patented April 28, 1908.

Application filed August 23, 1907. Serial No. 389,891.

*To all whom it may concern:*

Be it known that I, ARTHUR W. SPRAGUE, of La Grange, Cook county, Illinois, have invented a new and useful Wire-Stretcher, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a plan view, illustrating the manner of using the wire stretcher; Fig. 2 is a side elevation of the same; and Fig. 3 is a section on the line III—III of Fig. 2.

My invention has relation to wire stretchers and is designed to provide a hand operated stretcher of simple construction which is effective in its operation and which can be used without in any way cutting or mutilating the wire to be stretched.

Referring to the accompanying drawings, in which I have shown a tool embodying my invention, the numeral 2 designates a lever bar which is formed with a slotted head portion 3 in which is pivoted a shank 4 of a movable head 5. The head 5 has a fulcrum end portion 6 adapted to take a bearing against a fence post or other object by which the wire is to be stretched and at the base of which is formed a wire gripping jaw 7 at each side of the shank portion 4.

8 is a movable wire gripping jaw having a slot 9 through which the shank 4 loosely extends. This slot 9 is made sufficiently larger than the shank (see Fig. 3) to permit the jaw 8 to have a slight rocking movement on the shank for the purpose hereinafter described. The gripping faces of the fixed and movable jaws are preferably of waved form so that they will have an extended grip upon the wire to be stretched without in any way cutting or mutilating the same, as will be readily seen from the drawings. These jaws may, however, if preferred, be provided with any suitable form of gripping surfaces. The opposite face of the movable jaw 8 is of convex form and rests in loose contact with the convex edges 3<sup>a</sup> of the slotted head 3, the latter being flanged as shown to extend the working of these bearings. These edges 3<sup>a</sup> are formed eccentrically with respect to the pivot of the head 5, and constitute cam surfaces for actuating the movable jaw. The movable jaw is also preferably provided with the guide lugs 10 which loosely engage

the concave faces of said flanges and not only guide the jaw but normally hold it in open position.

The manner of using the stretcher will be readily understood from Fig. 1 of the drawings. The wire to be stretched is caught between the two jaws and the fulcrum portion of the lever is placed against the post or other object past which the wire is to be stretched. The lever bar is then moved, thereby forcing the movable jaw to clamp the wire between the two jaws. Owing to the loose mounting for the movable jaw, this movable jaw is free at all times to assume a position in which its gripping face is in parallelism with the gripping face of the opposite jaw, so that the wire is securely grasped throughout the entire length of the jaw and is prevented thereby from being cut or mutilated.

It will be noted that the tool is of double form, a pair of the gripping jaws being in effect provided at each side of the tool so that it is adapted for use at either side of a post.

The tool described is simple in its construction, being composed of but three operative parts which are of a strong and durable character; it is convenient in form and can be easily and quickly applied to the wires, and as before described, can be used without in any way injuring the wires. Owing to the manner in which the movable jaw is actuated, the greater the pulling movement on the lever bar, the tighter the wire will be gripped.

What I claim is:—

1. In a wire stretching tool, a lever having a bifurcated convexed and laterally flanged end portion, a head formed with a jaw and having a shank pivoted in the bifurcation, and a movable jaw mounted on said shank between the fixed jaw and the end of the head and arranged to be actuated by the convexed end of the latter, said movable jaw having guide lugs engaging the flanges of said end; substantially as described.

2. A wire stretching tool comprising a lever having a bifurcated forward end and provided with arcuate flanges upon the sides of the bifurcation, a head having a shank pivoted in the bifurcation eccentric to the flanges, transverse shoulders upon opposite



sides of the head constituting jaws spaced from the lever, and a movable jaw slidably embracing the shank between the fixed jaws and the lever and provided with rearwardly  
5 directed projections embracing the respective flanges of the lever, substantially as described.

In testimony whereof, I have hereunto set my hand.

ARTHUR W. SPRAGUE.

Witnesses:

GEO. H. PARMELEE,  
H. M. CORWIN.