

No. 808,759.

PATENTED JAN. 2, 1906.

D. K. KIRKLAND.
WIRE STRETCHER.

APPLICATION FILED APR. 7, 1905.

Fig. 1.

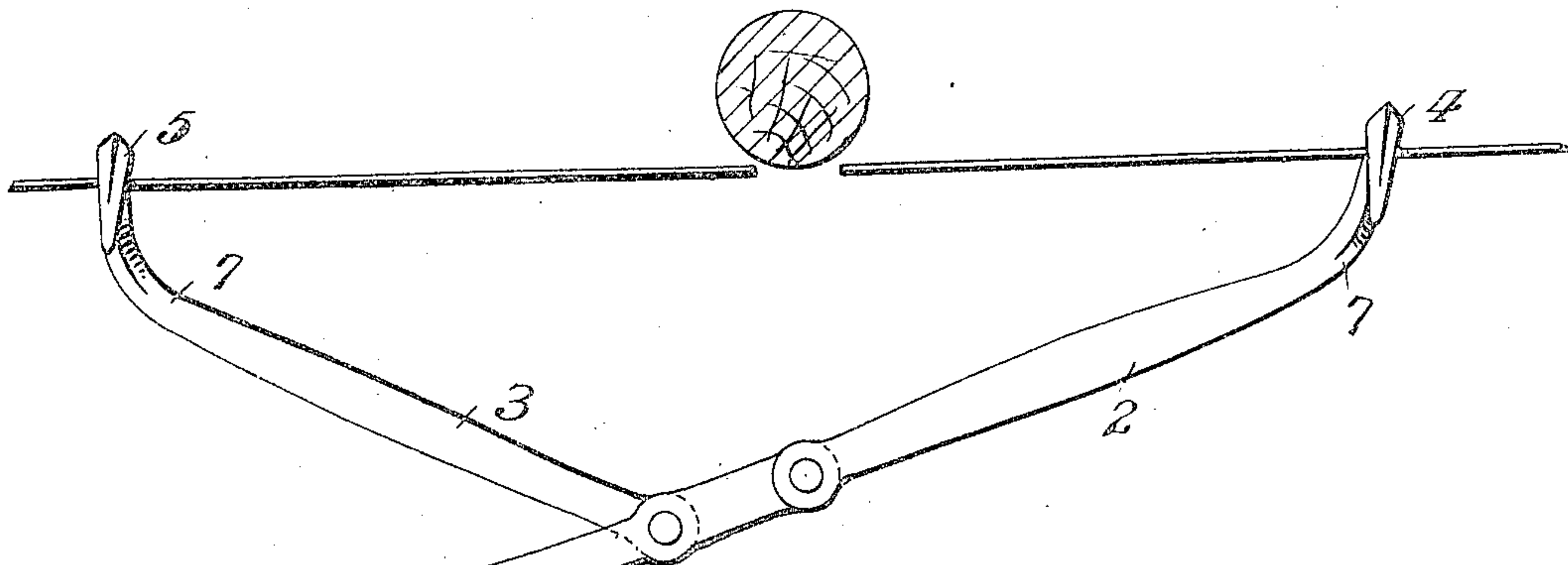


Fig. 2.

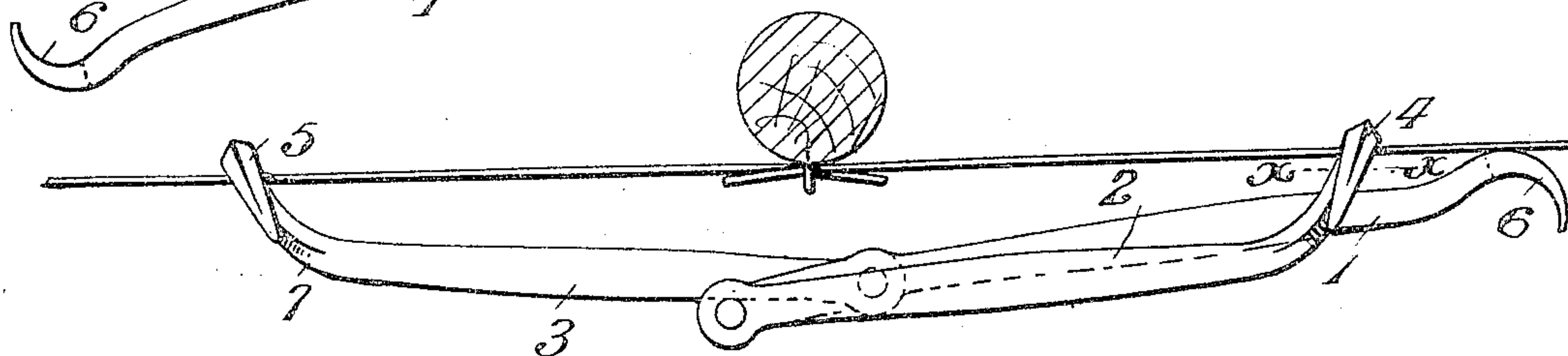


Fig. 3.

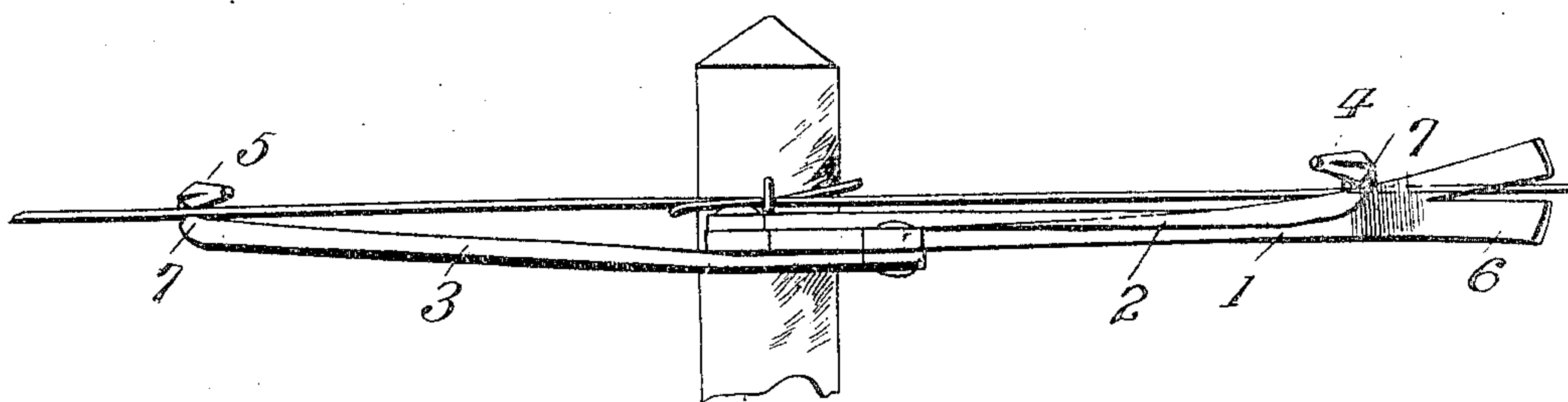
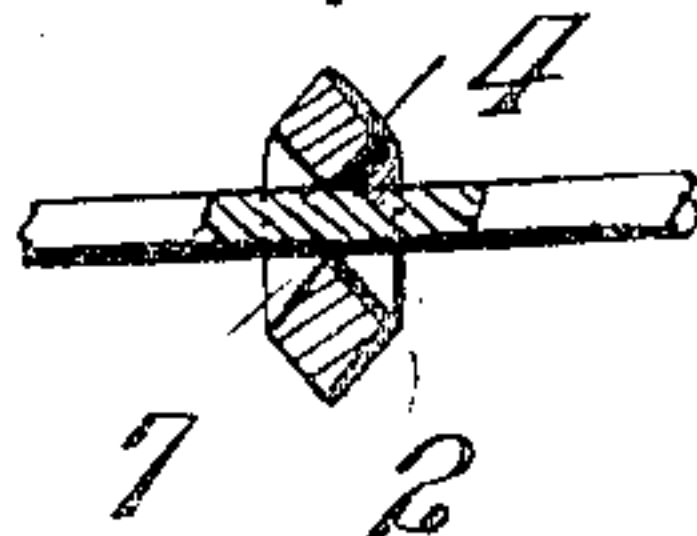


Fig. 4.



Inventor

D. K. Kirkland.

Witnesses

W. N. Woodson

By

R. H. Racy, Attorneys

UNITED STATES PATENT OFFICE.

DAVID K. KIRKLAND, OF SCHELL CITY, MISSOURI.

WIRE-STRETCHER.

No. 808,759.

Specification of Letters Patent.

Patented Jan. 2, 1906.

Application filed April 7, 1905. Serial No. 254,357.

To all whom it may concern:

Be it known that I, DAVID K. KIRKLAND, a citizen of the United States, residing at Schell City, in the county of Vernon and State of Missouri, have invented certain new and useful Improvements in Wire-Stretchers, of which the following is a specification.

This invention relates to wire-stretchers, and has for its object to produce a device of that character which may be used with advantage for stretching the wires of fences, telegraphs, telephones, &c.

A further object is to produce a tool which shall be more compact than those hitherto in use and which shall be adapted to use under varying conditions.

Reference is to be had to the accompanying drawings, in which—

Figure 1 is a plan view of the device, showing it in an open position and connected with a wire about to be stretched. Fig. 2 is a plan view showing it in a closed position. Fig. 3 is a side view showing it in a closed position. Fig. 4 is a transverse vertical section taken through one of the claws on the line $x x$ of Fig. 2.

The wire-stretcher consists, essentially, of a lever 1, formed, preferably, from a steel bar, and of two arms 2 and 3, pivoted thereto on opposite faces and bearing claws 4 and 5 at their free ends. The free end of the lever 1 is bent and split, so as to form a claw 6 to be used in drawing or loosening staples and also for tightening the wire when used in conjunction with a post, as will be hereinafter described. The arm 2 is pivoted at the top of the opposite end of the lever 1 and extends to the right, while the arm 3 is pivoted to the bottom of lever 1 at a suitable distance from the end and extends to the left. The ends of the arms bearing the claws 4 and 5 are bent outward, as shown at 7 in the drawings, so that when the lever is thrown around to stretch the wire the arms 2 and 3 will be out of alinement with the wire and will therefore not interfere with the splicing operation. The claws 4 and 5 preferably turn upward for convenience in attaching the ends of the wire and have a peculiar construction, which adds very materially to their propensity for gripping wires. The arms 2 and 3 are preferably made of bar metal which is so formed as to

have an approximately square cross-section at the claw ends. In forming the claws 4 and 5 the ends of the arms 2 and 3 are twisted, so as to bring one of the edges or corners of the square upward, and are then bent over, so as to form a V-shaped recess. The formation of the claws thus produced can be best understood from Fig. 4, and it can readily be understood that the combination of the V-shaped recess and the angular edges of said recess produces a claw which will grasp and securely hold a wire where an ordinary claw would fail.

The operation of the device is as follows: After loosening the staples with the claw 6 and while in the open position, as shown in Fig. 1, one end of the wire is caught in the claw 4, the wire pulled taut, and the other end of the wire fastened in the other claw 5. The lever is then pushed around to the position shown in Fig. 2. By this operation the claws are drawn together and the wire stretched. The amount of stretching depends upon the space between the points where the arms are pivoted to the lever. A large space reduces the leverage and gives greater stretching capacity, and vice versa. When the wire is drawn sufficiently tight to suit the operator, the lever 1 is thrust around under the claw 4 and the wire passed through the recess in the claw 6 at the end of the lever, as best shown in Fig. 3. This holds the tool in a locked position, so that the operator is enabled to splice the wire at his leisure. It is obvious that where desirable or required by the circumstances the end of a wire may be caught in the claw 6 at the end of the lever and drawn taut by using a post as a fulcrum.

It will thus be understood that I have produced a wire-stretcher which is extremely compact and simple in construction and which is adapted to be used as required by many various circumstances.

What I claim as new, and desire to secure by Letters Patent, is—

In a wire-stretcher, the combination of a lever, an arm pivoted thereto, a second arm pivoted to said lever at a distance from the first arm, the free ends of said arms being bent outward at an angle thereto and having

an approximately square cross-section, and
claws at the end of said arms formed by first
twisting them so as to get a corner or sharp
edge upward and then bending the end up-
5 ward and back so as to form a V-shaped re-
cess, the sides of which are formed by a sharp
edge of the bar.

In testimony whereof I affix my signature
in presence of two witnesses.

DAVID K. KIRKLAND. [L. s.]

Witnesses:

A. F. CABLE,
JNO. W. DADE.