

No. 705,634.

Patented July 29, 1902.

S. BATES.
WIRE STRETCHER.

(Application filed Apr. 24, 1902.)

(No Model.)

Fig. 1.

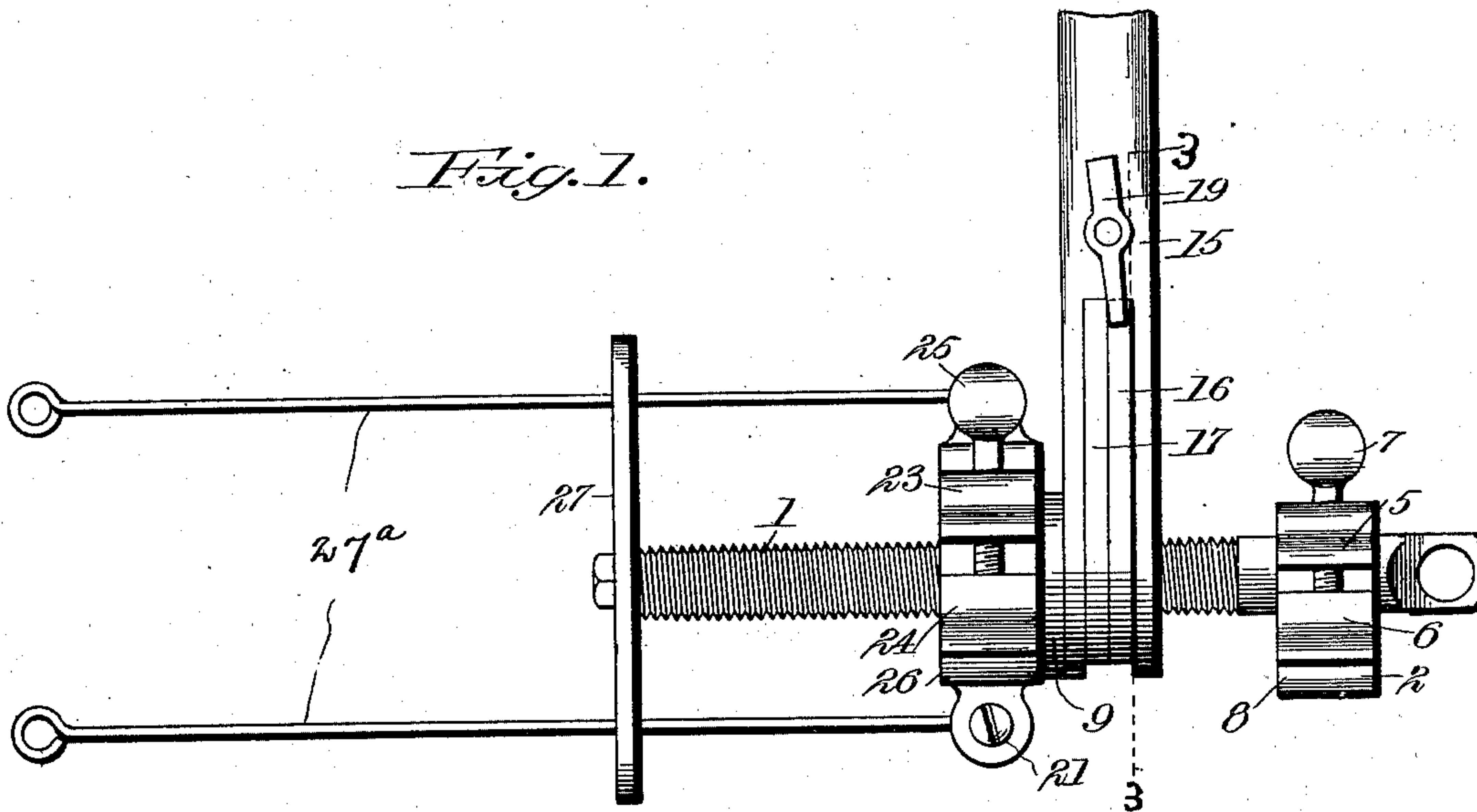


Fig. 2.

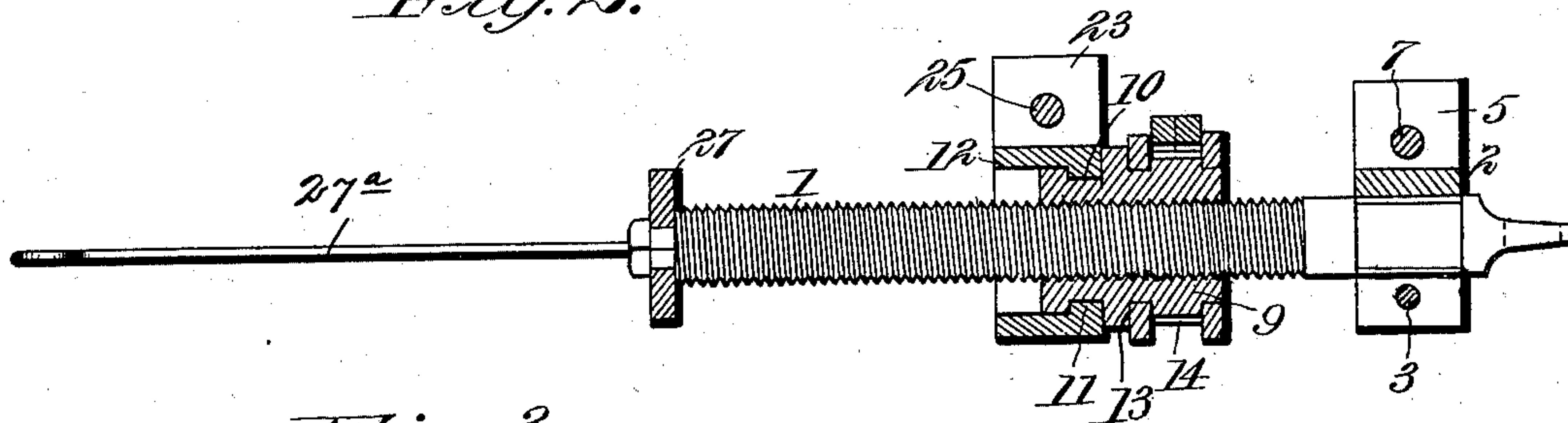


Fig. 3.

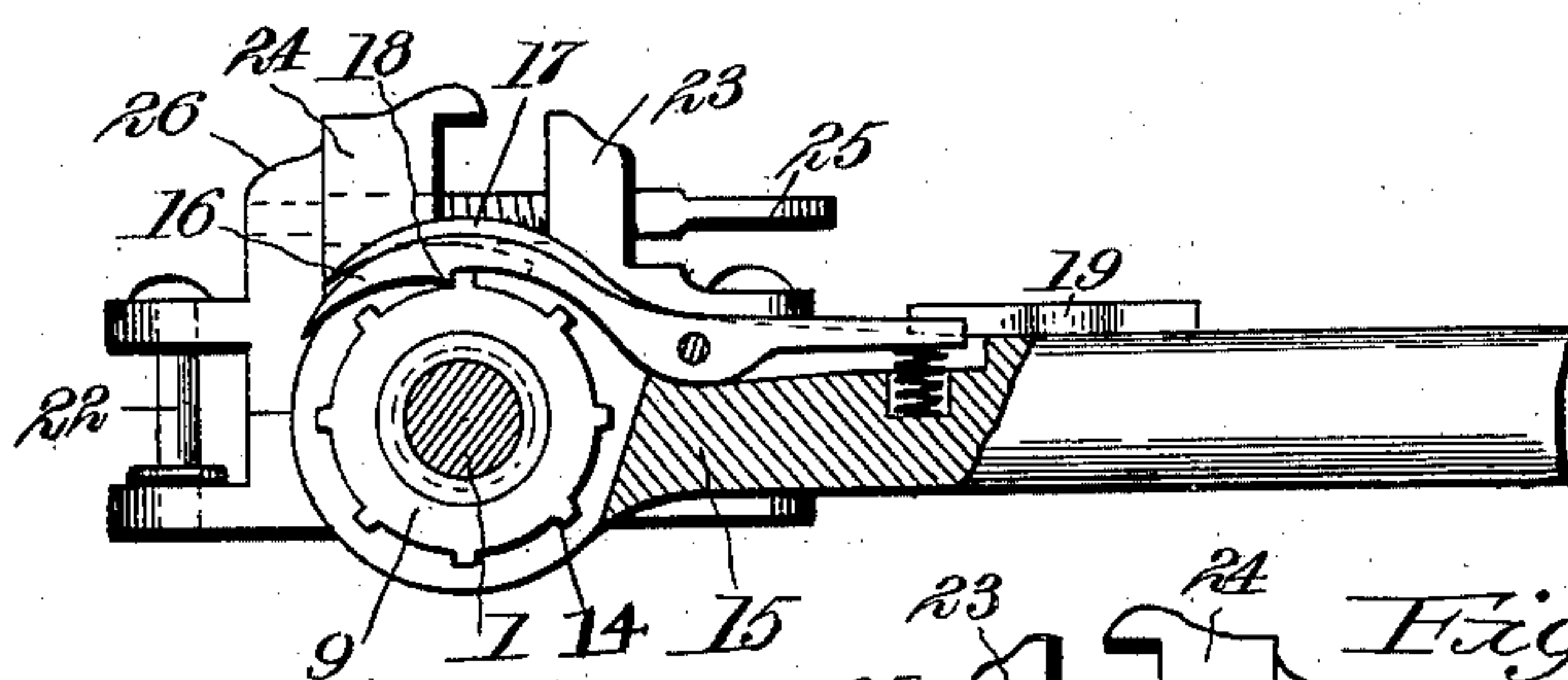


Fig. 4.

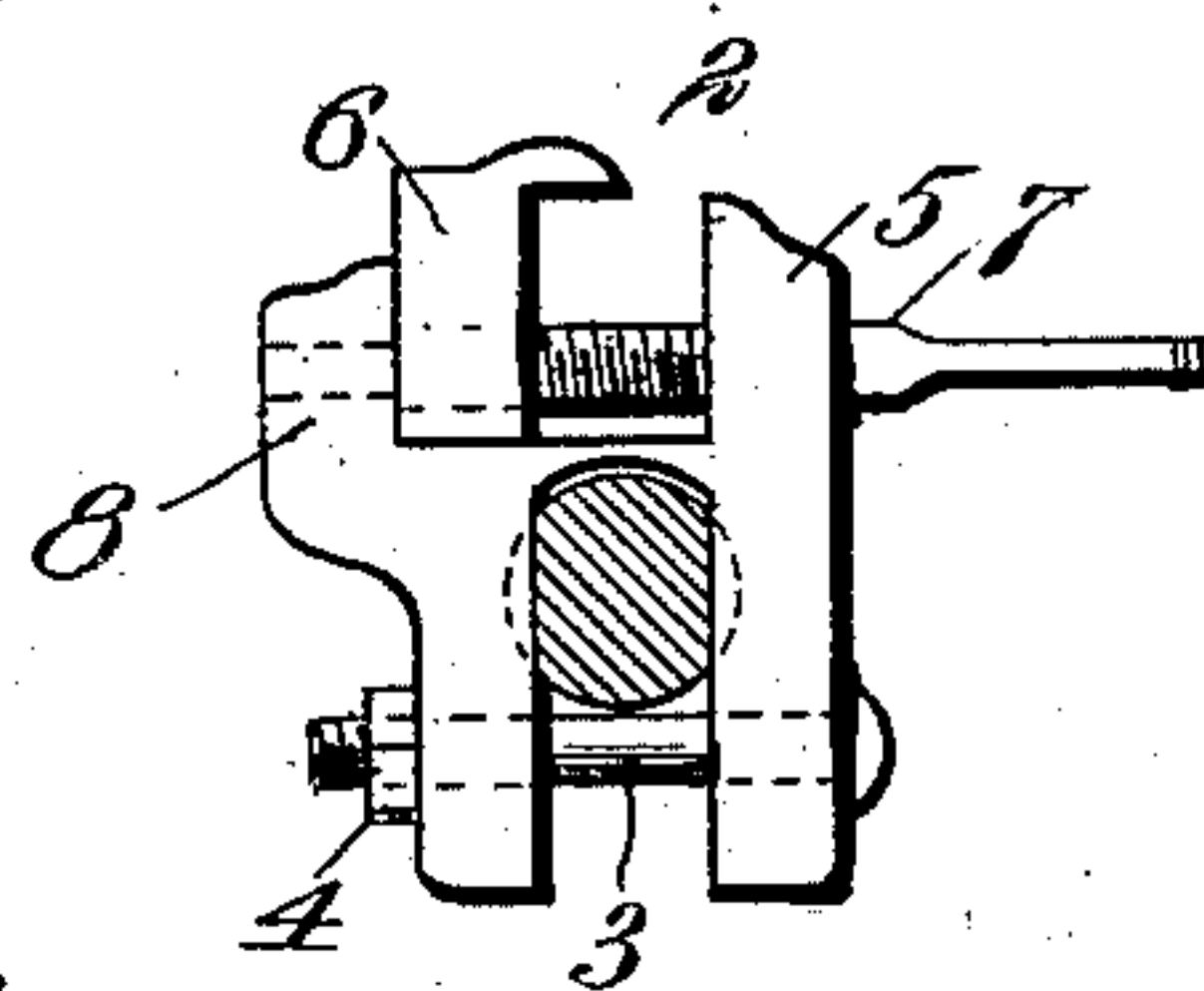
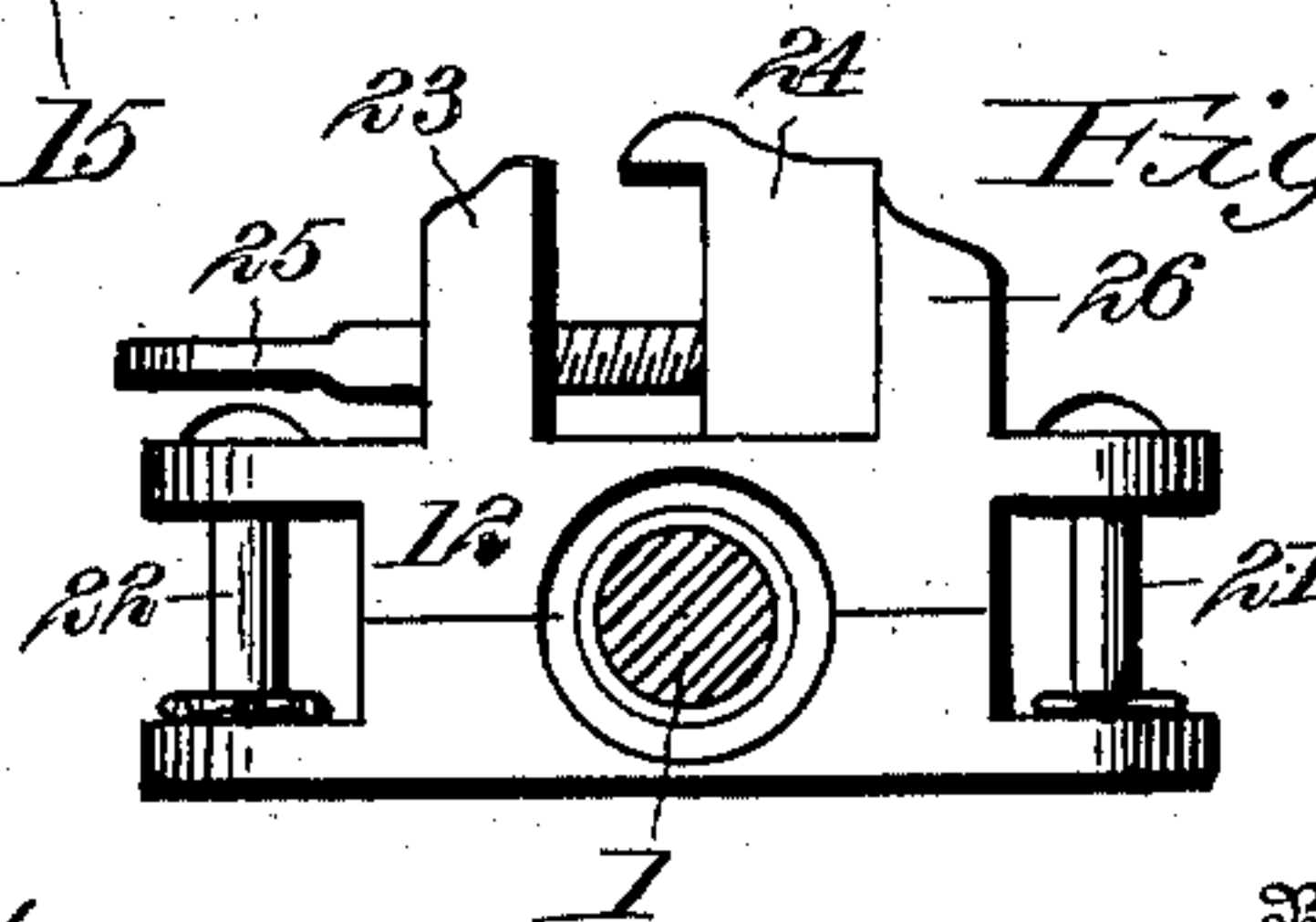


Fig. 5.



Witnesses

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SAMUEL BATES, OF NORTH LIBERTY, INDIANA.

WIRE-STRETCHER.

SPECIFICATION forming part of Letters Patent No. 705,634, dated July 29, 1902.

Application filed April 24, 1902. Serial No. 104,504. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL BATES, a citizen of the United States of America, residing at North Liberty, in the county of St. Joseph and State of Indiana, have invented certain new and useful Improvements in Wire-Stretchers, of which the following is a specification.

This invention relates to devices for stretching fence-wires and telegraph and telephone wires.

The object of the invention is to produce a device that will stretch wire and hold it in place until it can be permanently fastened and to which the wire can be applied and removed without difficulty.

Furthermore, the object of the invention is to produce a device that can be used for drawing the ends of wire together and holding them in a position for uniting the ends.

Furthermore, the object of the invention is to produce a wire-stretcher which will possess advantages in points of simplicity, efficiency, and durability, proving at the same time comparatively inexpensive.

With the foregoing and other objects in view the invention consists in the details of construction and in the arrangement and combination of parts to be hereinafter more fully set forth and claimed.

In describing the invention in detail reference will be had to the accompanying drawings, forming part of this specification, wherein like characters denote corresponding parts in the several views, and in which—

Figure 1 is a plan view. Fig. 2 is a central longitudinal sectional view. Fig. 3 is a transverse sectional view on the line 3 3 of Fig. 1. Fig. 4 is a sectional view of a clamp, showing it in engagement with a screw. Fig. 5 is a front view of the yoke, showing the screw in section.

In the drawings, 1 indicates a screw having a portion cut away at one end for the engagement of a clamp 2, which is secured to the screw by means of a bolt 3 and nut 4. The body of the clamp has a fixed jaw 5 and a movable jaw 6, which is adjusted by the screw 7, said screw being swiveled in the lug 8 and rotatable in the jaw 5. A cylinder 9 is internally threaded for engagement with the screw and has a groove 10 on the outer surface, in

which is seated an annular flange 11 of a yoke 12. On the outer surface of the cylinder intermediate its ends is a circumferential shoulder 13. The cylinder is also provided externally with ratchet-teeth 14. A lever 15 is pivoted over the cylinder and has pawls 16 and 17 for engaging the ratchet-teeth 14. One of the pawls 16 has an undercut shoulder 18 to engage the ratchet-teeth when running in one direction, while the pawl 17 has a shoulder on its end to push against a tooth when moved in the opposite direction. By changing the detent 19 from one pawl to the other the pawl released will engage the teeth of the ratchet. The yoke 12, with the annular flange 11, is secured to the cylinder by means of bolts 21 and 22. A clamp consisting of one rigid jaw 23, formed on the yoke, and a loose jaw 24, which is brought to contact with the rigid jaw by means of a thumb-screw 25. The screw is loose in the rigid jaw, is threaded in the loose jaw, and has its end swiveled in a lug 26. Two rods 27^a, with eyes at each end, are fastened to the bolts, which secure the sections of the yoke to the cylinder and extend beyond the end of the screw for making suitable connections and anchoring one end of the stretcher. A guide 27, mounted on the end of the screw, has slots to receive the rods, so that they will prevent the yoke from turning.

When it is desired to operate the wire-stretcher, the ends of a broken wire are caught in the clamps and securely fastened by means of the thumb-screws. The ends of the wire are brought together by rotating the cylinder on the screw by means of the lever and ratchet. When the ends are together, they are held in position until securely spliced, when the stretcher may be removed by unloosening the thumb-screws of the clamps.

It will be seen that by changing the detent on the lever the pawls will engage either the front or rear of the ratchet-teeth, so that the cylinder may be rotated in either direction.

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

1. In a wire-stretcher, a screw, a cylinder internally threaded to engage the screw, a yoke swiveled on the cylinder, a lever pivoted on the cylinder, pawls carried thereby, teeth on the cylinder engaged by the pawls,

a clamp on the screw and a clamp on the yoke as and for the purpose described.

2. In a wire-stretcher, a screw, a cylinder internally threaded to engage the screw, a yoke swiveled on the cylinder, a lever pivoted on the cylinder, pawls carried thereby, teeth on the cylinder engaged by the pawls, rods extending from the yoke and a guide on the end of the screw through which the rods
10 extend.

3. In a wire-stretcher, a screw, a clamp secured thereto, a cylinder threaded on the screw, means for rotating the cylinder, a yoke on the cylinder, a clamp carried by the yoke,
15 and rods extending from the yoke.

4. In a wire-stretcher, a screw, a clamp secured thereto, a cylinder threaded on the screw, means for rotating the cylinder, a yoke comprising two sections embracing the cylinder and loosely connected therewith, rods connected to the yoke, a guide on the end of the screw having slots through which the rods extend.
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In testimony whereof I affix my signature, in the presence of two witnesses, this 15th day
25 of April, 1902.

SAMUEL BATES.

Witnesses:

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P. T. HERRING.