

(No Model.)

W. D. AMIS.
WIRE STRETCHER.

No. 294,716.

Patented Mar. 4, 1884.

Fig. 3.

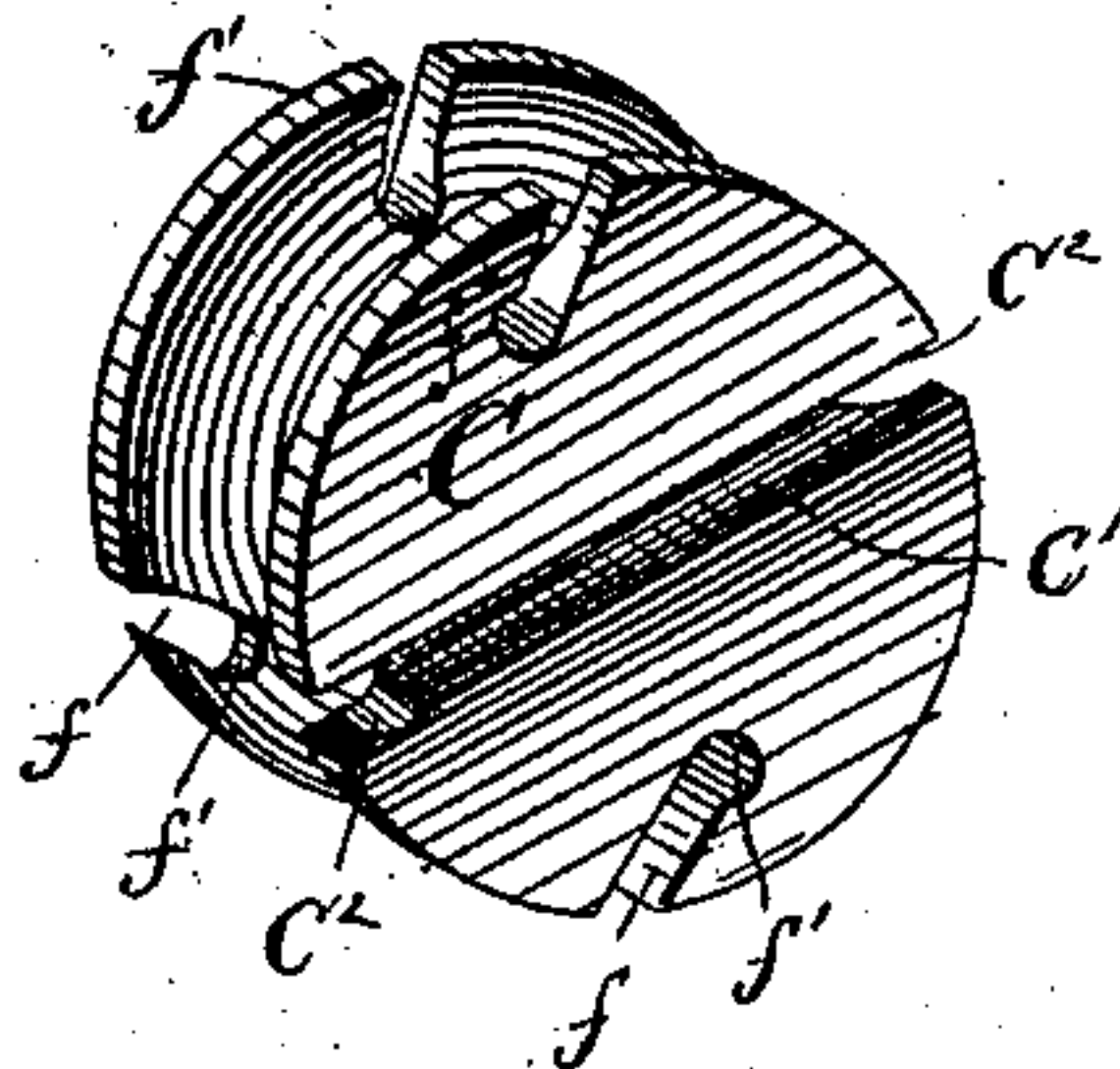


Fig. 5.



Fig. 1.

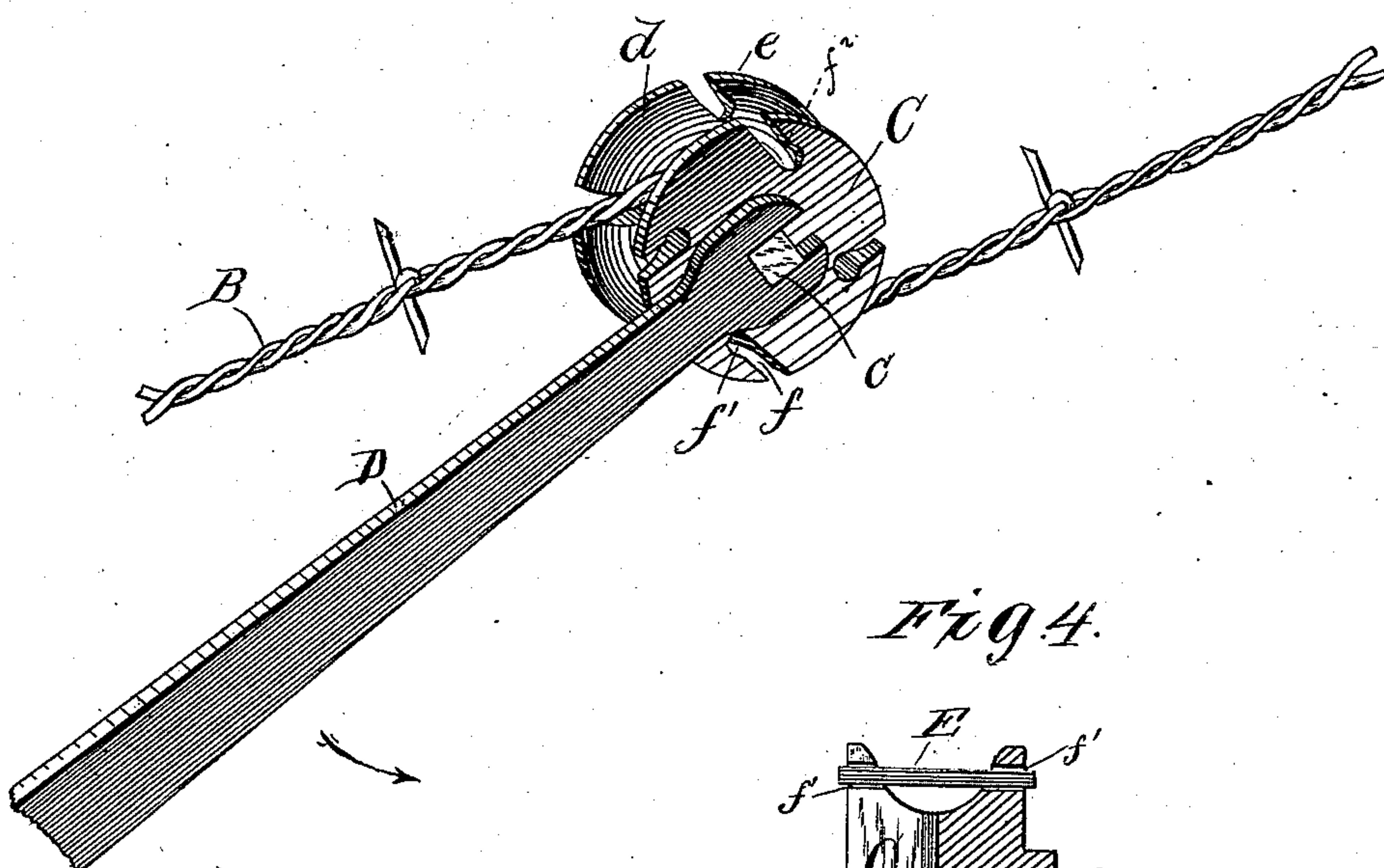


Fig. 4.

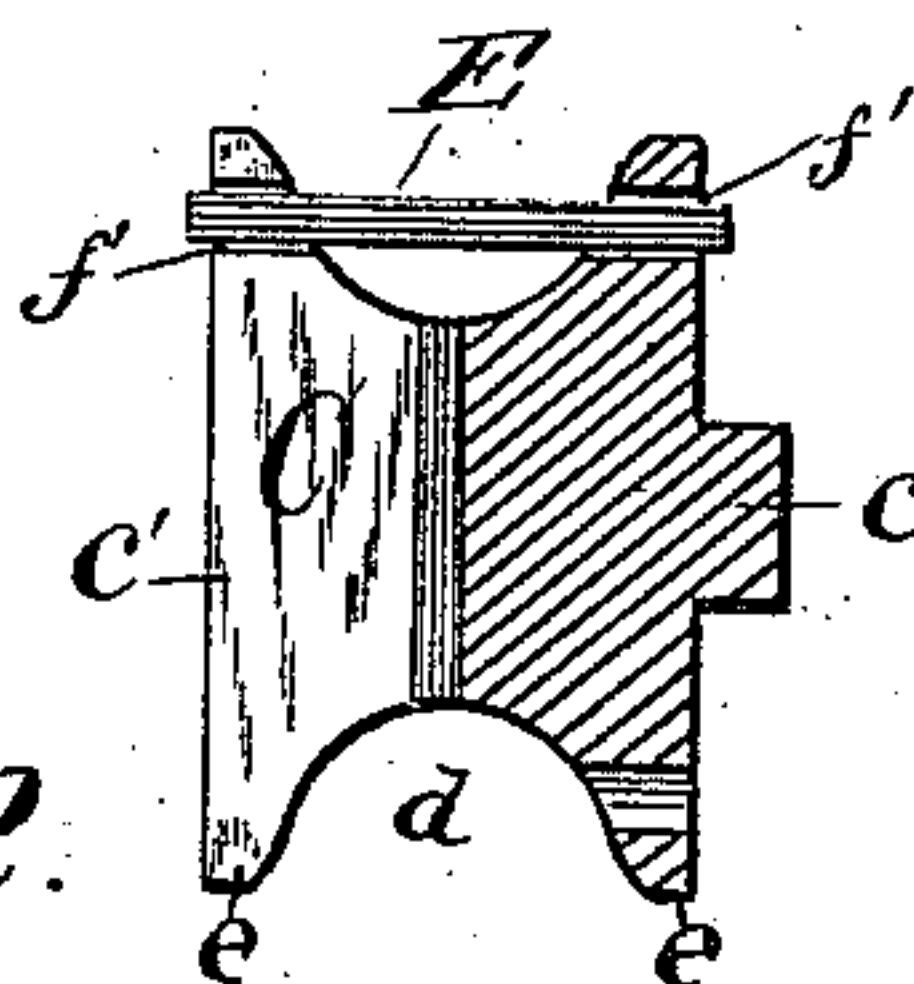
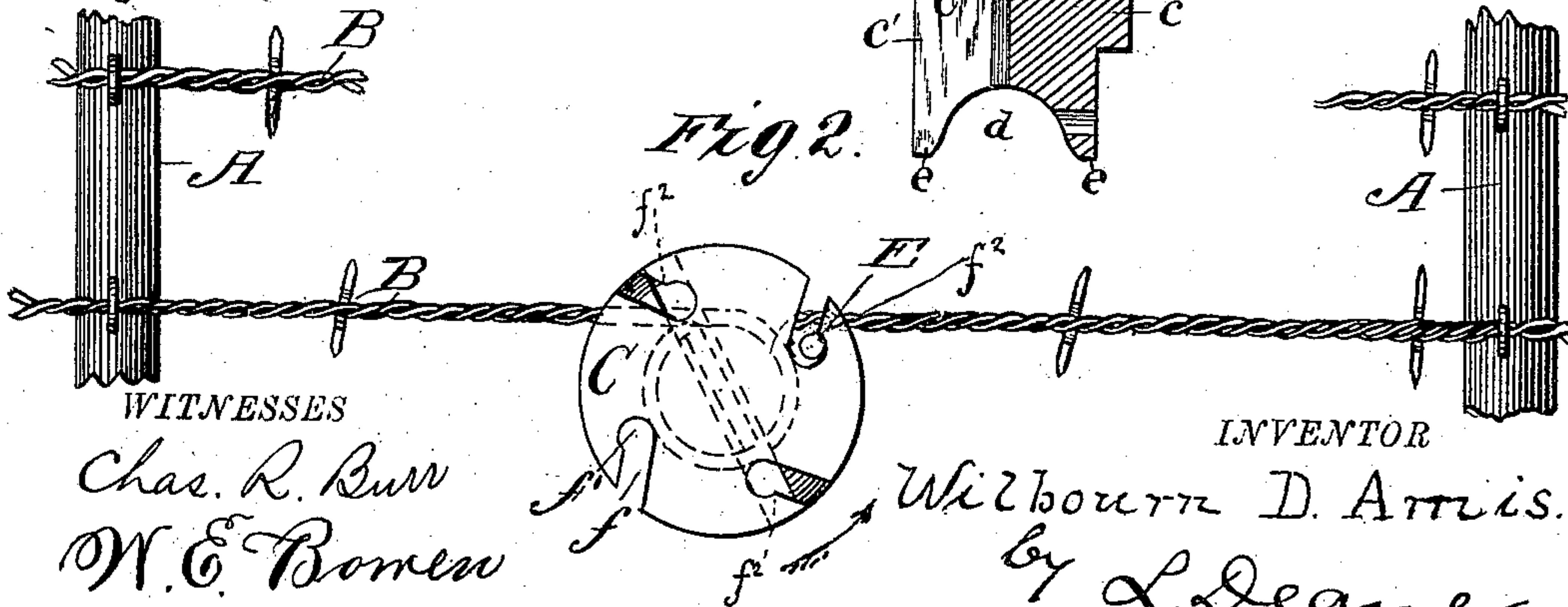


Fig. 2.



WITNESSES
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WILBOURN DAVIS AMIS, OF FARRAGUT, IOWA.

WIRE-STRETCHER.

SPECIFICATION forming part of Letters Patent No. 294,716, dated March 4, 1884.

Application filed October 31, 1883. (No model.)

To all whom it may concern:

Be it known that I, WILBOURN DAVIS AMIS, a citizen of the United States, residing at Farragut, in the county of Fremont and State of Iowa, have invented certain new and useful Improvements in Wire-Stretchers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

Figure 1 is a perspective view illustrating my invention applied to a barbed wire, showing the wire strained and wrench applied. Fig. 2 is a front view, showing my tightening device applied to the wire between posts and locked. Fig. 3 is a perspective of the device, looking at it from its slotted end. Fig. 4 is a view of the tightening device, partially in section, with the key in position as in use. Fig. 5 is a detail of the locking-pin.

My object is to produce a portable device which is adapted to tighten barbed or other wires for fence-guards, and which will remain on the wire or wires of the fence to admit of the same being tightened when necessary; and my invention consists in a grooved pulley having a wrench-nut on one end, adapted to receive a movable hand-wrench, and having a diametrical groove extending partially through it, and also open slots in the periphery of the flanges. Also in means, hereinafter explained, for locking the pulley and holding the wire taut when it (the pulley) has been turned so that the wire is at a proper tension.

These features, together with others which I shall hereinafter explain, will be fully understood when taken in connection with the annexed drawings.

A A designate the posts of a wire fence, and B B the fence-wires, which may be barbed or not for the purpose of my invention.

In order to tighten the wires, I employ a pulley, C, for each one of the wires. On the end of each pulley is a prismatic head or stem, *c*. The pulley is transversely slotted at *c'*, and its circular flanges *e e* are notched at suitable intervals, *f f f*, the notches being oblique and terminating interiorly in eyes *f'*, said notches affording passages for the locking-pin E, for the purpose of adjusting this pin in the said eyes. It will be seen that the eye is made

larger in diameter than the transverse diameter of the locking-pin; consequently I leave a shoulder at *f''*, which will prevent the pin E from disengagement from the device during the process of tightening a wire. The groove *c'* in this pulley is terminated at or near the middle of the length of said pulley by an eye, *c''*. This grooved pulley C is cast entire, and it is preferably made of malleable iron. I use, in combination with this grooved pulley, a key or pin, E, which is adapted to enter any one of the eyes *f'* of the oblique notches *f*.

The operation of my invention is as follows: The pulley C is applied to a fence-wire by adjusting the pulley on a wire anywhere between posts, letting the wire into the diametrical slot *c'*. The wrench D is now applied on the prismatic portion, and the pulley is turned until the wire is wrapped about the groove *d* of the pulley a sufficient number of times to obtain the required tension. The pin E is then inserted through the oblique grooves into the eyes *f'*, and when the strain is put on the wire the pin E will be brought home against the shoulders *f''*, and will be safely locked. It will thus be seen that this pin forms a stay or lock to prevent the pulley from turning backward. The wrench is of course removed after the pin is inserted and the device is left on the wire. At any time when the wire sags, by using the wrench the wire can be tightened.

While I have shown this as applied to wire fence, it is obvious that it is applicable to tightening ropes or cables for any purpose.

I am aware that it is not new to construct an annularly-grooved wheel with a transverse groove in it, and with perforated flanges to receive a locking-pin; and I make no broad claim to such device.

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

The wire-stretcher having a transverse slot and oblique grooves in its flanges, terminating in eyes *f'*, and shouldered at *f''*, adapted to receive a locking-pin, substantially as described.

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

WILBOURN DAVIS AMIS.

Witnesses:

J. E. SINGLETON,
J. BILSLAND.