

N. BURNHAM.  
FENCE WIRE-STRETCHER.

No. 169,770.

Patented Nov. 9, 1875.

Fig. 1.

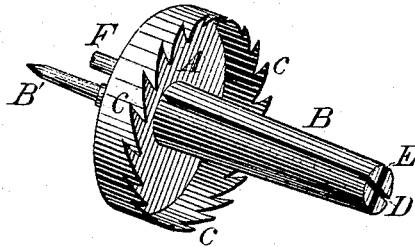


Fig. 2.

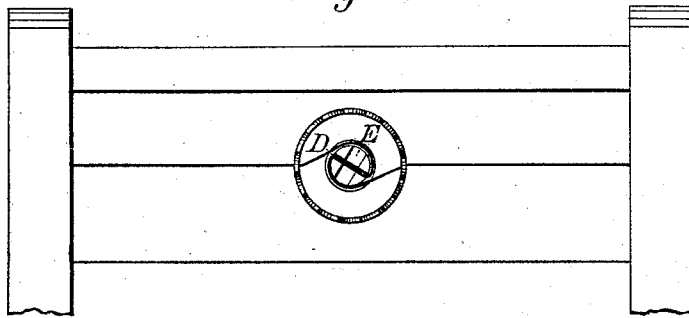


Fig. 3.

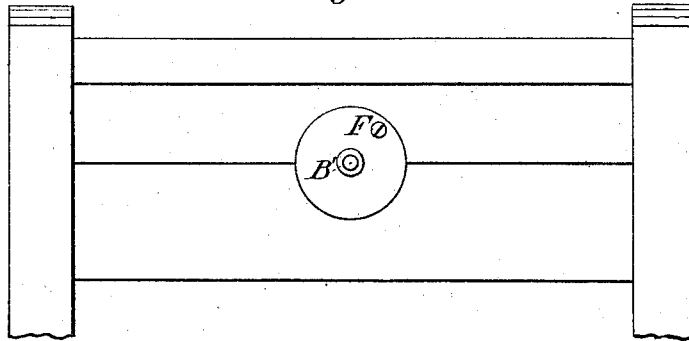
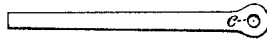


Fig. 4.



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# UNITED STATES PATENT OFFICE.

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## IMPROVEMENT IN FENCE-WIRE STRETCHERS.

Specification forming part of Letters Patent No. 169,770, dated November 9, 1875; application filed June 18, 1875.

*To all whom it may concern:*

Be it known that I, NATHANIEL BURNHAM, of Amboy, in the county of Lee and State of Illinois, have invented certain new and useful Improvements in Wire - Stretchers; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification, and in which—

Figure 1 is a perspective view of the stretcher. Fig. 2 is a front elevation of the same, showing its application to the fence. Fig. 3 is a rear elevation of the stretcher applied to the fence; and Fig. 4 shows the key or lever, used preferably in operating the stretcher.

Similar letters of reference indicate corresponding parts in all the figures.

The object of this invention is to produce a simple, cheap, and easily-operated apparatus for tightening or stretching the wire on wire-fences; and it consists in the construction of the device whereby this object is attained, as will be more fully hereinafter described.

A is a circular disk or wheel, which is firmly secured to one end of the central shaft B. The teeth or ratchets C project laterally and at right angles from the disk A, and point in the direction of the shaft B. This shaft is split, so as to form the two slots D and E, one of which (shown at D) extends through the entire length of B to the disk A, while the other, E; which is at right angles to D, may be made only deep enough to admit of the insertion of the key or lever by which the stretcher is turned.

The disk A has a spindle, B', on the opposite side, which forms a prolongation of the shaft B, and serves as a handle for holding and guiding the disk while it is being turned. On the same side of the disk or wheel A there are two or more projections, F, by the aid of which the disk is turned with a lever of any suitable construction. An ordinary iron bolt or bar will answer the purpose.

The manner of using my improved wire-

stretcher is as follows: After the wire has been placed on the fence-posts the stretcher is placed on the wire at any convenient place—generally at or near the middle of the fence. This is easily done by simply inserting the wire in the slot D till it reaches and presses against the disk A. The lever or key (preferably of the configuration shown in Fig. 4) is then inserted in the slot E, and by it the stretcher is turned, while it is steadied by holding on to the handle B'. The teeth or ratchets will catch the wire on both sides of B, and, when it is sufficiently stretched, it is held taut while being fastened, after which the stretcher is easily removed by simply turning the disk and shaft B, so as to release the ratchets, and then withdrawing it.

The stretcher may also be left remaining upon the wire, so that this may be stretched conveniently whenever necessary without having to put it on again.

The stretcher may also be operated, after it has been placed in position upon the wire, by inserting the handle B' through the eye e of the key or lever shown in Fig. 4, and pressing the lever against one of the projections F. It will then act as a crank to turn the stretcher while it is being steadied by holding on to either the handle B' or the axle B. This will enable the operator to turn the stretcher from either side of the fence equally convenient.

My improved wire-stretcher may be made of cast or malleable iron, or of any other suitable material; and it may be made in one or more pieces, at the option of the manufacturer.

Having thus described my invention, I claim and desire to secure by Letters Patent—

A wire tightener or stretcher, consisting of the flanged disk or wheel A, provided with laterally-projecting teeth or ratchets C, and with projection F, the slotted shaft B, and the handle B', substantially as and for the purpose hereinbefore set forth.

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

NATHANIEL BURNHAM.

Witnesses:

WM. A. WALKER,  
R. P. TREADWELL.