(No Model.)

J. O. WALTON.

WIRE STRETCHER.

No. 540,125. Patented May 28, 1895.

Fig. 1.

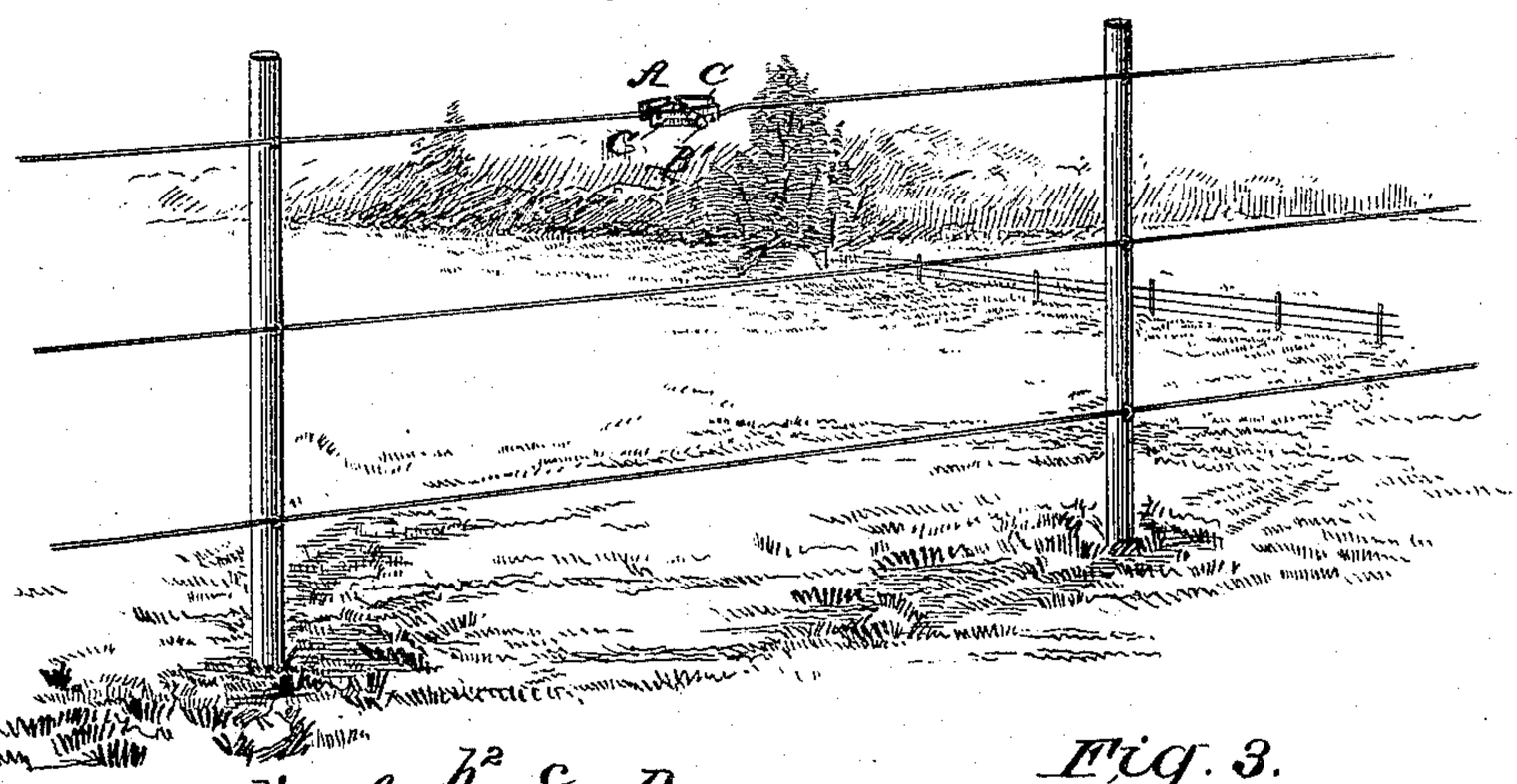


Fig. 2.

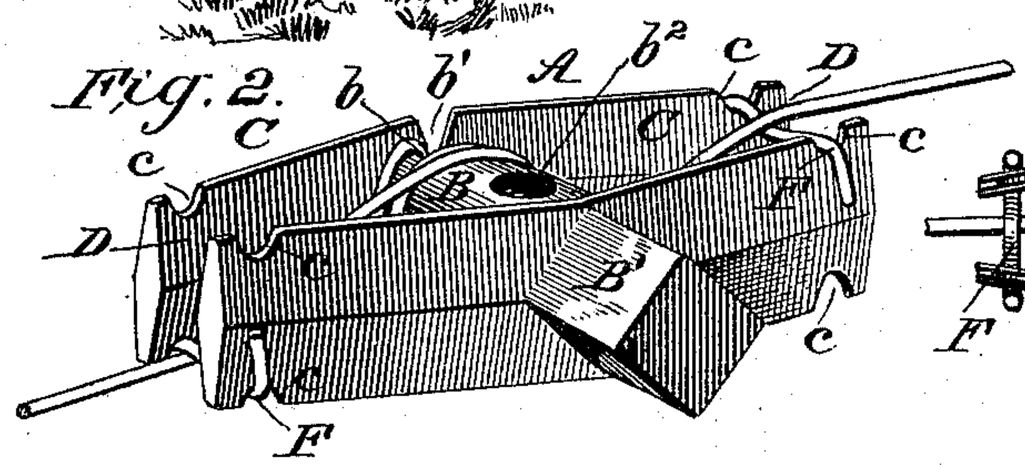


Fig. 3.

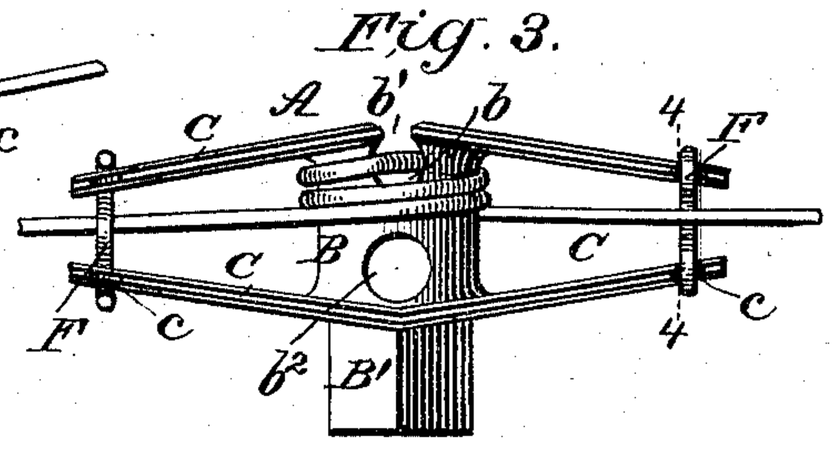


Fig. 4.

Fig. 5.

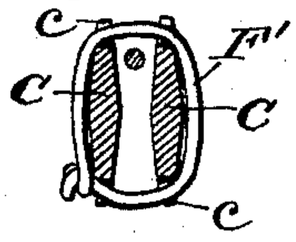


Fig. 6.

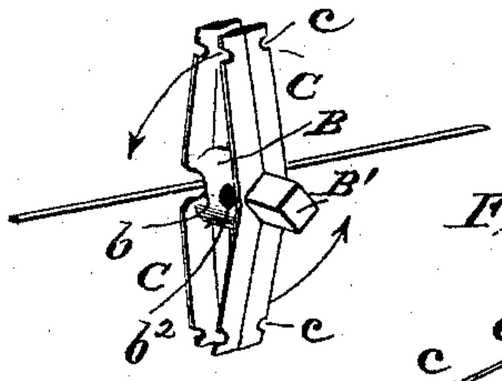


Fig. 7.

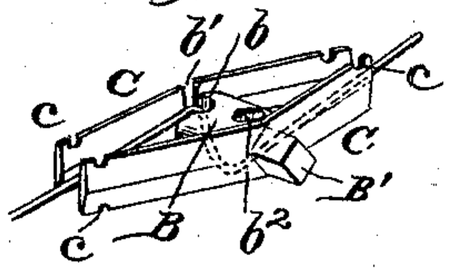
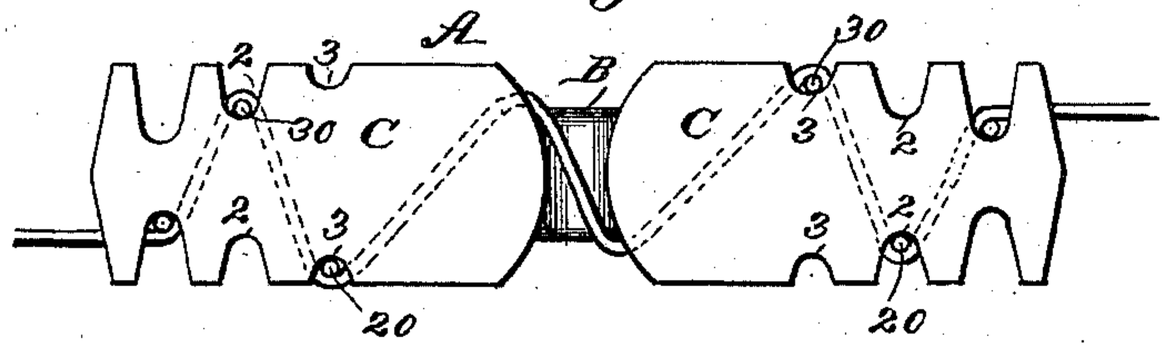


Fig. 8.



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UNITED STATES PATENT OFFICE

JOHN ORLENTHUS WALTON, OF BELLE VERNON, OHIO.

WIRE-STRETCHER.

SPECIFICATION forming part of Letters Patent No. 540,125, dated May 28, 1895.

Application filed September 25, 1894, Serial No. 524,068. (No model.)

To all whom it may concern:

Be it known that I, JOHN ORLENTHUS WALTON, residing at Belle Vernon, in the county of Wyandot and State of Ohio, have invented a new and Improved Wire-Stretcher, of which the following is a specification.

My invention relates to improvements in fence wire tighteners and it has primarily for its object to provide a simple and inexpensive tightener or stretching device which can be quickly attached to a fence and which will serve to stretch the same without the necessity of cutting such wire or taking it down from its fastenings.

It has also for its object to provide a device of this character which will serve to draw and tighten the wire, without making a very short bend in such wire, and breaking or otherwise injuring the same.

With other objects in view, which hereinafter will appear, the invention consists in such novel features of construction and peculiar arrangement of parts as will be first described in detail and then pointed out in the appended claims, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of a portion of a wire fence with my improvement applied. Fig. 2 is a perspective view of the tightener or stretching device. Fig. 3 is a plan view thereof. Fig. 4 is a cross-section of the same on the line 4 4, Fig. 3. Fig. 5 is a view of a modified form of fastening. Figs. 6 and 7 are views illustrating the manner in which the device is connected with a secured fence-wire, and Fig. 8 is a view of a slightly-modified form of stretcher.

My improved wire stretcher in its simplest and cheapest form consists of a cast iron body A, having a central or hub like portion B, from which, in opposite directions, project wing portions C C which converge at the ends to form narrow throat like ways D D, such hub being extended forward and made non-circular as at B′, to form a wrench receiving knob. At the side opposite the knob B′, the hub has an opening *b* extended at right angles to the longitudinal direction of the wings, which opening terminates in a slot way *b′*, formed in the rear wall of the hub portion, and at a point in front of such opening *b*, the hub has a parallel aperture b^2, for a purpose presently explained. The ends of the wing portions have seats or notches *c c* to receive the fastenings F or F′, hereinafter more particularly referred to.

From the foregoing taken in connection with the drawings, it will be noticed that when it is desired to tighten a slack section of a secured wire fencing, the stretcher is fitted on the wire, by slipping its slot way *b′* thereover as shown in Fig. 6. By then applying the wrench and turning it in either direction and guiding the device so its throat ways D pass over the wire strand, such strand will wind about the hub in opposite directions until the required tension is attained. The fastening devices F or F′ are then secured to the ends of the arms, which will serve to hold the stretcher in a straight line with the wire.

It will be noticed by reference to Fig. 4 that the fastener F consists of a bail like wire rod, which fits over the upper ends of the wings and seats in the notches c^2, they being securely held down to form stops to hold the body A to its adjusted position, by the spring tension of the wire. If desired the fastening may be in the nature of a wire loop F′ as shown in Fig. 5 which passes around the ends of the wings, the wire strand passing through the same as shown. I prefer however to use the fastener shown in Fig. 4 in that a more rigid connection between the wire and body A is made. It can also be the more readily applied in position, and during cold weather be removed to allow for a free contraction of the wire.

To allow for a free contraction of the fence wire during cold weather without removing the fastenings, the wing members may be formed as shown in Fig. 8, and in such construction additional notches or seats 2 and 3 are provided in which are seated supplemental fasteners 20 and 30 formed of wire of greater flexibility than the end fastenings and the fence wire, whereby, as the said fence wire contracts and attains a certain tension, it will draw on the supplemental fasteners and bend them inward and thereby permit the said fence wire to contract considerably without danger of snapping.

When the device is connected with the wire in the manner described, the front aperture b^2 can be utilized to receive a rod or handle

member to aid in turning the stretcher, and as the knob and aperture b^2 are close together permits the use of the rod and wrench to the best possible advantage.

By providing the side arms converging toward their outer ends, the wire is prevented from drawing from one side to the other and gives such wire a greater purchase on the hub.

When the device is used in connection with a newly constructed fence, the wire may be passed through the aperture b^2, and in such case the opening b is used as a handle member socket. When once connected with the fence wire the same cannot be removed without breaking such wire.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is--

1. An improved wire stretcher comprising a central or hub member having integral wing members and a projecting wrench portion, said hub having a transverse aperture near the wrench end and a slot way extending inward of the rear wing members, said wing members having grooves in the upper and lower edges near their ends and bail like fastenings detachably held to seat in the said grooves, when the wire is secured to the stretcher all arranged substantially as shown and described.

2. An improved wire stretcher comprising a central or hub member B, having integral wing members C C and a projecting wrench portion B′, said hub having a transverse aperture b^2, at a point near the wrench end, and a slot way extending inward of the rear wing members, said wing members converging from the hub toward the outer ends, and formed with grooves c in the upper and lower edges near the said ends, and the bail like fasteners F, adapted to seat in the grooves when the wire is secured to the stretcher all arranged substantially as shown and for the purposes described.

3. A wire stretcher having a central or hub portion having oppositely extended wing or guard members, and provided with a receiving aperture said wings having a series of seats or notches, detachable fasteners of a flexibility no greater than the fence wire and supplemental fasteners of a greater flexibility than such fence wire all substantially as and for the purposes described.

4. In a wire stretching device the combination with the apertured hub and the side wings having a series of seats or notches in their edges, of bail like fasteners formed of a wire of greater flexibility than the fence wire, adapted to be detachably connected with such seats all arranged substantially as and for the purposes described.

JOHN ORLENTHUS WALTON.

Witnesses:
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