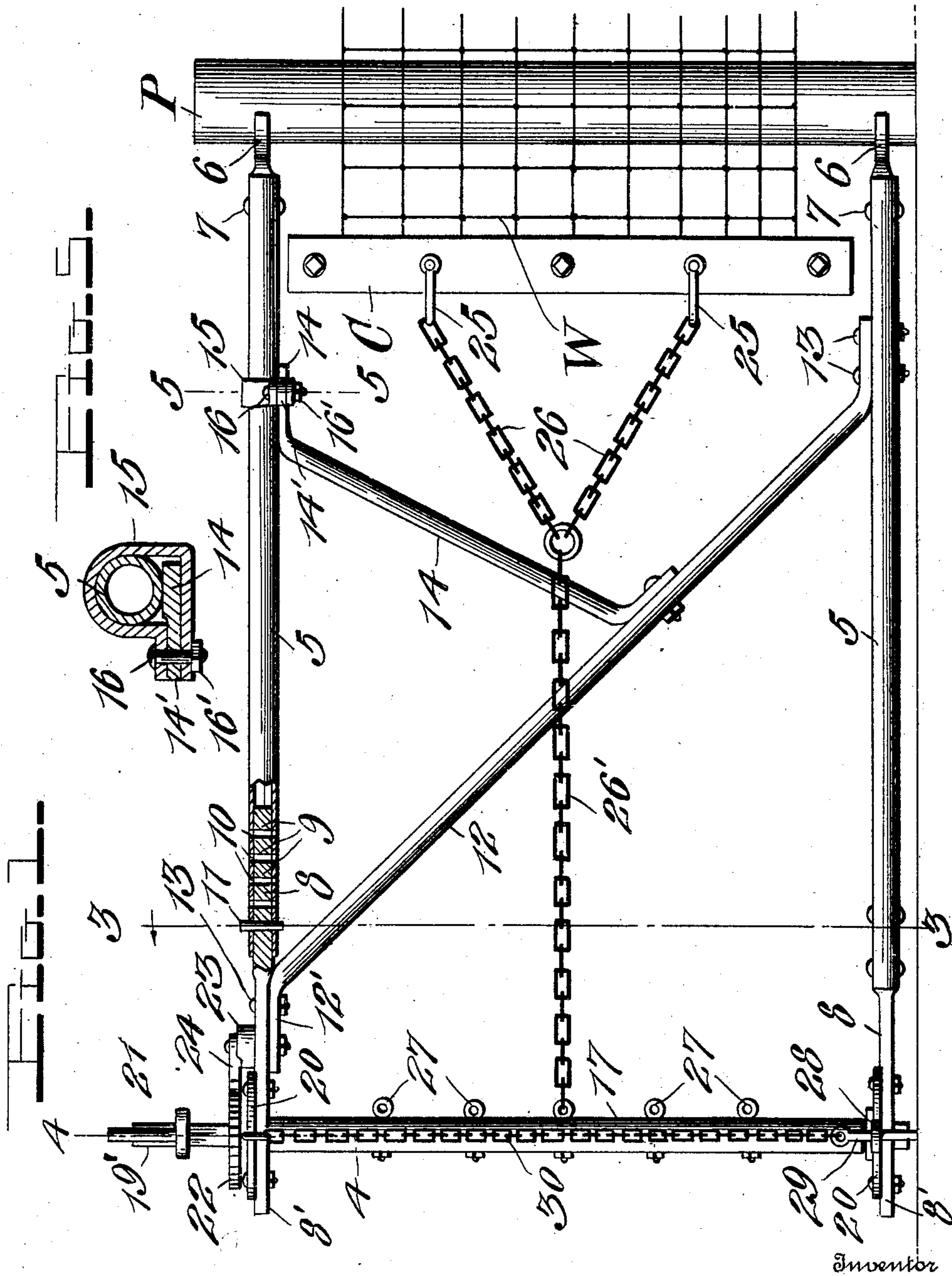


978,989.

A. CURREN.
WIRE STRETCHER.
APPLICATION FILED AUG. 10, 1910.

Patented Dec. 20, 1910.

2 SHEETS-SHEET 1.



Witnesses

Chas. L. Gruebauer.
M. H. Pender.

A. Curren,

By

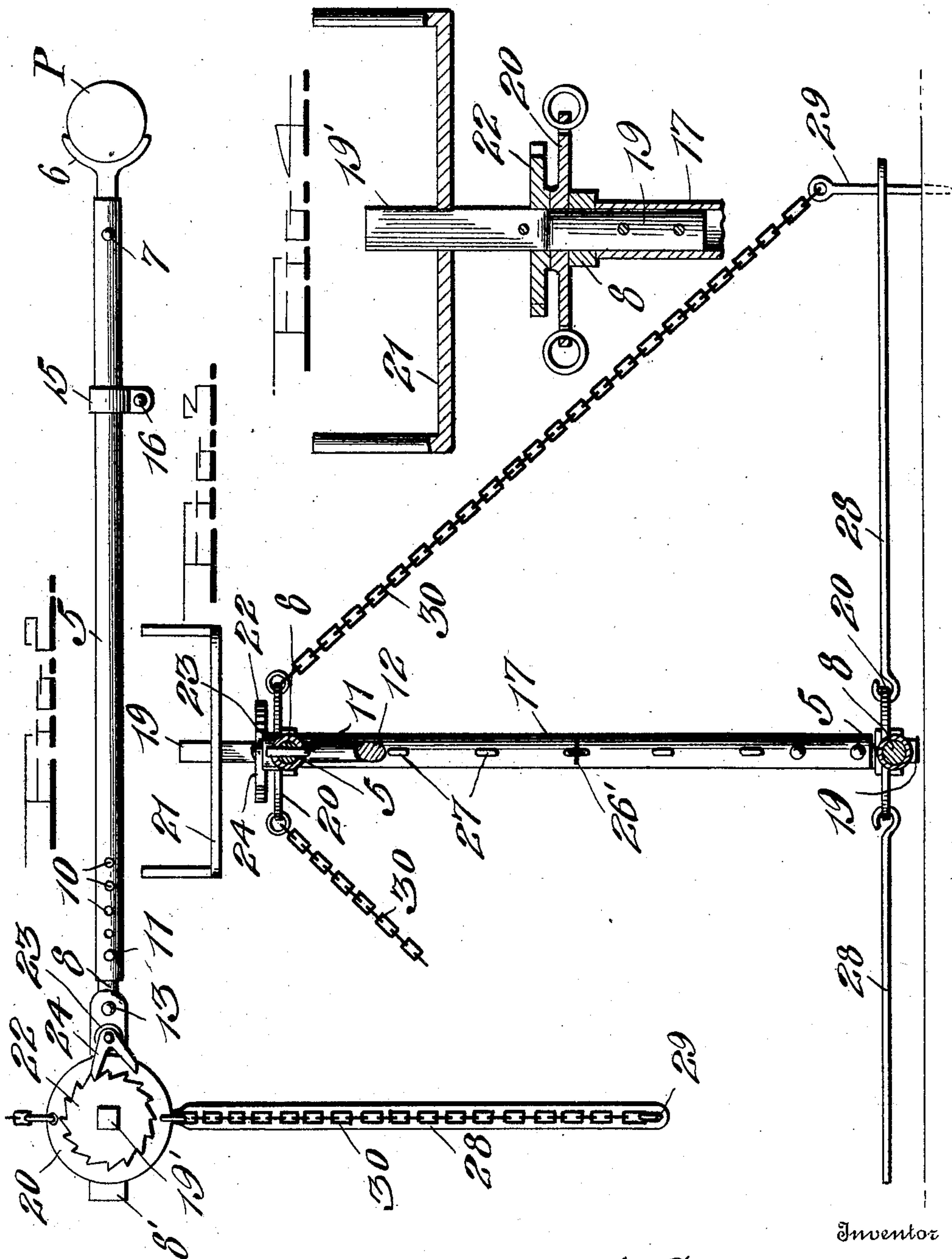
Watson E. Coleman.
Attorney

978,989.

A. CURREN.
WIRE STRETCHER.
APPLICATION FILED AUG. 10, 1910.

Patented Dec. 20, 1910.

2 SHEETS-SHEET 2.



Inventor

Witnesses

Chas. L. Griestauer.
M. H. Pender.

A. Curren,

By Watson E. Coleman.
Attorney

UNITED STATES PATENT OFFICE.

AMOS CURREN, OF RICH HILL, MISSOURI.

WIRE-STRETCHER.

978,989.

Specification of Letters Patent.

Patented Dec. 20, 1910.

Application filed August 10, 1910. Serial No. 576,437.

To all whom it may concern:

Be it known that I, AMOS CURREN, a citizen of the United States, residing at Rich Hill, in the county of Bates and State of Missouri, have invented certain new and useful Improvements in Wire-Stretchers, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to an improved wire stretcher and has for its primary object, to provide a device of this character of comparatively simple construction, and one which may be easily and quickly arranged in position for use.

Another object of the invention resides in the provision of a drum, and means for supporting the same in spaced relation to a fence post, said drum having attached thereto one end of a chain connected to a clamp bar to which one end of the fence wire fabric is secured.

A further object of the invention is to provide an adjustable arrangement of supporting bars for the winding drum, whereby the drum may be properly arranged in position to wind the wire fabric thereon irrespective of the angular position of the fence post.

With the above and other objects in view, the invention consists of the novel features of construction and the combination and arrangement of parts hereinafter fully described and claimed and illustrated in the accompanying drawings in which—

Figure 1 is a side elevation illustrating the practical application of my invention. Fig. 2 is a top plan view. Fig. 3 is a section taken on the line 3—3 of Fig. 1. Fig. 4 is a detail section taken on the line 4—4 of Fig. 1, and Fig. 5 is a section taken on the line 5—5 of Fig. 1.

Referring more particularly to the drawings, C designates a wire clamp to which the end of the wire fence fabric W is attached.

P indicates the fence post to which the wire fabric is adapted to be stapled after the same has been properly stretched by means of my improved stretching device, the construction of which will now be set forth in detail.

The drum supporting frame is constructed entirely of gas pipe or tubing and comprises the upper and lower parallel longitudinal members 5. In one end of each of the members 5, the bifurcated post engaging rods 6

are secured by means of suitable bolts or rivets 7. These rods engage upon the periphery of the fence post P, adjacent to its upper and lower ends, as clearly shown in Fig. 1. In the other end of the upper frame pipe 5, the end of a rod 8 is secured. This rod 8 is telescopically engaged in the tube 5, and is provided with a plurality of openings 9 any one of which is adapted to be alined with the opening 10 in the end of the pipe 5, said alined openings receiving a pin 11 whereby the pipe and rod 8 are securely connected. The greater portion of the rod 8 which extends beyond the end of the pipe 5 is flattened into substantially rectangular cross sectional form, as shown at 8'. Another of the rods 8 similar in form to the one just described, is also rigidly secured in the end of the lower member 5 of the supporting frame. The rod 8 in the upper member 5 is connected to the lower frame member 5 by means of a diagonal brace 12. This brace is also formed of piping and at its ends is flattened as indicated at 12', the ends of said brace being secured to the rod 8 and the lower frame member 5, by means of the bolts 13. A bracing strut 14 is secured at one of its ends to the intermediate portion of the diagonal brace 12, and extends at an angle therefrom, and has its upper end adjustably fixed to the upper frame member 5. A U-shaped plate 15 extends over the upper frame member 5, and beneath the longitudinally extending end portion of the strut 14. One end of the plate 15 is disposed upon an eye 14' which is formed on the longitudinally disposed end of the strut, and a fastening bolt 16 extends through this eye and through the ends of the plate 15. A nut 16' is threaded on the end of the bolt 16 whereby the upper frame pipe 5 and the strut 14 may be securely clamped together, after the pipe has been adjusted and the rod 8 secured in the end thereof by means of the pin 11.

Between the rectangular portions 8' of the rods 8, the vertical drum 17 is arranged. Solid cylindrical pins 19 are secured in the ends of the drum and extend through openings in the rods 8, and the circular plates 20 which are secured thereon. The upper end of the pin 19 secured in the upper end of the drum 16 is squared as shown at 19' to receive an operating crank 21. A ratchet 22 is arranged upon the squared portion of the rod 19, and is slightly spaced from the plate 20. This ratchet may be removed and reversed if

desired, so as to reverse the rotation of the drum 17. One of the bolts 13 which extends through the rod 8 and the upper end of the diagonal brace 12, also secures upon the rectangular portion of the rod a disk 23, the upper surface of which is recessed to receive a double dog 24, the intermediate portion of which is pivoted upon the bolt 13. One of the ends of this dog 24 is adapted to be engaged with the teeth of the ratchet 22 in either direction of movement to prevent retrograde movement of the drum 17, which would loosen the fence wire fabric after being stretched.

Loops 25 are secured to the clamp C upon opposite sides of its center and to these loops the branch chains 26 are connected, said chains being secured together at their free ends by a single longitudinally extending chain 26'. The end of this chain carries a hook for engagement in any one of a plurality of eyes 27 secured to the drum 17.

To the lower circular plate 20 the ends of the transversely extending bars 28 are secured at diametrically opposite points, said bars extending from opposite sides of the drum. In the outer ends of these bars an opening is formed to receive an anchoring pin or staple 29, which is adapted to be driven deeply into the ground. To the upper ends of these anchoring pins, the ends of the chains 30 are connected, the other ends of said chains being secured to opposite sides of the upper circular plate 20. By providing these supporting chains for the frame structure, the winding drum is at all times supported in alinement with the fence post, and transverse oscillation of the same in the operation of the device is effectually prevented. The chains 30 when taut, act as braces between the anchoring pins and the upper end of the drum.

In the operation of my improved wire stretcher, the frame is arranged as shown in Fig. 1 at one side of the fence post, the bifurcated ends of the rods 6 being engaged with said post as previously described. After the fence wire fabric has been securely fixed in the clamp C, the chain 26' is connected to the drum 17. The operator now rotates said drum to wind the chain thereon, one end of the dog 24 engaging with the teeth of the ratchet upon the release of the operating crank 21, so that a reverse rotation of the drum is rendered impossible. In this manner, fence wire fabric may be very tightly stretched across the posts, the clamp C being drawn between the upper and lower frame members 5. After the fabric

has been sufficiently stretched, the drum is locked by means of the dog 24, so that the operator has the free use of both hands in the stapling of the wire fabric to the fence post.

From the foregoing it is believed that the construction and operation of my improved wire stretching device will be readily understood. It is comparatively simple, may be manufactured at a low cost, and may be easily arranged in position for use to expeditiously stretch the wire across the fence post so that the same may be securely fixed thereto. While I have shown the preferred arrangement of the various elements, it will be understood that they may be greatly modified without departing from the essential features or sacrificing any of the advantages of the invention.

I claim:—

1. In a wire stretcher, a frame comprising upper and lower tubular members, bifurcated rods secured in one end of said frame members to engage with a fence post, rods telescopically engaged in the other ends of said frame members having enlarged rectangular portions, said upper frame member being longitudinally adjustable upon the rod therein, a diagonal brace between the upper rod and the lower tubular frame member, a strut secured to said brace intermediate of its ends and adjustably engaged with the upper frame member, and a power device mounted between the flattened end portions of the last named rods.

2. In a wire stretcher, a frame comprising upper and lower tubular parallel frame members adapted for engagement at one of their ends with a fence post, rods telescopically engaged in the other ends of said frame members, means for securing said upper frame member adjustably on its rod, a diagonal tubular brace rigidly secured to the lower frame member and to the rod in said upper frame member, a strut angularly disposed between the upper frame member and said brace and rigidly secured to the latter, means for clamping said strut to the upper frame member, a power device arranged between said rods, and transversely disposed anchoring means connected to the ends of said rods.

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

AMOS CURREN.

Witnesses:

F. E. KELLOGG,
J. R. HALES.