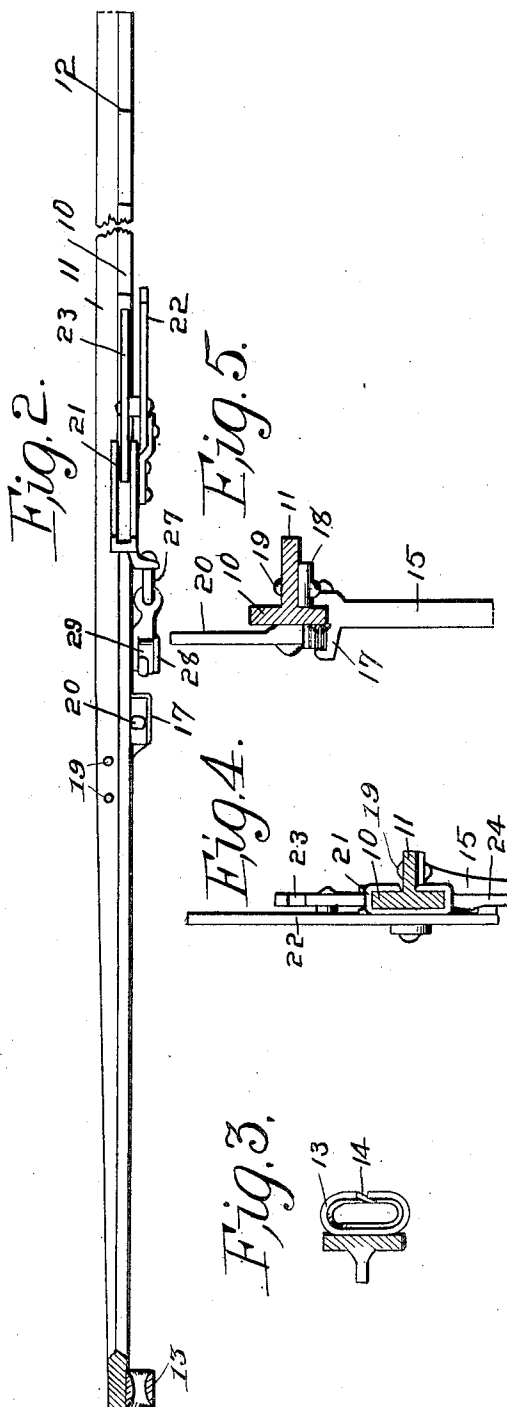
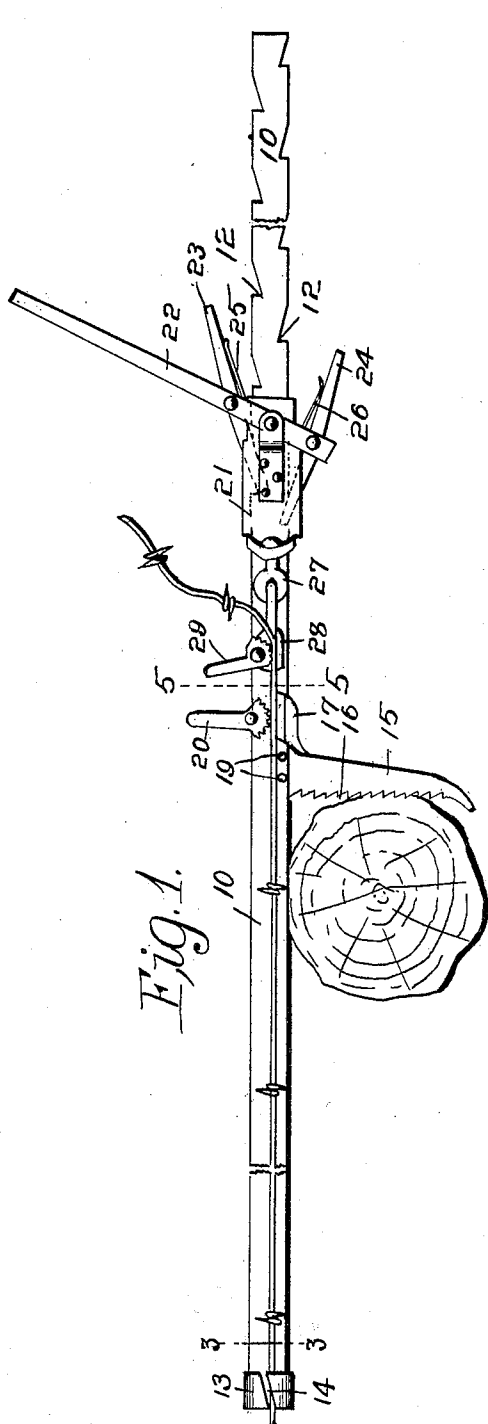


No. 828,819.

PATENTED AUG. 14, 1906.

C. W. HUDSON.
WIRE STRETCHER.

APPLICATION FILED AUG. 14, 1905.



Witnesses
A. G. Hague
J. B. Smutney

Inventor C. W. Hudson
by Orrin Lane atty's

UNITED STATES PATENT OFFICE.

CHARLES W. HUDSON, OF KNOXVILLE, IOWA.

WIRE-STRETCHER.

No. 828,819.

Specification of Letters Patent.

Patented Aug. 14, 1906.

Application filed August 14, 1905. Serial No. 274,215.

To all whom it may concern:

Be it known that I, CHARLES W. HUDSON, a citizen of the United States, residing at Knoxville, in the county of Marion and State of Iowa, have invented a certain new and useful Wire-Stretcher, of which the following is a specification.

The object of my invention is to provide a wire-stretcher that may be formed complete of few parts that are inexpensive in themselves and yet which produce a strong and durable wire-stretcher of the class designed to stretch a wire past the post on which the stretcher is supported, so that the operator may secure the wire to the same post used to support the stretcher.

My invention consists in certain details in the construction, arrangement, and combination of the various parts of the stretcher whereby the objects contemplated are attained, as hereinafter more fully set forth, pointed out in my claims, and illustrated in the accompanying drawings, in which—

Figure 1 shows a top or plan view of the stretcher applied to a post and in position with the wire drawn past the post. Fig. 2 shows a side elevation of the complete stretcher. Fig. 3 shows a transverse sectional view on the line 3 3 of Fig. 1. Fig. 4 shows a transverse sectional view taken on a line adjacent to the operating-lever, and Fig. 5 shows a transverse sectional view on the line 5 5 of Fig. 1.

Referring to the accompanying drawings, the body portion of the stretcher is composed of a straight metal bar **T**-shaped in cross-section, the flat portion thereof being indicated by the numeral 10 and the longitudinal rib by the numeral 11. At one end the edges of the part 10 are provided with alternately-arranged notches 12, and on the other end I have secured a wire-guide comprising a loop 13, provided with a slot 14, through which a fence-wire may be passed to enter the loop.

Fixed to the main bar of the stretcher near its central portion is a device which may be formed complete of a single piece of metal and comprises an arm 15, extending substantially at right angles to the main bar and provided on one face with a series of teeth 16. Near the inner end of the arm 15 I have formed on said arm a wire-gripping jaw 17 to project beyond the flat face of the part 10, and on the same end of the arm 15 is an extension 18, shaped to lie flat against the rib 11 on the side of the part 10 opposite from

the part 17, and this part 18 is connected by rivets 19 with the rib 11.

The numeral 20 indicates an eccentric wire-gripping lever of the usual construction pivoted to the face of the part 10 to coact with the stationary wire-gripping jaw 17.

Slidingly mounted on the notched end of the bar is a sleeve 21, having fulcrumed thereto a lever 22, which lever is provided with two pawls 23 and 24, pivoted to opposite sides of its fulcrum and held in engagement with the notched edges of the part 10, by means of the springs 25 and 26. Connected with the sleeve 21 is a swiveled eyebolt 27, and connected with said eyebolt is a wire-gripping jaw member 28, carrying a pivoted eccentric wire-gripping member 29.

In practical use the operator first sets the sleeve 21 as near the center of the main bar as possible. He then places the arm 15 with its toothed edge adjacent to the post, as shown in Fig. 1. He then places the fence-wire in position in the wire-gripping device, composed of the jaws 28 and 29, and then places the fence-wire through the slot 14 and into the loop 13. He then reciprocates the operating-lever 22 until the wire has been stretched tight or until the sleeve 21 reaches the opposite limit of its movement. In the latter case the wire is placed between the jaws 20 and 17 and is held there while the jaw 29 is released and the sleeve 21 moved back to position near the center of the bar and the wire again gripped between jaws 28 and 29. Then the jaws 17 and 20 are released and the lever 22 reciprocated until the fence-wire is sufficiently stretched. In stretching the wire there is obviously a tendency for the end of the main bar that is beyond the post to swing outwardly away from the post. This tendency, however, is overcome partly by the loop 13, which engages the fence-wire; but it would swing outwardly to a certain extent but for the teeth 16 on the arm 15 engaging the post and holding the stretcher-bar accurately in line with the fence-wire. Then as soon as the fence-wire is secured to the post in the ordinary way the jaws 28 and 29 may be released and the stretcher removed from the wire.

Having thus described my invention, what I claim, and desire to secure by Letters Patent of the United States therefor, is—

1. An improved wire-stretcher comprising a main bar **T**-shaped in cross-section having

notches on the opposite edge portions of one end thereof, a wire-guide at the opposite end thereof, a laterally-extending arm near the central portion of said bar, a stationary wire-gripping device upon the bar near said arm, a sleeve slidably mounted upon the bar, a lever fulcrumed to the sleeve, two spring-actuated pawls carried by the lever on opposite sides of its fulcrum to engage the notched edges of the bar and a wire-gripping device carried by the sleeve.

2. An improved wire-stretcher comprising a main bar T-shaped in cross-section having notches formed on opposite edges of one end portion thereof, a loop fixed to the other end thereof and provided with a slot to receive the fence-wire, an arm having a toothed edge and also having an integral stationary jaw

member and an integral stationary extension, said jaw member projecting beyond the flat face of the bar and said extension riveted to the rib of the bar, a wire-gripping eccentric pivoted to the bar to coact with said stationary jaw member, a sleeve slidably mounted upon the bar, a lever fulcrumed to the sleeve, two spring-actuated pawls carried by the lever to engage the notched edges of the bar, a wire-gripping member carried by the sleeve and an eccentric wire-gripping member connected therewith and carried thereby, substantially as set forth.

Des Moines, Iowa, July 27, 1905.

CHARLES W. HUDSON.

Witnesses:

C. A. McELREA,
J. T. ROBUCK.