

J. H. LEWIS.  
 WIRE STRETCHER.  
 APPLICATION FILED MAR. 18, 1911.

1,069,556.

Patented Aug. 5, 1913.

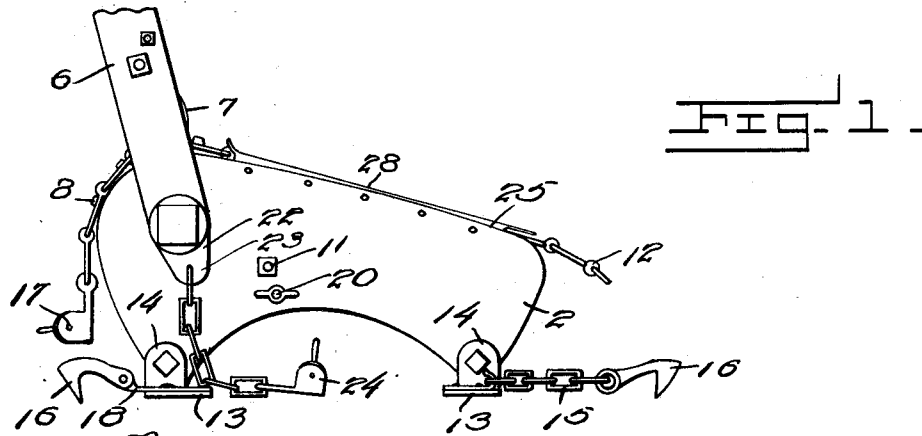


FIG. 1.

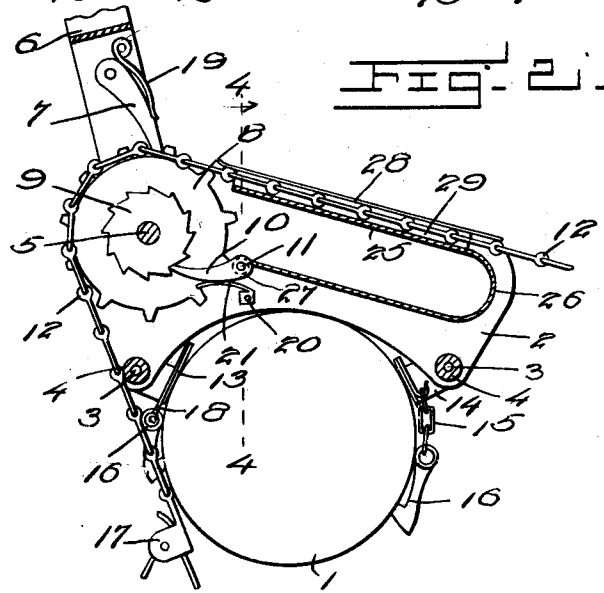


FIG. 2.

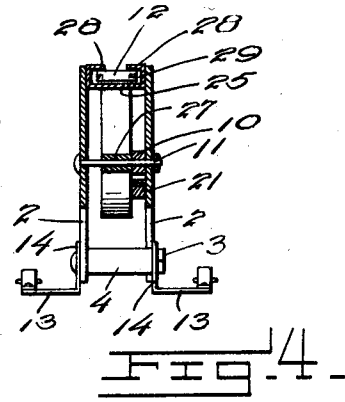


FIG. 4.

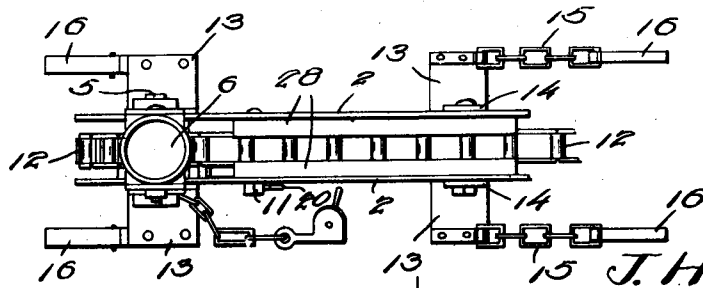


FIG. 3.

Witnesses  
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# UNITED STATES PATENT OFFICE.

JOHN H. LEWIS, OF WEISER, IDAHO.

## WIRE-STRETCHER.

1,069,556.

Specification of Letters Patent.

Patented Aug. 5, 1913.

Application filed March 18, 1911. Serial No. 615,207.

*To all whom it may concern:*

Be it known that I, JOHN H. LEWIS, a citizen of the United States, residing at Weiser, in the county of Washington and State of Idaho, have invented certain new and useful Improvements in Wire-Stretchers, of which the following is a specification.

This invention relates to improvements in wire stretchers, and has particular reference to an improvement on my Patent No. 974,403, patented Nov. 1, 1910.

One object of the present invention is to provide a device of this character which is simple in construction, and easy in operation.

Another object is to improve and simplify the guiding means for the chain.

Other objects and advantages will be apparent as the following description proceeds, but it will be understood that changes in the specific structure shown and described may be made within the scope of the claim without departing from the spirit of the invention.

In the accompanying drawings, Figure 1 is a side elevation of the device, Fig. 2 is a horizontal sectional view through the device and a fence post, Fig. 3 is a plan view of the device, detached. Fig. 4 is a sectional view on the line 4-4 of Fig. 2, looking in the direction of the arrow.

Referring to the accompanying drawings, 1 represents a fence post to which my device is adapted to be attached when stretching wires.

The device comprises side plates 2 held in parallel relation by means of the pins 3, and on which are rotatably mounted the rollers 4. In one portion of the device, and extending through the plates 2, is a shaft 5, on which is mounted the operating lever 6, having pivotally secured thereto an actuating pawl 7, the operation of which will be later referred to. On the shaft 5, and centrally between the plates 2, is a sprocket wheel 8 to one side of which is secured a ratchet wheel 9, adapted to be engaged by a pawl 10 mounted on a pin 11 on the inner side of the adjacent side plate 2. Over the sprocket wheel 8, a sprocket chain 12 passes, and is drawn thereover by means of the pawl 7 acting on the teeth of the sprocket wheel, when the lever 6 is rocked. Pivotally mounted on the pins 3, by means of the ears 14 are the plates 13, to which are secured

the chains 15, having the hooks 16 on their ends for engagement with the post. On one end of the sprocket chain is attached a wire clamp 17, which draws the wire taut when said chain is drawn over the sprocket wheel. On one of said plates 13, the hooks are hinged to the plates 18, which are in turn fixedly secured to the plates 13. A leaf spring 19, secured to the lever 6, retains the pawl 7 in engagement with the teeth of the sprocket 8. A pin 20 passes through one of the side plates 2, and has an extension 21 on its inner end, which is adapted to engage with the pawl 10 to press the same against the ratchet wheel, 9 and when it is desired to draw the chain 12 back to grip the wire again for further stretching, the pin is turned by means of the finger piece seen in Fig. 1. On the shaft, outside of the plates, and between the securing nuts 5', and said plates, are the washers 22, which have the extensions 23, for pivotal connection of a wire grip 24. This grip 24 is used to hold the stretched wire when the grip on the sprocket chain is moved to a new portion of the wire, thus retaining the wire in a stretched position. In the opposite end of the device, I dispose a guiding device for the sprocket chain. This device consists of a plate 25 bent on itself as at 26, and has near its opposite end and formed approximately at the center thereof, a downwardly struck tongue 27, which embraces the pin 11, to support the plate at that portion. On either side of the plate 25 are formed wings 28, which are bent upwardly and inwardly toward each other, and have their vertical portions secured to the inner faces of the side plates 2. It will thus be seen that the wings 28 form the channels 29, through which the chain 12 is positively guided and prevented buckling, thus doing away with the yoke 18 and the spring 19 of my former patent referred to. The space left between the inturned portions of the wings, permits the free movement of the pawl 7, so that it can support and carry each link of the chain into the channels.

The operation of the device is simple. The parts being arranged as shown in the drawing, it is only necessary to rock the lever 6 to draw the chain over the sprocket, which stretches the wire. When it is desired to obtain a fresh grip on the wire the free end of same is passed through the grip

24, to retain the wire in stretched position, while the grip or clamp 17 is moved to a new position on the wire.

What is claimed is:

5 In a wire stretcher, a frame, a sprocket wheel on the frame, a sprocket chain engaged over the sprocket, an operating lever carrying a pawl, guide means for said chain comprising a bifurcated yoke shaped filling plate,  
10 lateral wings on one leg of the bifurcation of the plate, said wings being formed of upwardly extending portions secured to the said frame, and inwardly turned portions to provide channels for the reception and guid-

ing of said chain, the free ends of the legs of 15 said bifurcation being disposed to permit the teeth of said sprocket to pass therebetween, whereby the said pawl supports and passes each link of the stretching chain into the channels to prevent buckling of 20 said chain.

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

JOHN H. LEWIS.

Witnesses:

FRANK HARRIS,  
I. F. SMITH.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."