No. 765,190. PATENTED JULY 19, 1904.

G. F. MOYERS.

WIRE STRETCHER AND SPLICER.

APPLICATION FILED JUNE 1, 1903.

NO MODEL.

Fig. 1.

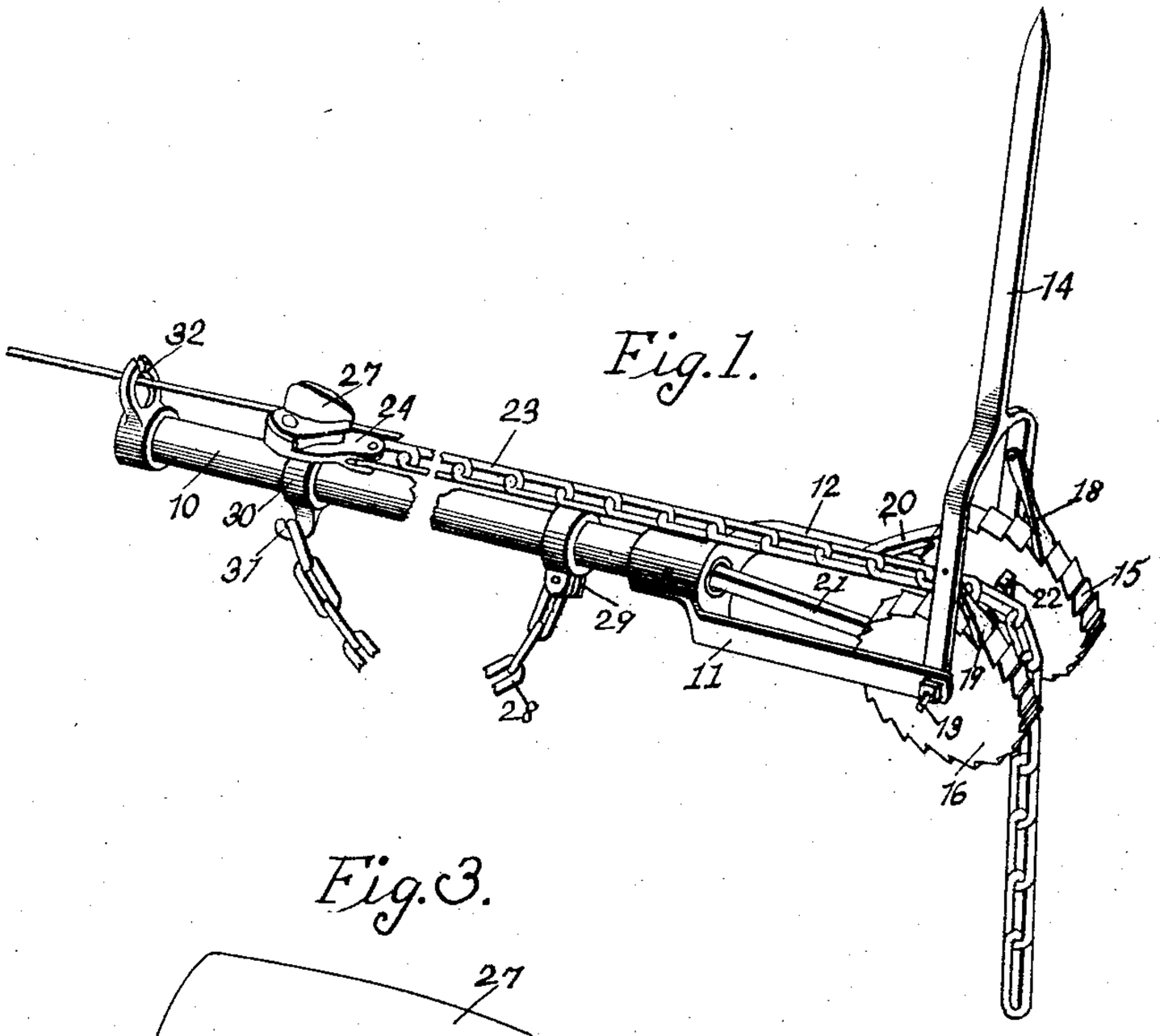


Fig. 3.

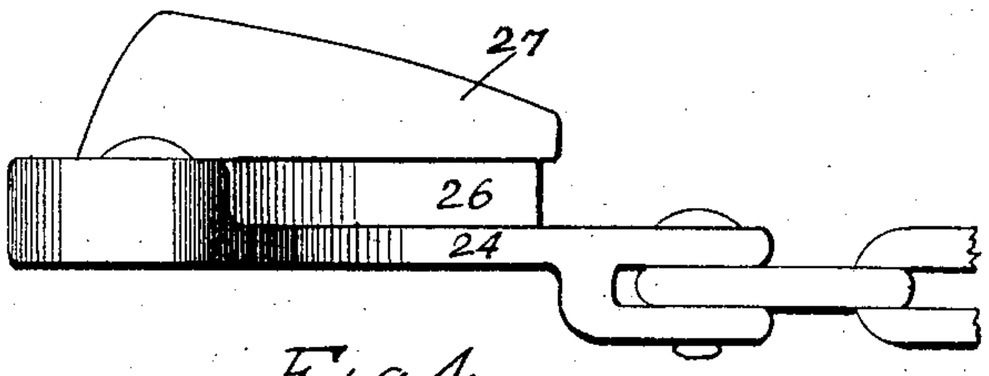


Fig 4.

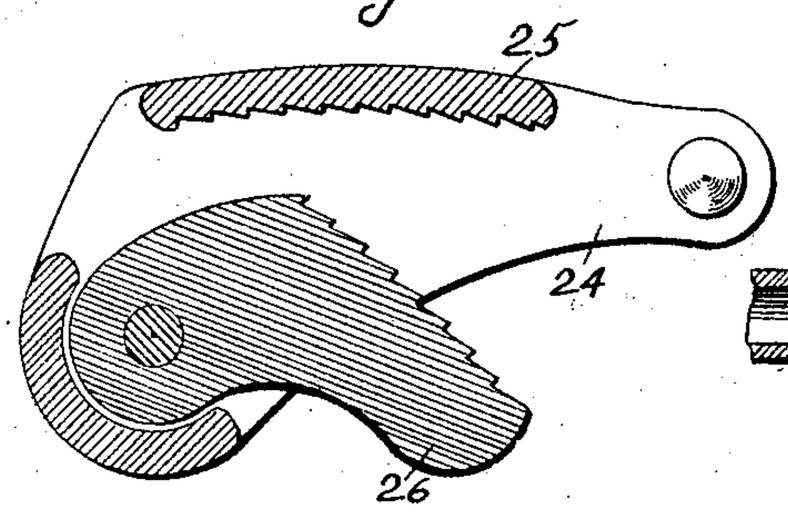
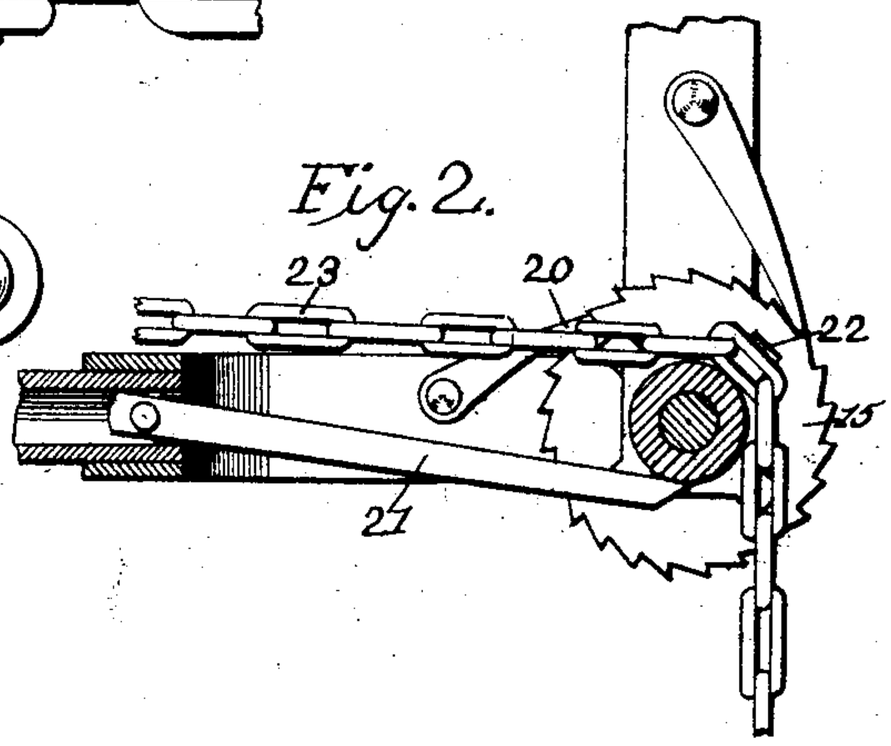


Fig. 2.



Witnesses.
K. K. Kelfer.
Co. G. Hague.

Inventor G. F. Moyers.
by Orwig & Lane Attorneys.

No. 765,190. Patented July 19, 1904.

UNITED STATES PATENT OFFICE.

GEORGE F. MOYERS, OF CARLISLE, IOWA.

WIRE STRETCHER AND SPLICER.

SPECIFICATION forming part of Letters Patent No. 765,190, dated July 19, 1904.

Application filed June 1, 1903. Serial No. 159,433. (No model.)

To all whom it may concern:

Be it known that I, GEORGE F. MOYERS, a citizen of the United States, residing at Carlisle, in the county of Warren and State of Iowa, have invented certain new and useful Improvements in Wire Stretchers and Splicers, of which the following is a specification.

The objects of my invention are to provide a wire-stretcher of simple, durable, and inexpensive construction which can be easily and readily attached to a post and the mechanism of which can be so operated as to draw the wire forwardly past the post, and thus enable the operator to tack the wire to the post.

A further object is to provide means for operating my stretcher which can be easily used and it will require a minimum amount of power to operate.

A further object is to provide a wire-stretcher which can be attached to either side of a post and yet can enable the operator to pull the wire in either direction.

It is my object, further, to provide a clamp which can be easily attached and readily detached from the wire to be stretched.

My invention consists in certain details in the construction, arrangement, and combination of the various parts of the device 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 in perspective the stretcher with the central portion of the body broken away and a portion of the chain which passes around the post broken away. Fig. 2 is a detail longitudinal sectional view of the front portion of my stretcher and is designed to show the way in which the chain forming a portion of my wire-stretcher passes between the ratchet-wheels which are mounted at the front end thereof. Fig. 3 is an elevation of the clamp which is attached to one end of my chain. Fig. 4 is a horizontal sectional view of my wire-clamp.

Referring to the accompanying drawings, I have used the reference-numeral 10 to indicate the body portion of my stretcher, which is preferably made of hollow metal tubing. Near the front end of my frame I have mounted the supports 11 and 12, said supports being attached to each other, thus forming a fork-shaped portion, which is attached at its rear end to the front end of the body portion of my stretcher. Mounted in these supports 11 and 12 and connecting them is the rotatably-mounted shaft 13. Mounted on said supporting-shaft and between the supports 11 and 12 is the forked lever 14, one of the arms of said forked portion resting against the support 11 and the other arm of said forked lever resting against the support 12. At the upper portion of the forked lever 14 is a handle used for rocking said lever.

Rotatably mounted on the rod 13 and between the arms of the forked lever 14 are the ratchet-wheels 15 and 16. On the inner face of each of these ratchet-wheels I have provided projections which extend toward each other and are substantially at right angles to the face of each of the ratchet-wheels. These projections are designed to engage the links of the chain for drawing the wire, which will be mentioned hereinafter. Attached to each arm of the forked lever 14 on the interior of said arms and immediately above the ratchet-wheels are the pawls 18 and 19, said pawls being designed to engage the ratchets of the ratchet-wheels when the upper end of the lever 14 is moved forwardly, and when the upper end of the lever is moved rearwardly the pawls will slide over the ratchets of these ratchet-wheels.

Attached to the support 12 and in engagement with the ratchet-wheel 15 is the pawl 20, said pawl being designed to hold the ratchet-wheels against rotation toward said pawl 20 and also to hold what is taken up by the lever 14 when the upper end of said lever is drawn forwardly relative to the body portion.

Attached to the body portion 10 and extending forwardly from it between the supports 11 and 12 and in engagement with the shaft 13 is the chain-releasing rod 21, the forward end of said rod being beveled, so that as the chain which is to draw the wire comes in engage-

ment with said beveled portion it will be thrown forwardly and out of engagement with the projections on the ratchet-wheels. For the sake of designating the projections a little more clearly I have referred to them by the numeral 22.

I have provided a wire-clamp-bearing chain which is designed to pass over the supporting-shaft 13 and between the projections 22 on the inner faces of the ratchet-wheels 15 and 16 in such a way that these projections will engage the links of the chain and cause the chain to be drawn forwardly when the wheels 15 and 16 are rotated by moving the upper end of the lever forwardly. This chain I have referred to by the numeral 23. Attached to one end of the chain is the wire-clamp having a body portion 24. Projecting upwardly from one edge of this body portion 24 is the ratchet-faced projection 25. Pivotally mounted on the other edge of this wire-clamp is a second ratchet-faced member 26. Extending upwardly from the ratchet-faced member 26 is the shoulder 27. This shoulder is designed to be struck by an arm or similar article for throwing the ratchet-faced member 26 out of engagement with the wire, which is designed to be passed between the ratchet-faces of the portions 25 and 26. It will be seen that as the wire is placed between the portions 25 and 26 of the wire-clamp that the portion 26 will swing toward the wire, and it will be held firmly between these portions, and as the chain is drawn forwardly by locking the lever 14 the wire-clamp attaching the chain and the wire, to which the said wire is also attached, will be drawn forwardly, provided the body portion 10 is attached to a post.

Slidingly mounted on the body portion 10 of the wire-stretcher is the chain 28, said chain being attached to the slidingly-mounted link 29. I have also provided a slidingly-mounted link 30 on said body portion, said link having a hook 31 extending outwardly from it and designed to allow a link of the chain 28 to be passed over the hook to hold the wire-stretcher in position to a post or other object. I have provided a wire-guide 32 near the upper rear portion of my stretcher and firmly attached to the body portion 10. This link is split at its upper portion to allow the wire to be passed into it.

My wire-stretcher is designed to be so attached to a post that the wire will be drawn past the post to which the stretcher is attached, and thus enable the operator of the wire-stretcher to nail the wire to the same post as that upon which the wire-stretcher is mounted. This is due to the fact that the point of attachment of the wire-stretcher to the post is behind the draft device. In the previous stretchers it has been common to fasten the wires to the post behind that one to which the stretcher is attached, and it is almost essential that there be two men in putting up the ordinary wire fence.

In practical use and assuming that the operator desires to set up a wire fence on posts which have already been set in the ground he attaches one end of the wire to the first post. Then he passes the chain 28 around the next post in consecutive order away from the one to which the wire has been attached and hooks one of the links of said chain 28 over said hook 31. Then he passes this wire into the guide 32 and attaches the wire-clamp to said wire. He then passes the chain 23 between the projections 22 on the ratchet-wheels and rotates said wheels by drawing the upper end of the lever 14 forwardly. This causes the wire to be drawn forwardly and stretches it from its point of attachment, so that it can be easily and readily attached to a post to which the wire-stretcher is fixed.

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

1. In a device of the class described, the combination of a body portion, ratchet-wheels rotatably mounted at the front of said body portion, projections on the inner faces of said ratchet-wheels, a pawl-bearing lever mounted outside of said ratchet-wheels for rotating them, a wire-guide mounted on said body portion and at the rear end of it, a wire-clamp-bearing chain designed to pass between said ratchet-wheels, adjustable means for attaching the device to a post and means attached to the body portion for throwing said chain out of engagement with said projections as the ratchet-wheels are rotated, for the purposes stated.

2. In a device of the class described, the combination of a body portion, supports attached near the front end of said body portion, a supporting-shaft mounted between said supports, a lever mounted on said shaft, ratchet-wheels mounted on said shaft and between said supports, projections on the inner faces of said ratchet-wheels, pawls mounted on said lever for engaging said ratchet-wheels, a pawl mounted on one of said supports for engaging said ratchet-wheels and preventing them from rotating in one direction, a chain adjustably mounted on the body portion designed to be passed around a post to attach the device to the post, a wire-clamp-bearing chain designed to pass between said ratchet-wheels and be engaged by said projection as the wheels are rotated, a wire-guide mounted near the rear end of the body portion of my device, for the purposes stated.

3. A wire-stretcher comprising in combination a body portion, ratchet-wheels mounted at the front of said body portion, projections on said ratchet-wheels, a wire-clamp-bearing

chain, designed to be passed between and engaged by said projections, means for rotating said ratchet-wheels in one direction, means for preventing the ratchet-wheels from being rotated in the opposite direction, means for attaching the device to a post, a pivotally-mounted chain-releasing rod attached to the body portion, a wire-guide mounted near the rear end of the body portion for the purposes stated.

GEORGE F. MOYERS.

Witnesses:
J. RALPH ORWIG,
W. R. LANE.