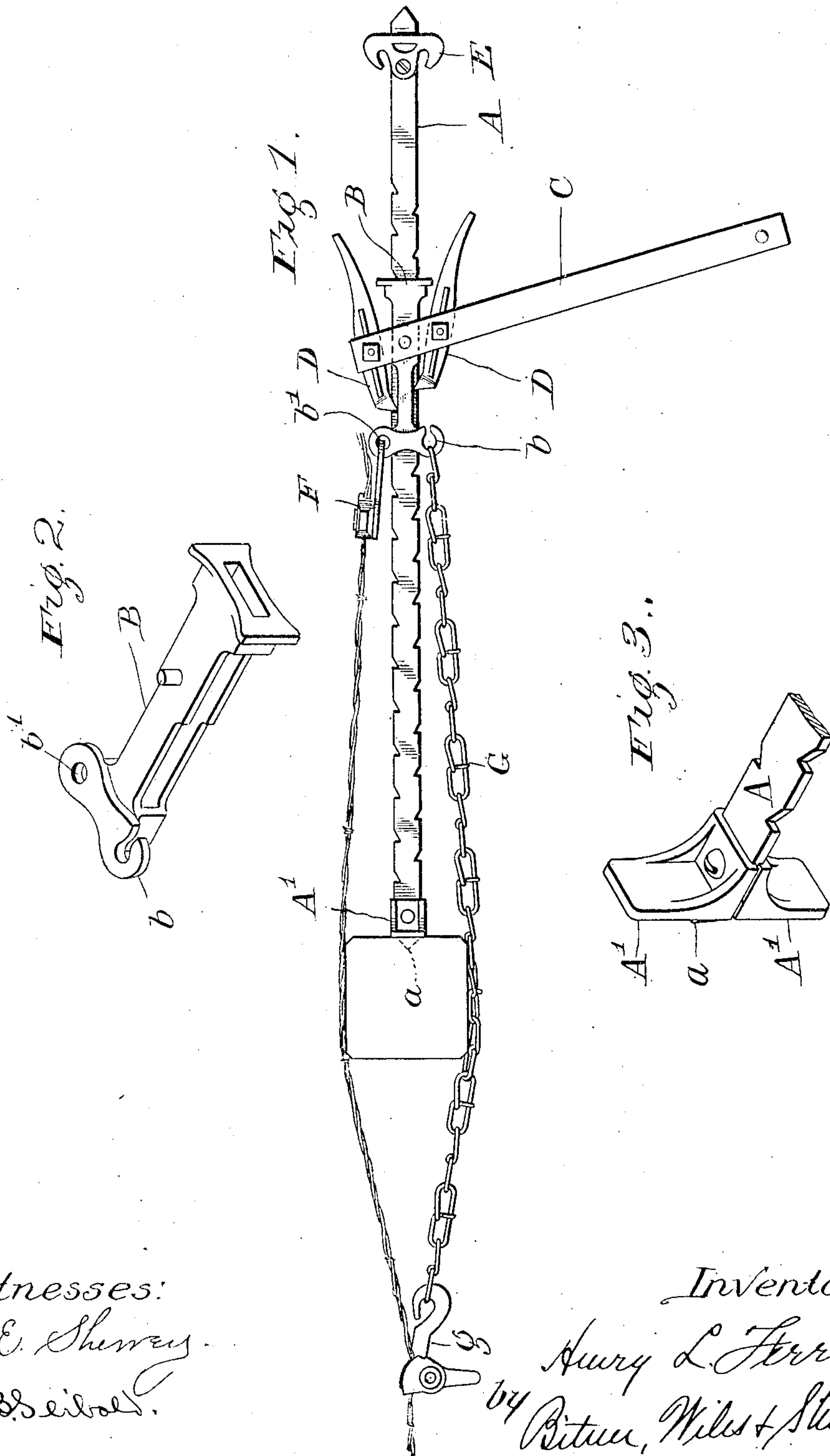


No. 844,718.

PATENTED FEB. 19, 1907.

H. L. FERRIS.  
WIRE STRETCHER.  
APPLICATION FILED MAY 13, 1905.



Witnesses:  
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# UNITED STATES PATENT OFFICE.

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## WIRE-STRETCHER.

No. 844,718.

Specification of Letters Patent.

Patented Feb. 19, 1907.

Application filed May 13, 1905. Serial No. 260,210.

*To all whom it may concern:*

Be it known that I, HENRY L. FERRIS, a citizen of the United States of America, residing at Harvard, in the county of McHenry and State of Illinois, have invented certain new and useful Improvements in Wire-Stretchers, of which the following is a specification.

My invention relates to improvements in wire-stretchers, and is fully described and explained in this specification and shown in the accompanying drawings, in which—

Figure 1 is a top plan of my improved device in use. Fig. 2 is a perspective view of the traveling slide, and Fig. 3 is a perspective view of the front end of the ratchet-bar.

In wire-stretching devices of various sorts the device ought to work to secure the best results in two positions with respect to the post toward which the wire is being pulled. In laying a long length of wire for fencing an ordinary stretcher is attached to one of the posts and secured to the wire in front of said post, whereupon the stretcher is operated to pull up the wire, and the wire is nailed to the post next in front of the one to which the stretcher is secured. In such cases the common means for securing a stretcher to the post has been a chain passed around the post and engaging the stretcher. When, however, the corner of the field to be fenced is reached, it becomes necessary, or at least desirable, to stretch past the post to which the stretcher is secured, so that the wire can be drawn tight throughout its entire length. When working in this position, an entirely different problem as to supporting the stretcher presents itself, for the stretcher exerts a pushing strain on the post instead of a pulling strain.

My invention is designed to furnish a device which will work interchangeably both in front of and behind the post, the said device being simple, cheap, efficient, and, furthermore, of the same general type as a well-known stretcher now in use which has been thoroughly tested commercially and finds a ready sale.

Referring to the drawings, A is a ratchet-bar upon which is mounted a longitudinally-movable slide B, to which is pivoted between its ends a handle C. The handle C carries pawls D, which are arranged to engage op-

posite sides of the ratchet-bar as the lever is reciprocated. The rear end of the ratchet-bar carries a double hook E for attachment with a chain, by means of which the stretcher can be secured upon the post when operating in the ordinary manner. So much of the construction is old and well known and needs no further description.

The front end of the ratchet-bar A is provided with a point *a*, which can be forced into the wood of a post to prevent lateral displacement of the end. Two angle-pieces A' are secured to the forward end of the ratchet-bar just behind this sharpened point to give a flat bearing on the post. The front end of the slide B is provided with a transverse portion, one end of which is formed into a hook *b* for the attachment of a chain and the other end of which is formed into an eye *b'* to receive a wire-clamp F of ordinary form. G indicates a chain of ordinary construction, said chain carrying at one end a wire-clamp *g*. This completes the description of the mechanical portion of my device, and from such description its operation can readily be understood.

In working with the stretcher in front of the post the chain G is secured to one end of the hook E, passed around the post, and secured to the other point of the hook. The fence-wire is then secured to the wire-clamp F and drawn up in the ordinary way. When it is desired to draw two ends of wire together to form a splice, the chain G is connected to the hook E at one end, and a strand of the wire is connected to the wire-clamp *g* and the other strand to the clamp F. When it is desired to apply the stretcher behind the post—as, for instance, at the corner-post of the field or in any other position where it is desirable to fasten the wire to the same object which supports the stretcher—the parts are arranged as in Fig. 1, with the sharp end of the ratchet-bar A against the post. The wire is pulled up by hand until reasonably tight and secured to the clamp F. The chain G is secured to the hook *b*, passed around on the opposite side of the post from the wire, and the clamp *g* is engaged with the wire. The device is then operated in the ordinary manner and the wire pulled up; but it will be seen that the pull on the wire is distributed approximately equally between the chain G



and that portion of the wire between the clamp *g* and the clamp *F*. In this way a balanced pull is maintained on the stretcher, which prevents its being displaced in the plane of the wire and chain. While I prefer to utilize that portion of the wire between the clamps as the balancing means, it is obvious that other means than this wire might be employed, the object being merely to provide some balancing means for the chain, which balancing means passes upon the opposite side of the post therefrom. Displacement of the stretcher in the other plane is prevented by the angle members *A'* and their engagement with the post.

I realize that considerable variations are possible in the details of this construction without departing from the spirit of my invention, and I do not intend, therefore, to limit myself to the specific form herein shown and described.

I claim as new and desire to secure by Letters Patent—

1. The combination with a stretcher-bar adapted to bear against a support, and to extend substantially in the line of the wire to be stretched, of a movable slide carried by the bar, a chain adapted to pass on one side of the support and having one end secured to the slide and the other end adapted to be connected to the wire to be stretched, and a wire passing upon the opposite side of the support and serving to transmit a balanced

pull whereby the bar is maintained in proper position.

2. The combination with a stretcher-bar adapted to bear against a support and to extend substantially in the line of the wire to be stretched, of a movable slide upon the bar, a chain having one end attached to the slide and having a clamp upon the other end, said chain being adapted to be passed on one side of the support and to be connected to the wire to be stretched, and balancing means for the chain passing upon the opposite side of the support and extending to the slide.

3. The combination with a stretcher-bar adapted to bear against a support and to extend substantially in the line of the wire to be stretched, of a slide movable upon the bar, a chain having one end connected to the slide and having at its opposite end a clamp, said chain being adapted to be passed upon one side of the support and secured to the wire in advance thereof, the wire to be stretched being passed upon the opposite side of the support and secured to the slide.

In witness whereof I have signed the above application for Letters Patent, at Harvard, in the county of McHenry and State of Illinois, this 5th day of May, A. D. 1905.

HENRY L. FERRIS.

Witnesses:

C. F. REYNOLDS,  
W. S. DODGE.