

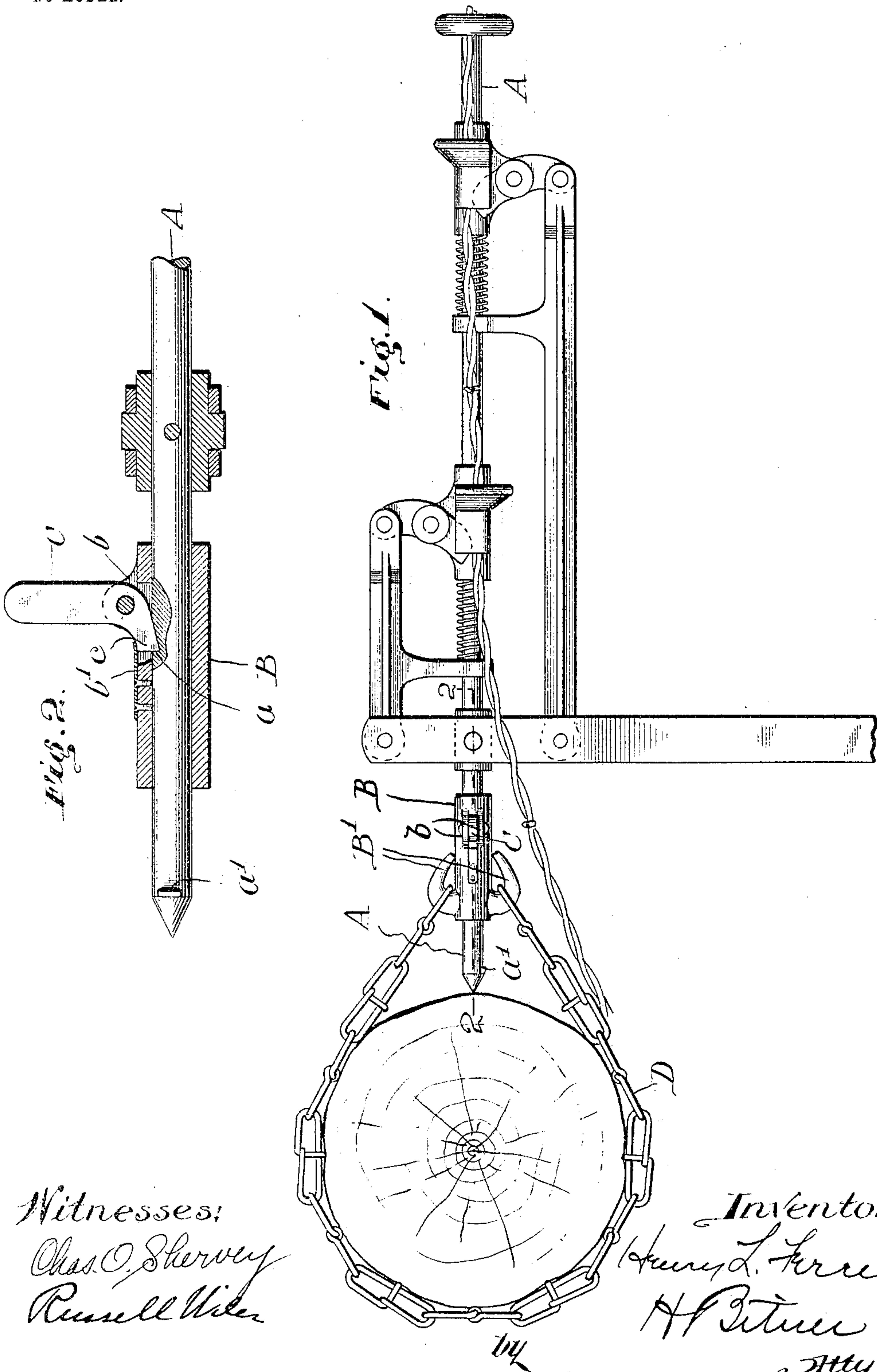
No. 775,080.

PATENTED NOV. 15, 1904.

H. L. FERRIS.
WIRE STRETCHER.

APPLICATION FILED DEC. 26, 1903.

NO MODEL.



Witnesses:
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UNITED STATES PATENT OFFICE.

HENRY L. FERRIS, OF HARVARD, ILLINOIS, ASSIGNOR TO HUNT, HELM, FERRIS & COMPANY, OF HARVARD, ILLINOIS, A CORPORATION OF ILLINOIS.

WIRE-STRETCHER.

SPECIFICATION forming part of Letters Patent No. 775,080, dated November 15, 1904.

Application filed December 26, 1903. Serial No. 186,624. (No model.)

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 certain new and useful improvements in wire-stretchers; and its object is to produce a device of this class which shall have certain advantages which will appear fully and at large in the course of this specification.

To this end my invention consists in certain novel features of construction, which are clearly illustrated in the accompanying drawings and described in this specification.

In the aforesaid drawings, Figure 1 is an elevation of my improved wire-stretcher in its normal position when in use; and Fig. 2 is a section in the line 2 2 of Fig. 1, showing the same upon a larger scale.

Referring to the drawings, A indicates the supporting-rod of the wire-stretcher upon which the parts move. The wire-stretcher mechanism is illustrated at the right of Fig. 1; but no detailed description thereof will be necessary, for the reason that it is similar in all particulars to the wire-stretcher illustrated in my application for patent on wire-stretcher now pending in the Patent Office, filed July 11, 1903, and allotted Serial No. 165,037. My present invention relates to a device for readily releasing the wire-stretcher from the chain by which it is secured to the post.

In operation the ordinary wire-stretcher is secured to a post, the wire is stretched and nailed in place, and it then becomes desirable to release the wire-stretcher. As a matter of fact, with the ordinary wire-stretcher such a degree of tension upon the wire and stretcher is frequently obtained that it becomes very difficult, if not impossible, to release the stretcher, and in many instances when the wire is stretched very tightly it becomes necessary to cut the wire and lay another strand in order to remove the stretcher from position. It therefore becomes desirable to provide some means by which the end of the

stretcher secured to the post can be released from the post without moving the stretcher toward the post to gain slack in the supporting-chain. For this purpose I mount upon the rod A a longitudinally-movable sleeve B, which is provided with ears *b* and which is provided with a perforation between these ears. Between the ears *b* is pivoted a trigger C, the point *c* of which engages with a corresponding notch *a* in the rod A. A spring *b'* engages with this trigger to hold the point *c* thereof normally in contact with the rod A. A stop *a'* is provided at the left-hand end of the rod A, as seen in the drawings, for the purpose of limiting the movement of the sleeve B.

In the operation of a wire-stretcher having my improved device the trigger is set in position, as shown in Fig. 2, with its point in engagement with the notch in the rod. The sleeve, it will be seen, bears hooks *B'*, to which the chain is secured. The chain (indicated by D) is passed about the post, and the wire is then stretched and tightened in the ordinary way, the only means of connection between the sleeve and the rod being that resulting from the engagement of the trigger on the sleeve with the notch in the rod. When the wire has been pulled up to any desired tension, it is nailed in place in the ordinary way, and the handle of the trigger C is then swung to the right from the position seen in Fig. 2. This raises the point of the trigger out of the notch in the rod and permits the sleeve to move along the rod until it strikes the stop *a'*. This loosens up all the parts, so that the stretcher can be readily removed. Sufficient slack is given to enable the chain to be released and the clamp-jaws to be loosened. Afterward the removal of the stretcher is perfectly simple.

It will be evident that a device of this sort can be applied to stretchers of any sort, the particular mechanism by which the wire is tightened being absolutely of no importance, and it is evident also that great variations in the construction of the releasing device can be made, and in view of the possibility of these variations I do not intend to limit my-

self to the specific form herein shown and described.

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

5 1. In a device of the class described, the combination with an anchor and a wire-tightening device, of means provided with an operating-handle and independent of the wire-tightening devices for releasing the tension
10 upon the wire.

2. In a device of the class described the combination with means for tightening the wire and means for securing the tightening devices in position, of a device provided with an operating-handle interposed between the securing and tightening devices and adapted to connect the same together and release one from the other without substantial movement of the
15 tightening device.

20 3. In a device of the class described, the combination with tightening devices, of a chain adapted to be secured to a stationary support and means provided with an operating-handle interposed between the chain and the tightening devices and adapted to secure the chain to
25 the tightening devices and release the same therefrom without substantial movement of

the tightening devices toward the point to which the chain is secured.

4. In a device of the class described, the combination with a rod and wire-tightening devices supported thereon, of a sleeve upon the rod, means for securing a chain to the sleeve, and a trigger adapted to connect the sleeve with the rod and disconnect the same
35 therefrom without substantial movement of the sleeve along the rod.

5. In a device of the class described, the combination with a rod and wire-tightening devices supported thereon, of a sleeve movable upon the rod, means for securing a chain to the sleeve, ears upon the sleeve, a trigger pivoted between the ears and adapted to engage with a suitable notch in the rod, and a spring adapted to hold the trigger normally
45 in contact with the rod.

In witness whereof I have signed the above application for Letters Patent at Harvard, in the county of McHenry and State of Illinois, this 8th day of December, A. D. 1903.

HENRY L. FERRIS.

Witnesses:

C. J. HENDRICKS,
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