

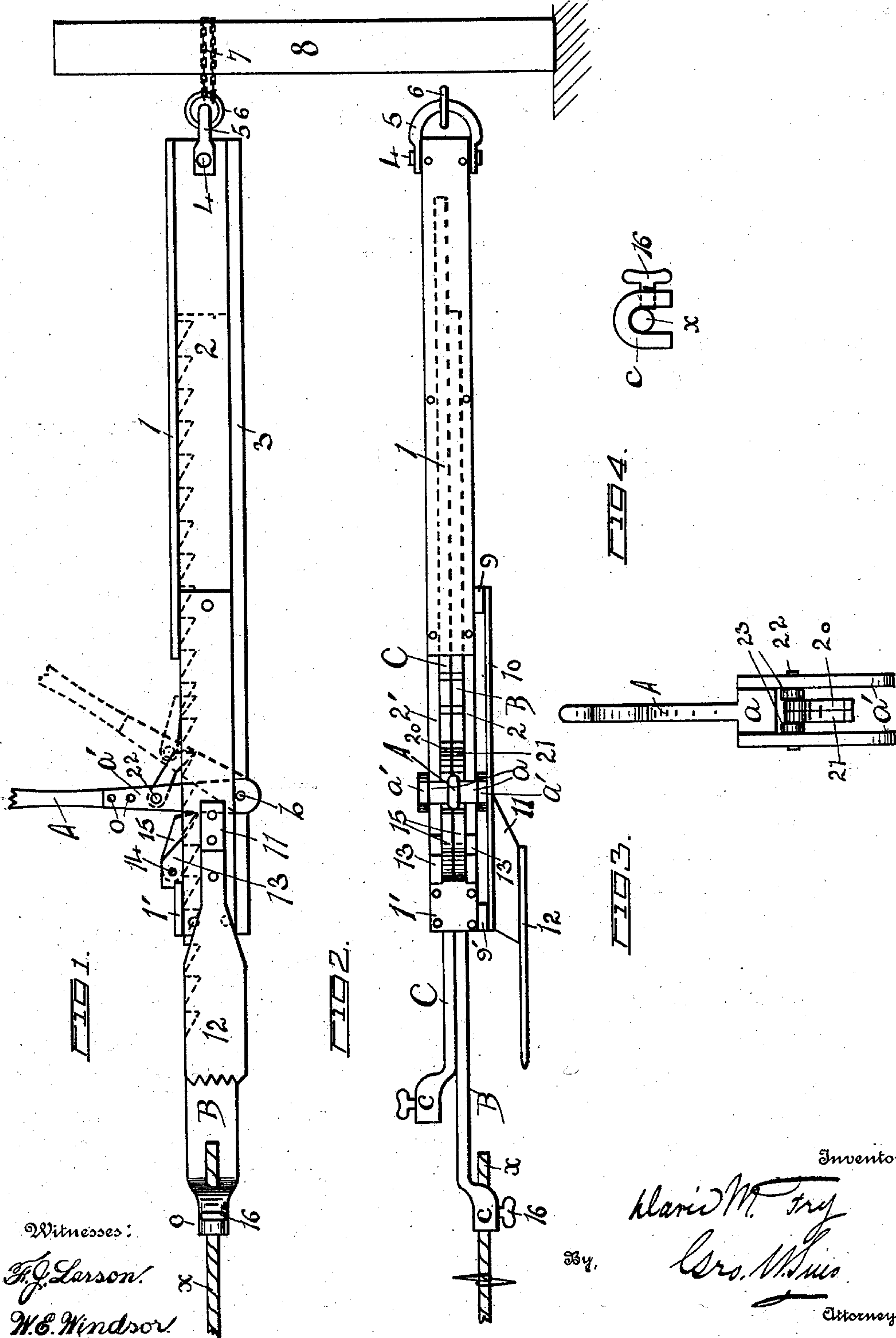
No. 750,273.

PATENTED JAN. 26, 1904.

D. M. FRY.
WIRE STRETCHER.

APPLICATION FILED JUNE 20, 1902.

NO MODEL.



Witnesses:
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UNITED STATES PATENT OFFICE.

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WIRE-STRETCHER.

SPECIFICATION forming part of Letters Patent No. 750,273, dated January 26, 1904.

Application filed June 20, 1902. Serial No. 112,501. (No model.)

To all whom it may concern:

Be it known that I, DAVID M. FRY, residing at Ulysses, in the county of Butler and State of Nebraska, have invented certain useful Improvements in Wire-Stretchers; and I do hereby declare that the following is a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to a new and novel improvement in a wire-stretcher.

The object of my invention is to provide a wire-stretcher so arranged that the wire to be stretched may be engaged and stretched in such a manner that the stretcher is continually in engagement with the wire, so that at no time is the wire released to allow any slack. In the accompanying drawings I have shown in Figure 1 a side view of a wire-stretcher embodying my invention with portions removed. Fig. 2 shows a top view of my wire-stretcher. Fig. 3 shows a front view of the operating-handle, while Fig. 4 shows an end detail of the clamp used in my invention.

My invention embodies, essentially, a box-shaped housing, comprising the bottom 3, the two similar sides 2 and 2', the cover 1, and the end brace 1', as shown in Figs. 1 and 2. This forms a housing which is open at the ends and partially open at the top. Snugly working within this housing are two rack-bars B and C, which slide side by side within this open-ended housing, and each rack-bar is provided in front with a U-shaped clamp *c*, (shown in end view in Fig. 4,) into which the wire to be stretched is inserted and then clamped by means of an ordinary clamping-screw 16. Passing transversely across the top of the housing and extending through the ears 13 is a pin 14, which pin mounts and supports the two pawls 15, as shown more clearly in Fig. 1, and these pawls are normally in engagement with the rack-bars B and C. Secured to the bottom 3 is a striding operating-lever held by means of the pin *b*, as is shown in Fig. 1, and this striding operating-lever is provided with the two side members *a'*, as is shown

in Fig. 3, which are secured to a head *a*, forming part of the handle A, as shown. Extending transversely across the side members *a'* is a pin 22, supporting the two pawls 20 and 21, working between the washers 23, and these pawls are arranged and adapted to engage the racks of the bars B and C, as is disclosed in Figs. 1 and 2. These pawls fit loosely between the washers and are normally in engagement with their respective racks.

It will be noticed that the housing is provided at one end with the pin 4, supporting the shackle 5, to which is secured a ring 6, supporting a chain 7, by means of which the wire-stretcher is adjustably and removably secured to a suitable fence-post 8.

Now in stretching an ordinary fence-wire the operation of my invention would be as follows: The pawls 15 would normally be in engagement with their racks. Now one of these bars B would be moved inward as far as possible and the other drawn outward as far as possible. In order to draw these rack-bars outward, the pawls 15 will of course have to be raised to permit the escape of the rack-bars below them. The fence-wire—as *w*, for instance—would then be placed below the U-shaped clamp *c*, when the wire would be secured by means of the screw 16. The handle A would then be operated to feed forward the rack-bar to which the fence-wire is secured. In doing this the operator would hold up and support the pawl 20, adapted to actuate the opposite rack-bar, so that but one rack-bar might be actuated, as the one B, for instance. After this rack had been moved toward the post 8 its fullest distance the rack-bar C would be shoved outward as far as possible, and the fence-wire would then be inserted into the clamp *c*. The remaining clamp *c* would then be released and the pawl 21 held upward while the rack C was being fed backward to again take up the slack and tighten the wire. From this it will be seen that the wire is taken hold of intermittently by the jaws and that the fence-wire is always in engagement with one of the rack-bars, which are prevented from working outward by means of the pawls 15.

When the wire is stretched at a corner fence-

post, the stretcher is held in position by means of the chisel-faced member 12, which is placed against the fence-post, so that the wire may be stretched to the corner-post and fastened.

5 This chisel member 12 is secured by the web 11, fastened to a bar 10, secured to the side 2, the washers 9 and 9' being interposed to permit the movement of the member *a'*. It is of course understood that ordinarily this wire-

10 stretcher is secured to a suitable post by means of the chain 7. When the wire is secured to the last or end post, in order to get a proper tension the stretcher-housing is held by the operator, the chisel member being used as a ful-

15 crum when the wire is stretched and secured.

This wire-stretcher is made of suitable sizes to accommodate the various thicknesses of wire, and,

20 Having thus described my said invention, what I claim as new, and desire to secure by United States Letters Patent, is—

1. The combination with an open-ended housing, of two rack-bars held within said housing, a clamp secured to each rack-bar, two

25 pawls secured to said housing each engaging one of said rack-bars, a pivoted handle secured to said housing, pawls secured to said handle to engage said rack-bars, and a forwardly-projecting extension secured to said housing, as

30 and for the purpose set forth.

2. In a wire-stretcher, the combination with an elongated open-ended housing provided with an opening in its top, of a pair of rack-

35 bars slidably mounted in said housing and having their teeth directed toward said opening, a pair of pawls pivoted to the housing at one end of said opening and each engaging the

teeth of one of the rack-bars, said rack-bars having clamps at their outer ends for engag-

40 ing a line-wire, a bifurcated operating-handle straddling the housing above the opening of the latter and pivoted to the housing, pawls pivoted to said handle and engaging the rack-

45 bars for moving the latter within the housing, and a forwardly-projecting extension secured to the housing and serving to anchor the stretcher to a post.

3. In a wire-stretcher, the combination with an elongated open-ended housing provided with an opening in its top, of a pair of rack-

50 bars slidably mounted in said housing and having their teeth directed toward said opening, a pair of pawls pivoted to the housing at one end of said opening and each engaging the teeth of one of the rack-bars, said rack-bars

55 having clamps at their outer ends for engaging a line-wire, a bifurcated operating-handle straddling the housing above the opening of the latter and pivoted to the housing, pawls

60 pivoted to said handle and engaging the rack-bars for moving the latter within the housing, a longitudinally-extending bar arranged at the side of the housing but spaced there-

65 from, the operating-handle being interposed between said bar and the housing, and a forwardly-projecting extension secured to said bar and serving to anchor the stretcher to a post.

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

DAVID M. FRY

Witnesses:

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O. D. COOK.