J. W. A. McGILVREY.

WIRE STRETCHER.

APPLICATION FILED OCT. 16, 1911.

1,022,102. Patented Apr. 2, 1912.

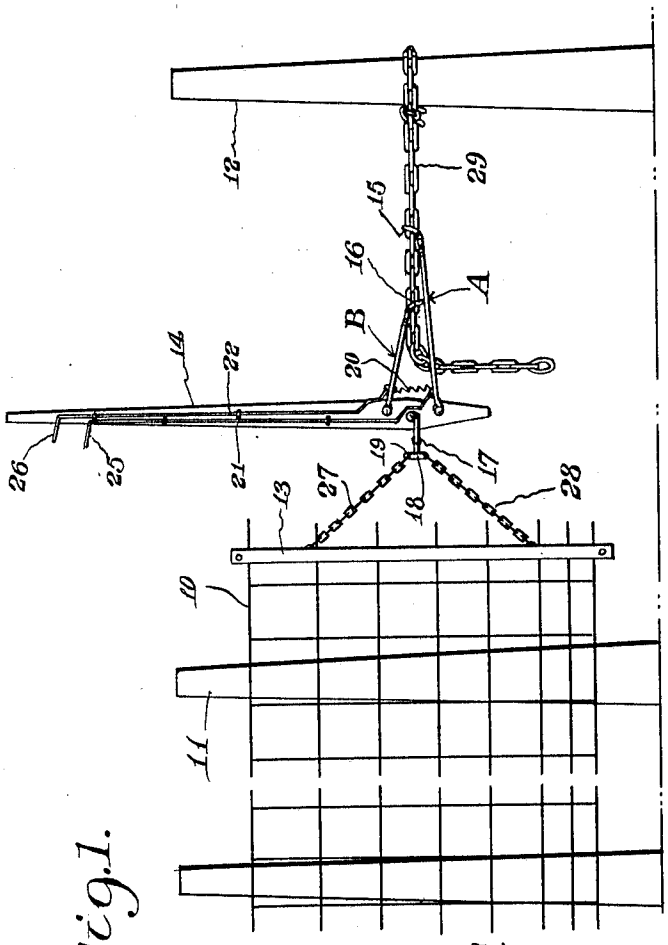

Fig. 1.

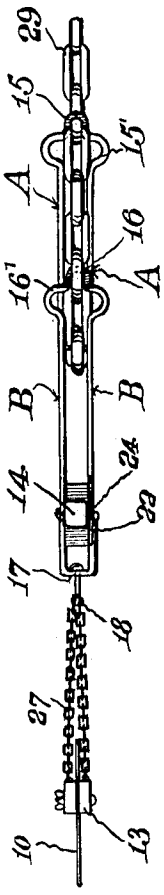

Fig. 2.

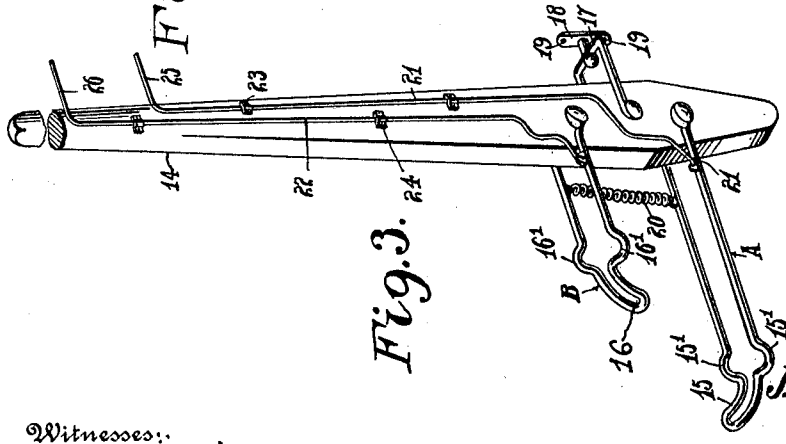

Fig. 3.

Witnesses:

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UNITED STATES PATENT OFFICE.

JOHN W. A. McGILVREY, OF ALBIA, IOWA.

WIRE-STRETCHER.

1,022,102. Specification of Letters Patent. Patented Apr. 2, 1912.

Application filed October 16, 1911. Serial No. 654,949.

To all whom it may concern:

Be it known that I, JOHN W. A. McGILVREY, a citizen of the United States, residing at Albia, in the county of Monroe, State of Iowa, have invented certain new and useful Improvements in Wire-Stretchers; and I do hereby declare the following to be 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.

This invention relates to wire stretchers.

The object of the invention resides in the provision of a wire stretcher which will be easy of operation, efficient in use, simple in construction and which may be manufactured and sold at a comparatively small cost.

With the above and other objects in view, the invention consists in the details of construction and in the arrangement and combination of parts to be hereinafter more fully described and particularly pointed out in the appended claim.

In describing the invention in detail, reference will be had to the accompanying drawings wherein like characters of reference denote corresponding parts in the several views, and in which—

Figure 1 is a side elevation showing the invention applied. Fig. 2, a plan view of what is shown in Fig. 1. Fig. 3, a detail perspective view of the operating lever of the stretcher and its associated parts.

Referring to the drawings 10 indicates a wire fence to be stretched, 11 the fence post to which the wire fence is to be attached after stretching, and 12 a fence post disposed adjacent the post 11. The wire fence 10 is held by a clamp 13 which is attached to the stretching device as will hereinafter appear.

The stretcher proper comprises a lever 14 having pivoted thereto adjacent its lower end a U-shaped pawl A, while another U-shaped pawl B is pivoted to said lever between the upper end of the latter and the pawl A, said pawl being directed on the same side of the lever 14. The pawl is relatively longer than the pawl B and each of said pawls is formed of a single piece of metal bent into U-shape embracing the lever 14. The pawl A has its arms bent outwardly and inwardly at an intermediate point as at 15′ while the free end of said pawl has the arms thereof contracted and curved upwardly as at 15. Likewise the pawl B has its arms bent outwardly and inwardly at an intermediate point as at 16′ while the free end of said pawl B has the arms thereof contracted and curved downwardly as at 16. Pivoted to the lever 14 between the pawls A and B and directed on the opposite side of said lever is a U-shaped anchor clevis 17 the bight portion of which has swiveled thereto a plate 18 having a pair of openings 19 therein. The pawls A and B are connected by a spring 20 which normally force said pawls away from each other for a purpose that will presently appear. In order to move the pawls A and B toward each other against the influence of the spring 20 when desired there is provided operating rods 21 and 22 slidable respectively in guides 23 and 24 on the lever 14. The lower ends of the rods 21 and 22 are pivotally connected respectively to corresponding arms of the pawls A and B while the upper ends of said rods terminate at the upper end of the lever 14 in the handles 25 and 26 respectively.

In operation of the stretcher the clamp 13 is secured to the anchor clevis by cables 27 and 28 having one end fastened to the upper and lower ends of the clamp respectively and their other ends secured in respective openings 19 of the plate 18. Attached to the fence post 12 is a link chain 29, the links of which are the size to pass freely between the arms of the pawls A and B at the curved portions 15′ and 16′ thereof but which cannot pass through the contracted curved portions 15 and 16 of said pawls. When the chain is directed through the pawls A and B the spring 20 will throw said pawls away from each other and force certain links of the chain into the contracted curved portions 15 and 16. When the chain and pawls are in this relation the upper end of the lever 14 is oscillated and this will cause the pawls A and B to successively advance upon the chain 29 and in that manner the chain is drawn taut and the fence 10 properly stretched. To disengage the pawls A and B from the chain it is only necessary to move same toward each other through the medium of the rods 21 and 22 as previously referred to.

What is claimed is:

In a device of the character described, a link chain adapted to be anchored, pulling means coöperating with said chain, said means comprising an operating lever, a pair of pawls pivotally connected to said lever

at spaced points thereon and directed at the same side thereon, one of said pawls being relatively longer than the other and each comprising a single length of metal bent U-shape and having its arms bent outwardly and inwardly at corresponding points in their lengths, said arms being contracted and curved at their free ends and a spring disposed between said pawls constantly tending to move the free ends thereof away from each other, and said chain passing between the arms of each pawl.

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

JOHN W. A. McGILVREY.

Witnesses:
J. S. MOON,
G. G. ELDER.