

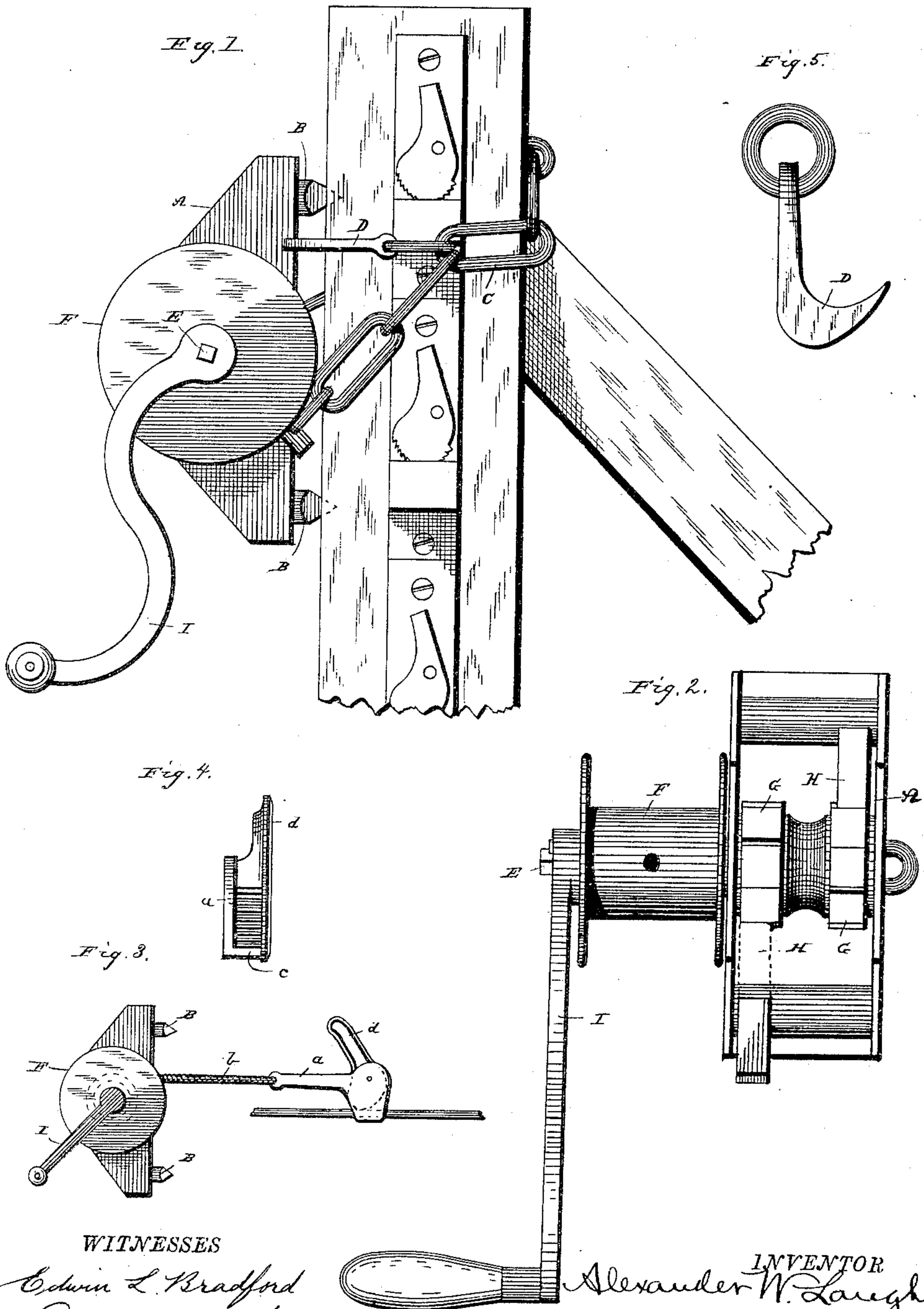
(No Model.)

A. W. LAUGHLIN.

WIRE STRETCHER.

No. 325,095.

Patented Aug. 25, 1885.



WITNESSES

Edwin L. Bradford
J. R. H. Hunter

INVENTOR

Alexander W. Laughlin,

By *Trubman Hemmes*
his Attorneys.

UNITED STATES PATENT OFFICE.

ALEXANDER W. LAUGHLIN, OF FAIRFIELD, IOWA.

WIRE-STRETCHER.

SPECIFICATION forming part of Letters Patent No. 325,095, dated August 25, 1885.

Application filed June 8, 1885. (No model.)

To all whom it may concern:

Be it known that I, ALEXANDER W. LAUGHLIN, a citizen of the United States, residing at Fairfield, in the county of Jefferson and State of Iowa, have invented certain new and useful Improvements in Wire-Stretchers, of which the following is a specification, reference being had therein to the accompanying drawings.

10 This invention relates to certain new and useful improvements in wire-stretchers; and it has for its object to provide a wire-stretcher constructed to be easily attached to and detached from a fence-post, and adapted to stretch the wires by drawing them in either direction, yet always to present the drum next to the side of the post to which the wires are connected.

15 In the accompanying drawings, forming a part of this specification, and on which similar letters of reference indicate the same or corresponding features, Figure 1 represents a side elevation of a portion of a fence-post having my improved wire-stretcher applied thereto; 20 Fig. 2, a view looking at the face of the wire-stretcher; Fig. 3, a side elevation of the stretcher, showing the means for grasping a wire between the ends; Fig. 4, a detached edge view of the eccentric lever, and Fig. 5 a side view of the grasping-hook.

25 The letter A designates a metallic plate provided with spurs or points B, adapted to be embedded into a post. This plate is also provided with a binding-chain, C, having one or 30 more hooks, D, so that by partly embedding the spurs into the post and passing the chain around the latter, and then driving the points of the hooks somewhat into the post, the stretcher will be connected thereto. The plate 35 A is bent up at either side so as to form cheek-pieces, in which bearings are made for the drum-shaft E. This shaft is integrally constructed with a drum, F; or the latter may be made separately and secured to the shaft, and 40 is provided with a hole for attaching the wire to be stretched thereto. Ratchet-wheels G are rigidly mounted on the shaft E, the teeth in which are disposed in opposite directions. Pivotally mounted in bearings formed in the 45 cheek-pieces are pawls H, adapted to engage, respectively, with the ratchets G. Thus it will be seen that the drum, by means of the crank

I, may be operated in either direction, and yet held against an opposite rotation by either the one or the other of said pawls, only one 55 being used at a time, however. As a result of this construction, it will readily be seen that a stretcher may be mounted upon a post and applied to stretching wires in either direction, the drum always being on the side of 60 the post to which the wires are connected.

In using this stretcher I connect the wires of a fence to the starting-post in any convenient manner, and having unreeled the wire until it reaches the stretching-post, I slip the 65 wire into engagement with a fastener, (secured to the post,) and then cut it shortly beyond the post. The stretcher having been applied to the post in the manner above stated, the end of the wire so cut is inserted into the hole 70 in the drum. This drum is then rotated by means of a crank, and the wires drawn until the slacks and kinks in the same are destroyed, when the wire is made secure to the post. The act of stretching the wires also 75 causes the spurs to embed themselves more deeply into the post, thus effecting a more positive connection between the stretcher and the post by the operation of using the stretcher.

The ability of the stretcher to be applied to 80 posts so as to stretch wires in either direction is due to the drum being placed to one side of the plate and being combined with ratchets having teeth disposed in opposite directions and each having a pawl. 85

It is sometimes desirable to stretch the wires without cutting the same from the body of the wire contained on the reel. For this purpose I employ a clasp, consisting of the arm *a*, having an eye at one end, to which is connected a 90 suitable rope, *b*, secured to the drum. The other end of this arm is provided with a lug, *c*, and pivotally connected with the said end is an eccentric binding-lever, *d*, having serrations on its eccentric end, and a flange, *e*, 95 which extends across the lug *c*, to prevent the wire from slipping out of place. As seen in Fig. 3, the rope is connected with the drum by passing it through a hole in the same, and the fence-wire is slipped between the lug *c* 100 and the eccentric end of the lever *d*. The crank is then operated and the slack of the wire taken up, the eccentricity of the lever binding the harder against the wire as the

strain is increased. The device shown in Fig. 1 for engaging the fence-wires forms no part of this application, but is in part the subject of an application filed by me March 28, 1885, 5 Serial No. 157,529.

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

10 In a wire-stretcher, the combination, with the plate having the projecting spurs, the cheek-pieces, and the binding chain having books, of the drum located at one side of the

said plate, and having its shaft journaled in said pieces and provided with oppositely-disposed ratchets, and the pawls pivotally mounted in the said cheek-pieces and constructed to 15 engage and disengage, respectively, with the said ratchets.

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

ALEXANDER W. LAUGHLIN.

Witnesses:

G. H. JOHNSON,
N. ROSENBERGER.