

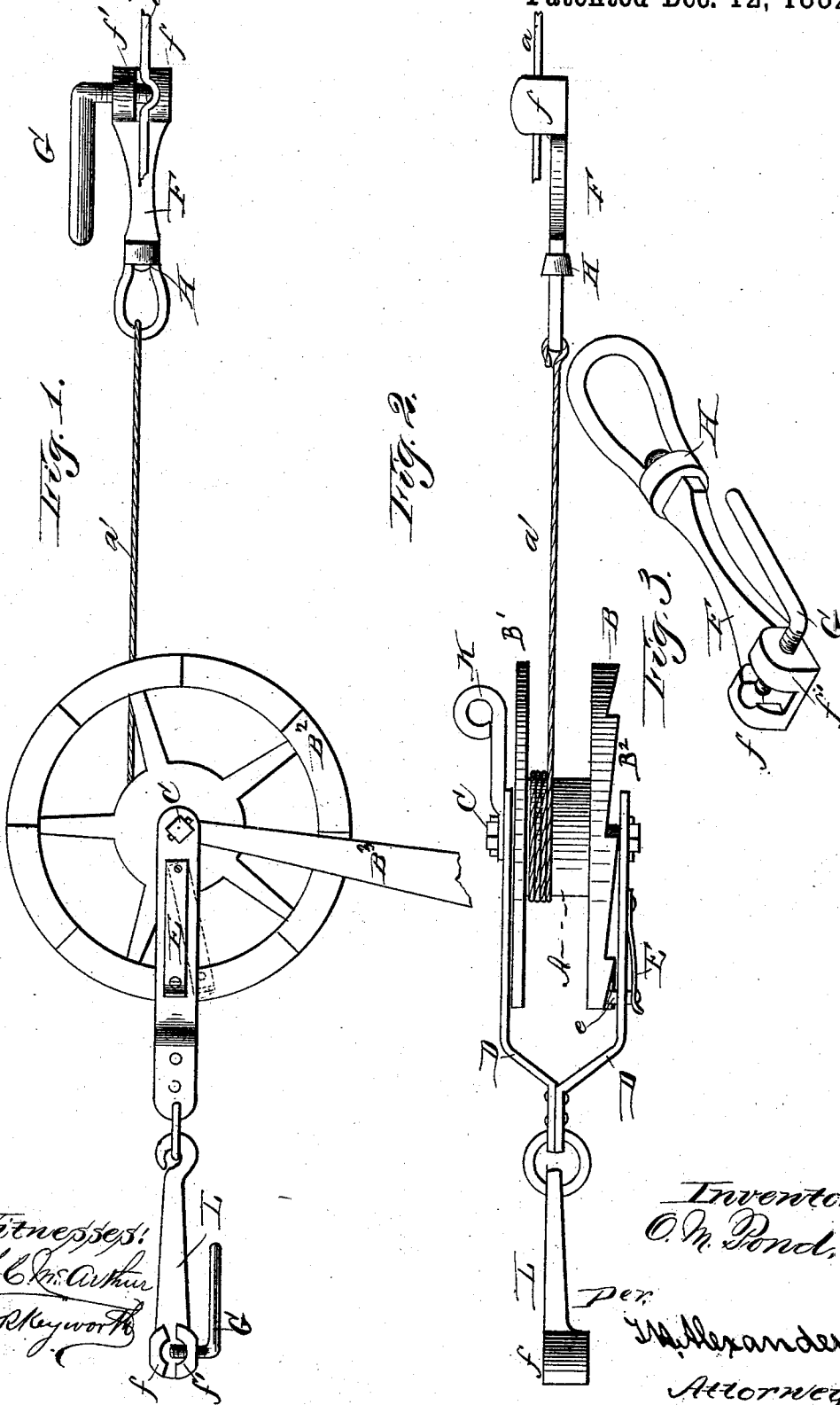
(No Model.)

2 Sheets—Sheet 1

O. M. POND.
WIRE STRETCHER.

No. 268,934.

Patented Dec. 12, 1882.



Witnesses:
H. C. Dr. Arthur
W. R. Keyworth

Inventor:
O. M. Pond,

Per
W. Alexander
Attorney.

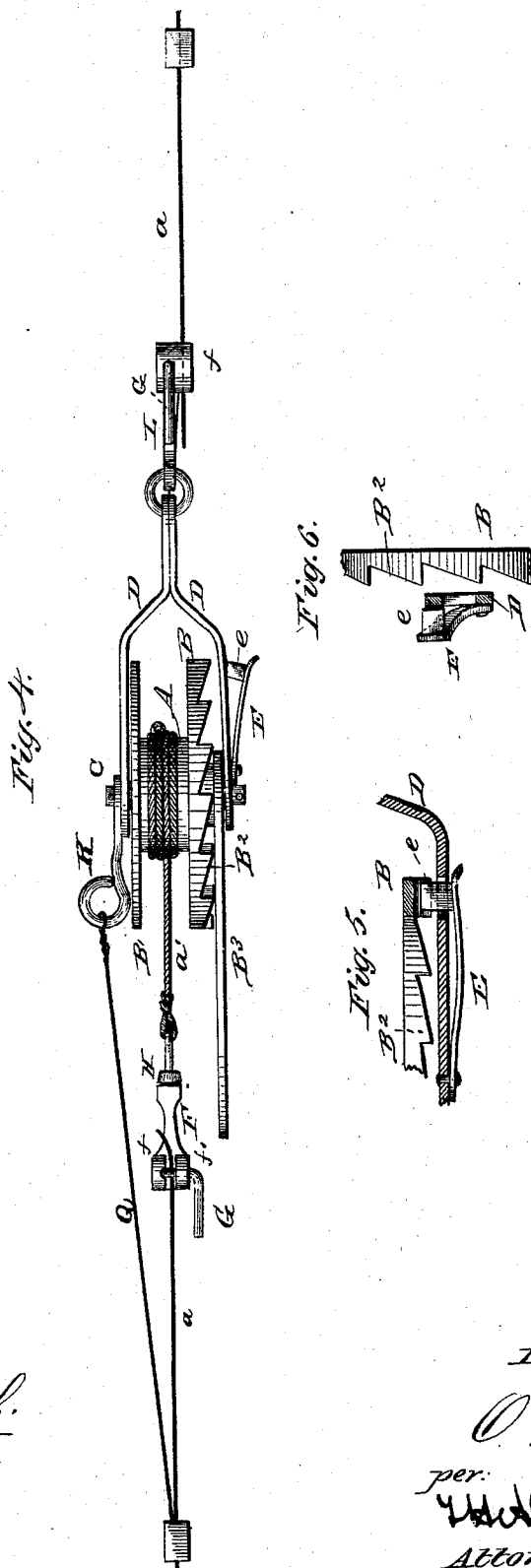
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Witnesses:
Phil C. Dieterich.
Wm R. Ryworth.

Inventor:
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UNITED STATES PATENT OFFICE

ORLANDO M. POND, OF INDEPENDENCE, IOWA.

WIRE-STRETCHER.

SPECIFICATION forming part of Letters Patent No. 268,934, dated December 12, 1882.

Application filed June 13, 1882. (No model.)

To all whom it may concern:

Be it known that I, O. M. POND, of Independence, in the county of Buchanan and State of Iowa, have invented certain new and useful Improvements in Wire-Stretchers; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification.

Figure 1 is a side elevation of my device. Fig. 2 is a plan view thereof. Fig. 3 is a perspective view of the wire-clamp. Fig. 4 is a plan view of my improved stretcher, illustrating the auxiliary wire connecting the eye K to a post when taking up slack. Fig. 5 is a top view in detail of the pivoted spring-tooth engaged with the ratchet-wheel of the windlass. Fig. 6 shows the pivoted spring-tooth disengaged from the ratchet-wheel by adjusting it on the yoke D.

The object of my invention is to provide a simple and efficient device by means of which the wires forming a fence may be in turn rapidly and conveniently stretched to the desired degree of tension, and in the position in which they are to be secured, as will be hereinafter more fully described.

In carrying out my invention I construct the windlass, which consists of the hub or winding-drum A and the two side disks or plates, B B', preferably of metal, which is mounted and revolves on the shaft C. On the outside of the edge of one of the side plates of the windlass is formed a ratchet, B². The windlass is supported in the yoke D, which is formed with two prongs or arms, which are secured at their ends to the shaft C, and between which the windlass may revolve.

To one side of the yoke D is secured the spring E, on the end of which is the stop or pawl e, which passes through a hole in the yoke, and, engaging the teeth of the ratchet, prevents backward movement of the windlass. The spring E is secured by bolt or rivet, so that when the stop is raised high enough it may be turned to one side and held out of contact with the ratchet, which will allow the windlass to be quickly unwound. The lever B³ engages the teeth of the ratchet, and when a reciprocating movement is imparted thereto it will turn the windlass A. The said lever is

pivoted to the central shaft, C, extends radially therefrom across the windlass, and may be of any desired length.

To the end of the yoke D, from which point the prongs or arms extend, is attached, by hook, link, or any suitable means, a clamp, L, by which the windlass is secured to a cord or wire attached to any suitable resistance, a post being usually the most convenient.

The piece K is attached to the yoke and to the central shaft, and may be used to secure the windlass in an opposite direction.

The clamp with which I secure the wire to be stretched, and also use, when most convenient, to secure the stretching mechanism in place, is composed of the flat metal plate F, provided at one end with the lugs f f', preferably integral therewith. One of the lugs is perforated and threaded to receive the clamping-screw G and the other is formed with a shallow recess, into which the screw G forces the wire. By this means I gain a very strong hold on the wire, and when the recess and clamping-screw are properly proportioned and finished no injury is done to the wire by having been held therein. To the other end of the clamp I secure the pivoted or swiveled link H, or, if preferred, form it into a hook or ring, by any of which it is secured to the windlass by means of the cord or chain a', which should be of sufficient length to take up, when wound on the drum of the windlass, the slack of the material being stretched. When so desired, an additional clamp and short cord may be attached to the arm K, by means of which the stretched wire may be held while the drum is being unwound to permit a new hold to be taken or the operation repeated.

The windlass having been secured in position, the wire to be stretched is secured in the moving clamp, the cord of which passes over the winding-drum, which is then rotated by means of the lever and stop until the wire is sufficiently tightened. By raising the stop e the drum may be quickly unwound, and is then ready for use.

The eye-piece K is rigidly secured to the yoke, and serves not only as a handle for sustaining the windlass in position for attaching a line-wire to the clip, but it also serves as a means for attaching, by means of a wire or a chain, the windlass to a post, so that the slack

of the line-wire can be taken up after the grip of the part F or the part L has been released. In this case I use an auxiliary wire, Q, by means of which the windlass is attached to a line-post, so that it is held with the line-wire attached until a splice or "twist" can be made.

It is obvious that the lever B', which performs the twofold purpose of a lever and a spring-pawl by reason of its elasticity, can be used above the ratchet-wheel B, instead of below it, as shown in Fig. 1 of the drawings.

The spring E is pivoted to the yoke D, so that the tooth e can be withdrawn from the ratchet-wheel B and adjusted on the outside of the yoke, as indicated by dotted lines, Fig. 1, and also in full lines, Figs. 4 and 6. This allows the rope a' to be readily unwound from the windlass A.

I have shown by Fig. 4 the practical use of the loop or eye K, which is rigidly fixed to the windlass-yoke D. When the rope a' has been wound upon the windlass as far as possible, and it is found that there is still a slackness of the line-wires, I secure an auxiliary wire, Q, to the eye K and suitably secure it to a fence-post. I then detach the tooth e from the ratchet-wheel B, thus allowing the windlass-rope to be quickly unwound from its drum. Of course, before this is done the ends of the broken line-wire between the posts must be securely spliced or united.

I do not broadly claim the loop or eye K,

which is fastened to the yoke D; neither do I claim broadly a windlass applied to a yoke for stretching fence-wire.

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

1. A fence-wire stretcher consisting of the flanged windlass A, the serrations formed on the end or face of one of said flanges, the yoke D, the pivoted spring E, the pawl-tooth e, the pivoted spring E of this tooth, the eye-piece K, rigidly fixed to said yoke, the spring hand-lever B', pivoted on the shaft of the windlass, a wire-clamping device, L, attached by a shackle to the said yoke, the windlass-rope a', the wire-clamp H, and the auxiliary wire Q, adapted to be attached to a fence-post for taking up the slack of the line-wire, all combined, constructed, and adapted to operate substantially in the manner and for the purposes described.

2. The combination of the auxiliary wire Q and the eye-piece K with the fence-wire tightener, all constructed and adapted to operate substantially in the manner and for the purposes described.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

ORLANDO M. POND.

Witnesses:

D. L. SMITH,

S. L. KEMMERER.