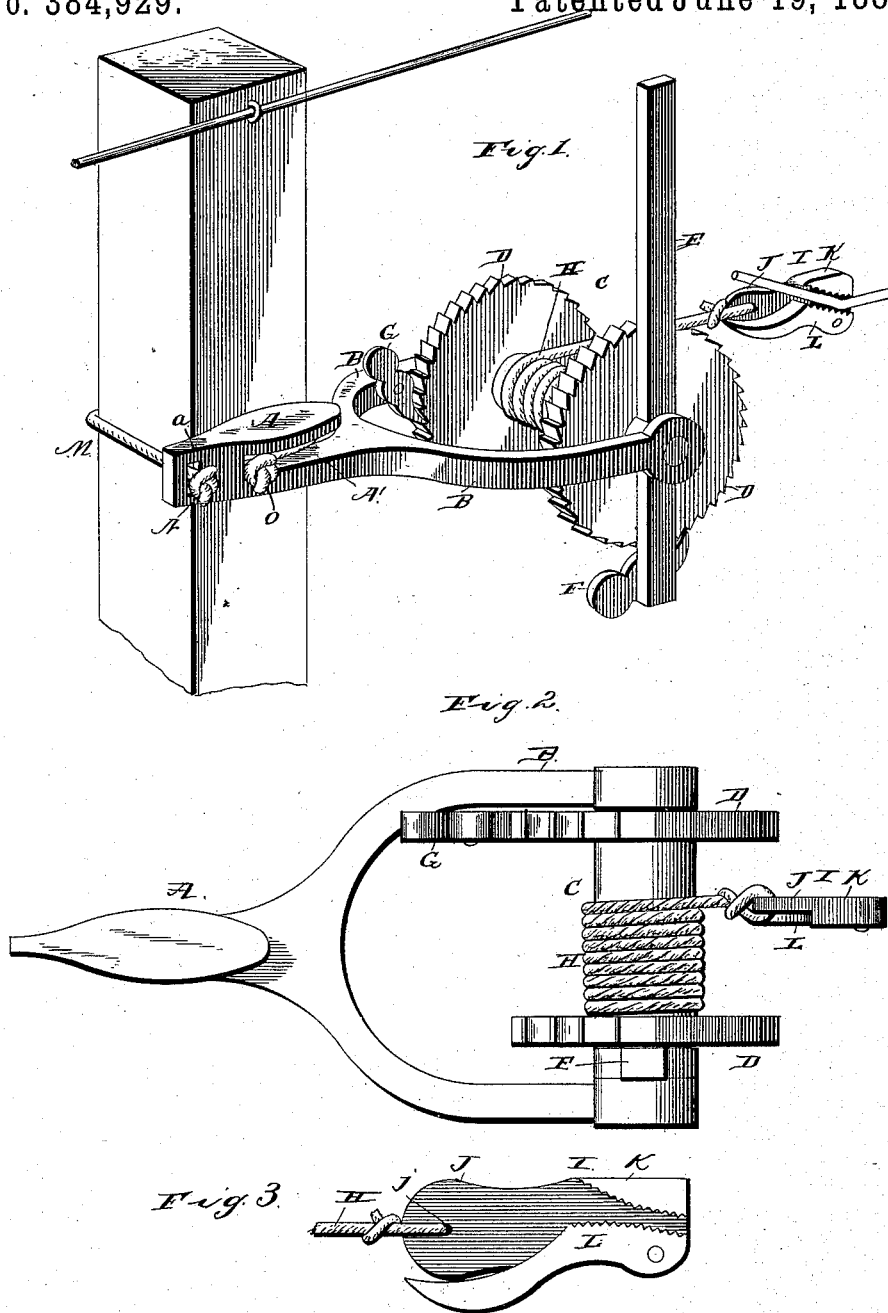


(No Model.)

C. V. PUGH.
WIRE STRETCHING MACHINE.

No. 384,929.

Patented June 19, 1888.



Witnesses,

Geo. P. Hooper,
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Inventor,

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By his Attorneys,

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UNITED STATES PATENT OFFICE.

CORTEZ VINCENT PUGH, OF BOWLING GREEN, MISSOURI, ASSIGNOR TO
WILLIAM A. HUTCHINSON, OF SAME PLACE.

WIRE-STRETCHING MACHINE.

SPECIFICATION forming part of Letters Patent No. 384,929, dated June 19, 1888.

Application filed July 19, 1887. Serial No. 244,748. (No model.)

To all whom it may concern:

Be it known that I, CORTEZ VINCENT PUGH, a citizen of the United States, residing at Bowling Green, in the county of Pike and State of Missouri, have invented a new and useful Improvement in Wire-Stretching Machines, of which the following is a specification.

My invention relates to wire-stretching machines; and it consists in a certain novel construction and arrangement of parts for service, fully set forth hereinafter, and specifically pointed out in the appended claim.

In the drawings, Figure 1 is a perspective view of the device in the operative position, as seen when stretching wire on a fence. Fig. 2 is a plan view of the device. Fig. 3 is a detail view of the clamp to hold the wire.

In carrying out my invention I employ a casting comprising a U-shaped portion having the arms B B and the integral bar A extending rearwardly from the center of the U-shaped portion. This bar A projects somewhat above the plane of the U-shaped portion, and is provided in its rear end with the transverse perforation *a* and in its front with the open-ended notch A'. In and between the front end of the arms B B, I journal the transverse drum C. The sides of the drum are provided with toothed flanges or ratchet-wheels D D, and E represents a lever loosely mounted on the journal of the drum on one side, between the toothed flange on that side and the arm B. The lower end of the said lever depends below the said journal, and is provided with a gravity-pawl, F, having a ball or weight on the rear end to hold the pawl normally in engagement with the ratchet-wheel or tooth-flange. It will be seen that when the upper end of the lever is moved toward the rear the pawl engages with the teeth of the ratchet and turns the drum.

G also designates a gravity-pawl pivoted on the inner side of the arm on the opposite side of the device, and adapted normally to engage the ratchet-wheel or toothed flange on that side of the machine. It will be seen that after the lever has been moved rearwardly at the upper end and caused the drum to be turned said drum will be prevented from turning in the opposite direction by the pawl G engaging

in the toothed flange. Thus the drum can be moved only in one direction.

H represents a chain or rope attached to the said drum and adapted to be wound thereon as the drum is turned, and on the outer end of the rope or chain is secured the clamping device I, comprising the plate J, having a small perforation, *j*, in the rear end to receive the end of the said rope or chain, a boss, K, on the front end curved and serrated on the inner side, and the cam-lever L, pivoted on the said plate, and having a serrated face to oppose the serrated face of the boss K.

The wire to be stretched is placed between the opposing and serrated faces of the boss and cam, and the cam-lever is swung around to force the cam thereon close to the face of the boss, thus binding the wire securely between the two. The cam-lever is so arranged that the pull upon the wire caused by the stretching thereof will clamp the lever still more tightly on the wire. Consequently the harder the pull upon the wire the tighter the same will be clamped.

It will be seen from the foregoing that when the wire to be stretched is clamped in the clamp I and the drum turned by means of the lever E the rope or chain H will be wound on the drum and the wire will be stretched. Further, as the diameter of the toothed flange is short and the lever long, the leverage will be tremendous, and the wire may be stretched with great force. It will also be observed that the lever is prevented from lateral play by the ratchet-wheel D and the arm B, so that the pawl will always be in engagement with the ratchet-wheel.

In order to secure the device to the stake or post, I pass a rope, M, through the perforation *a*, making a knot, N, at its end, and then pass the rope tightly around the post, at the same time holding the bar A against the side of the post. The free portion of the rope, which is provided with a series of knots, O, is then slipped into the notch A' through the open end of the same. The bar will thus be bound quickly and tightly to the post, and will be held against the same by the knots or stops N O, as will be readily understood upon reference to Fig. 1.

The device is very simple in construction and can be manufactured at a comparatively small cost. The bar A being secured to the side of the stake and extending rearwardly from the center of the U-shaped portion of the casting, the tendency of the device to twist laterally, so that the ratchet-wheel will not be readily engaged by the pawls, is entirely overcome. The rope can be quickly and easily applied to the arm A, and will not be readily disengaged therefrom.

Having thus described my invention, I claim—

The combination of the casting consisting of a U shaped portion having the arms B B and the arm A, extending centrally rearward from the U-shaped portion, the said arm A projecting above the plane of the U-shaped portion of the casting, and having the transverse perforation *a* in its rear end and the extended open-ended notch A' in its front portion, the rope M,

passed through the perforation *a*, provided with the knots or stops N O, and adapted to engage the notch A', the drum C, journaled in and between the free ends of the arms B B and provided with the ratchet wheels or disks D D, the lever E, loosely mounted on the spindle of the drum between one of the disks D and arm B and depending below said drum, the pawl E, pivoted on the lower end of the lever and engaging the adjacent disk, and the pawl G, pivoted to the opposite arm B and engaging the disk adjacent thereto, substantially as specified.

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

CORTEZ VINCENT PUGH.

Witnesses:

C. C. EDWARDS,
J. C. CASH.