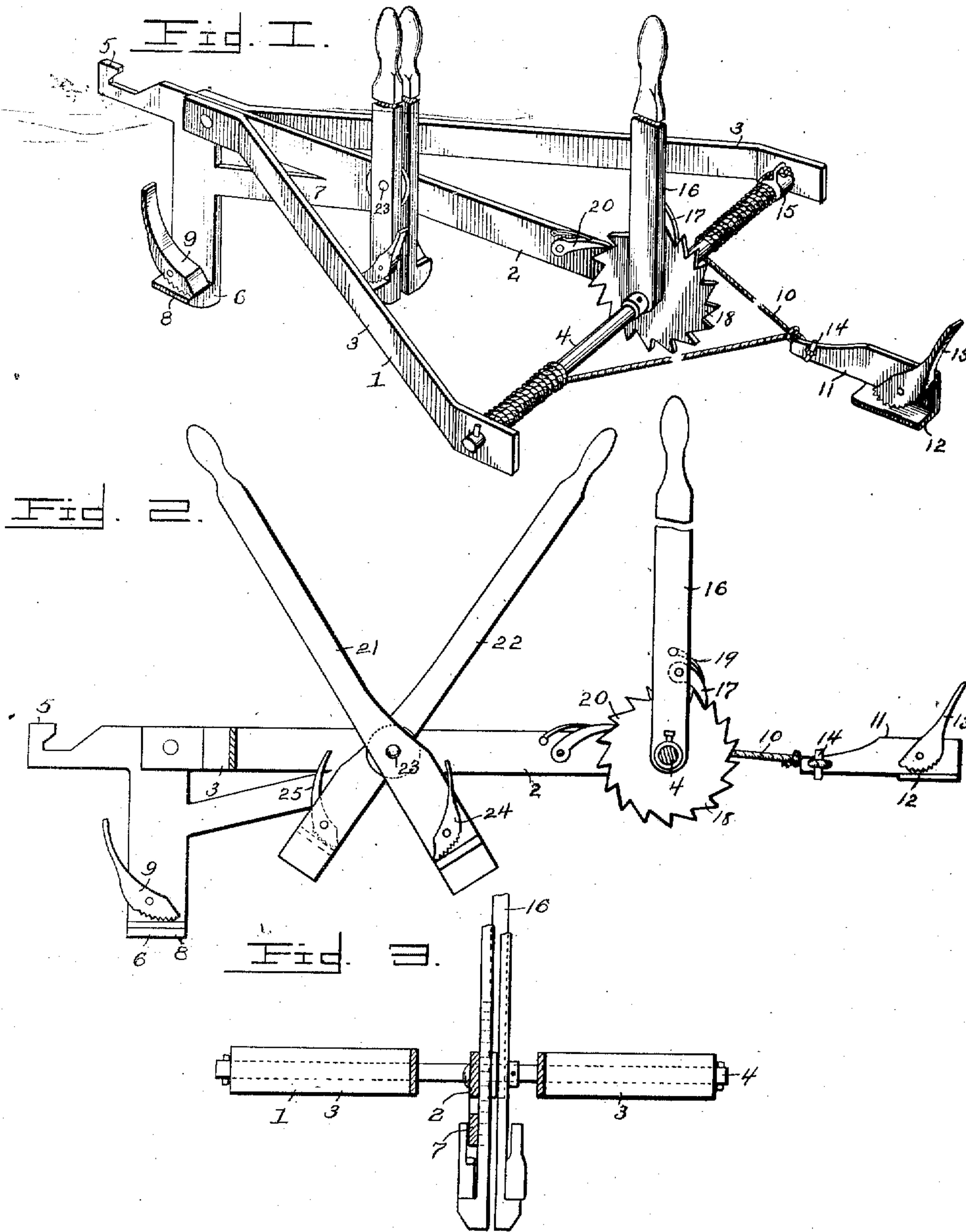


R. THOMSON, JR.
WIRE STRETCHER.

(Application filed Apr. 30, 1900.)

(No Model.)



Witnesses
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UNITED STATES PATENT OFFICE.

ROLLINS THOMSON, JR., OF EYRIE, TEXAS.

WIRE-STRETCHER.

SPECIFICATION forming part of Letters Patent No. 658,132, dated September 18, 1900.

Application filed April 30, 1900. Serial No. 14,962. (No model.)

To all whom it may concern:

Be it known that I, ROLLINS THOMSON, Jr., a citizen of the United States, residing at Eyrie, in the county of Ellis and State of Texas, have invented a new and useful Wire-Stretcher, of which the following is a specification.

The invention relates to improvements in wire-stretchers.

One object of the present invention is to improve the construction of wire-stretchers and to provide a simple and comparatively-inexpensive one capable of readily stretching fence-wires to the desired tension and of holding the same while they are being stapled or otherwise secured to a fence-post.

A further object of the invention is to provide a wire-stretcher of this character adapted to be readily employed as a mid-wire take-up and capable of drawing the ends of a broken wire together, so that the same may be readily spliced.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is a perspective view of a wire-stretcher constructed in accordance with this invention. Fig. 2 is a longitudinal sectional view of the same. Fig. 3 is a transverse sectional view.

Like numerals of reference designate corresponding parts in all the figures of the drawings.

1 designates a main frame provided with a central longitudinal bar 2 and having diverging sides or braces 3, arranged at an angle to each other and to the rear portion of the bar 2 and adapted to support the ends of a transverse shaft 4, which is journaled in suitable bearings of the central longitudinal bar 2 and the sides or braces 3. The rear end of the central bar 2 is provided with a hook 5, adapted to engage links of a chain, whereby the main frame may be anchored to a post or other suitable support.

The main frame is provided at its rear end with a depending clamp 6, having its body portion formed integral with the central bar 2 and supported by an inclined central brace 7; but the latter and the body portion of the

clamp 6 may be formed of separate pieces and suitably secured to the main frame, if desired. The body portion of the clamp 6 is provided with a rigid flange or jaw 8, against which a wire may be clamped by a pivoted cam-lever 9, having a corrugated or serrated engaging face and mounted on the body portion of the clamp adjacent to the flange or jaw 8, as clearly illustrated in Figs. 1 and 2 of the accompanying drawings.

The end portions of the transverse shaft receive the sides of a rope or cable 10, which is connected with a clamp 11 and which is adapted to be wound around the transverse shaft by the means hereinafter described, whereby the clamp 11 is drawn toward the frame 1 and the clamp 6. By this operation a fence-wire may be stretched for securing it to a fence-post when the main frame is anchored, and when the ends of a broken wire are placed in the clamps 6 and 11 they may be drawn together and held while they are being spliced. The clamp 11 consists of a longitudinal body portion or piece provided with a rigid flange or jaw 12, which coöperates with a clamping-lever 13, pivotally mounted on the body portion of the clamp and provided with a corrugated or serrated adjacent face, whereby it is capable of securely gripping a wire. The rope or cable 10, which may be attached to the clamp 11 in any suitable manner, is preferably looped through a perforation of the body portion of the said clamp 11 and secured to the same by a pin 14 or other suitable fastening device. This will enable the clamp to be readily removed from the rope or cable without detaching the latter from the shaft, which is provided with suitable loops or ears 15 for the reception of the ends of the rope or cable.

The transverse shaft is actuated by an operating-lever 16, fulcrumed at its lower end on the shaft and adapted to oscillate independently of the same and provided with an actuating-pawl 17, which is held in engagement with a ratchet-wheel 18 by a spring 19. The ratchet-wheel, which is located adjacent to the central bar 2 of the frame 1, is suitably fixed to the shaft, and it is held against retrograde rotation by a spring-pressed pawl 20, pivotally mounted on the central longitudinal bar 2 and located in rear of the ratchet-

wheel. By oscillating the lever 16 the shaft will be rotated and the sides of the rope or cable will be wound around the end portions of the shaft, as will be readily apparent.

5 In stretching fence-wires for securing them to fence-posts the main frame may be anchored or the wire may be looped around the post and connected with the clamps 6 and 11, one clamp being secured to the wire at one
10 side of the loop and the other being connected with the other side of the loop. By drawing the clamps together the wire will be stretched and held while it is being stapled or other-
15 wise secured to the fence-post. In order to enable the end portions of a broken wire to be readily stretched between the clamps 6 and 11 after the latter have been operated, a pair of levers 21 and 22 are employed and are
20 fulcrumed on the bar 2 at a point between the ends thereof by a pivot 23. Each lever is provided at its lower end with a clamp, and these clamps 24 and 25 are reversely arranged, and each consists of a fixed jaw or flange rigid
25 with the lever and a pivoted cam or clamping lever, similar to those heretofore described. The upper ends of the levers 21 and 22 are provided with suitable grips or handles, and these levers are adapted to be crossed or ar-
30 ranged at an angle, as shown in Fig. 2, to receive the end portions of a broken fence-wire, and by drawing them together to the position shown in Fig. 1 or by crossing them in the
35 opposite direction the end portions of the wire between the clamps 6 and 11 are stretched and may be held in convenient position for splicing them.

It will be seen that the wire-stretcher is exceedingly simple and inexpensive in construction, that it is easily operated, and that it is
40 adapted for stretching fence-wires adjacent to fence-posts and for splicing the ends of a broken fence-wire. It will also be apparent that the clamps 6 and 11 may be connected with a fence-wire between two fence-posts
45 and that the device will form an efficient mid-wire take-up by drawing the said clamps together and enabling the slackened portion of

the wire between them to be twisted or otherwise taken up, whereby the fence-wire will be retained at a tension when the clamps are removed.

What is claimed is—

1. A wire-stretcher comprising a frame, clamps connected with the frame, one of the clamps being movable and adapted to be
55 drawn toward the other, means for operating the movable clamp, and a pair of stretching-levers fulcrumed on the frame between the said clamps and provided with means for en-
60 gaging the ends of a fence-wire, whereby the latter may be again stretched after it has been operated on by the clamps, substantially as described.

2. A wire-stretcher comprising a frame provided at one end with a clamp, a shaft ar-
65 ranged at the other end of the frame and provided with a rope or cable, a clamp connected with the rope or cable, means for actuating the shaft, and a pair of levers fulcrumed on the frame between the ends thereof and pro-
70 vided with means for engaging a fence-wire, substantially as described.

3. A wire-stretcher comprising a frame composed of a central longitudinal bar, diverging
75 sides or braces, a depending portion located at one end of the longitudinal bar, and means for bracing the depending portion, a clamp carried by the depending portion, a shaft journaled in suitable bearings of the longi-
80 tudinal bar and the sides or braces, a ratchet-wheel fixed to the shaft, an operating-lever fulcrumed on the shaft and provided with means for engaging the ratchet-wheel, a rope or cable connected with the shaft at opposite
85 sides of the ratchet-wheel, and a clamp connected with the rope or cable, substantially as described.

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

ROLLINS THOMSON, JR.

Witnesses:

K. G. STROUD,
J. M. ALDERDICE.