

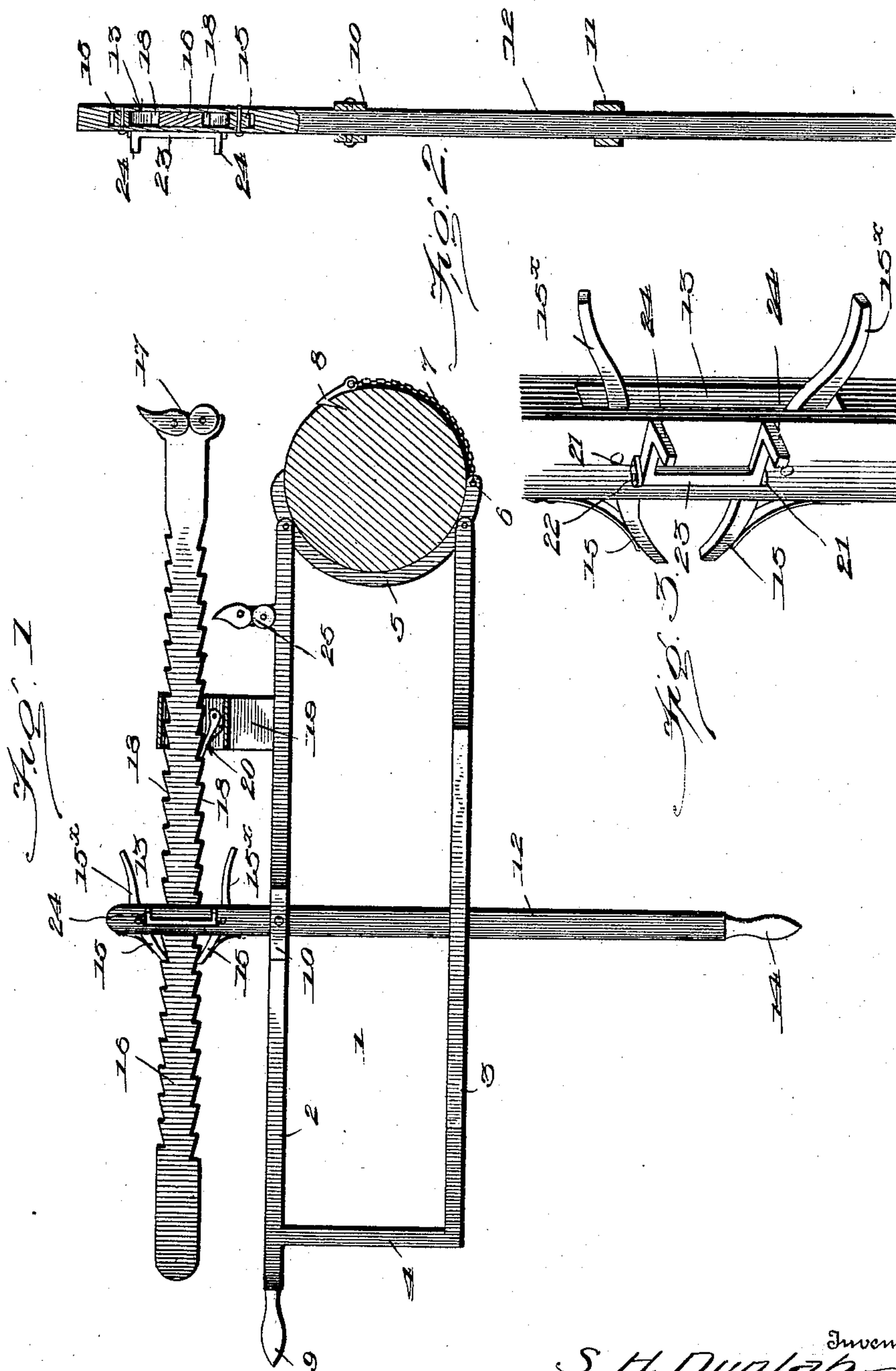
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Patented Jan. 28, 1902.

S. H. DUNLAP.
WIRE STRETCHER.

(Application filed Feb. 19, 1901.)

(No Model.)



Witnesses
John North
C. Heylman

Inventor
S. H. Dunlap
By *Victor J. Evans*
Attorney

UNITED STATES PATENT OFFICE.

SAM H. DUNLAP, OF KURTEN, TEXAS.

WIRE-STRETCHER.

SPECIFICATION forming part of Letters Patent No. 691,847, dated January 28, 1902.

Application filed February 19, 1901. Serial No. 47,944. (No model.)

To all whom it may concern:

Be it known that I, SAM H. DUNLAP, a citizen of the United States, residing at Kurten, in the county of Brazos and State of Texas, have invented new and useful Improvements in Wire-Stretchers, of which the following is a specification.

My invention has relation to improvements in wire-stretchers, and especially to that class of wire-stretchers employed in wire-fence building or repairing; and the object is to provide an improved implement of the character named which can be used to stretch and hold the wire while the same is being fastened to a fence-post, which may be used to take up any slack which may occur in the wire or hold broken ends together while being repaired.

To these ends my invention consists in the improved wire-stretcher which will be more fully described in the following specification and the novelty of which will be particularly pointed out in the claims.

I have fully and clearly illustrated my invention in the accompanying drawings, where in—

Figure 1 is a plan view of my improved wire-stretcher applied to a fence-post or other standard. Fig. 2 is a longitudinal sectional view of the operating-lever, and Fig. 3 is an enlarged view in perspective showing the means for holding the pawls out of engagement with the stretcher-bar.

1 designates a frame upon which the operating mechanism is attached. This frame may be of any material suitable to the uses for which it is intended, and consists, preferably, of side bars 2 3 and end bars 4 5, the end bar 5 being curved and adapted to engage and fit about a fence-post or other standard to which the stretched wire is to be secured. In one end of this end bar 5 is an opening 6, in which is secured one end of a chain 7, the other end of said chain terminating in a sharp hook 8. This chain 7 is adapted to pass about the fence post or standard and be held there by means of the hook 8, which is embedded in the said post. It will thus be seen that the end bar 5 and the chain 7 and hook 8 serve to hold the frame of the stretcher securely in operative position upon the fence-post.

The side bar 2 of the frame 1 extends be-

yond the end bar 4 and terminates in a handle 9. In this side bar 2 and approximately midway thereof is a longitudinal slot 10, said slot registering with a longer slot 11, formed in the side bar 3.

Extending through the slot in the bar 2 and suitably pivoted therein is an operating-lever, one end of said lever extending through and being adapted to move within the slot of the bar 3. This operating-lever consists of a rod or bar 12, one end of which is formed with a transverse slot 13 and the other in a suitable handle 14. Within the slot 13 of the lever 12 are pivotally arranged two oppositely-disposed spring-pressed pawls or dogs 15, which are formed with thumb-pieces or handles 15^x.

Passing through the slot 13 of the lever 12 is a stretcher bar or rod 16, which is preferably rectangular in cross-section, and at one end is provided with any suitable or approved means for gripping and holding the wire while it is being stretched. I show this grip as being preferably a cam-grip 17. The upper and lower edges of the rod or bar 16 are formed with ratchet-teeth 18, said teeth being out of vertical alinement or staggered with relation to each other, those on the upper side being in advance of those on the lower. These ratchet-teeth 17 are engaged by the spring-pressed pawls or dogs 15, and it is thus seen that by pushing the handle 14 of the lever 12 toward the post the stretcher-bar 16 will be pulled backward and the wire stretched.

Upon the side bar 2 and at any preferred point thereon is provided a retaining-bracket 19, having therein a spring-pressed pawl 20, adapted and arranged to engage the teeth upon the lower side of the stretcher-bar 16. This pawl helps to prevent the backward return of the stretcher-bar when the lever 12 is swung inwardly to obtain a new grip thereon.

In order that the pawls 15 may be entirely disengaged, so as to allow the stretcher-rod 16 to move freely through the slot of the lever, I provide the following means: Upon the side of the lever 12 and adjacent to the slot 13 are formed laterally-projecting ears 21, having bearings 22 formed therein. Within these bearings 22 are journaled pinions of a leaf or plate 23, said plate being formed with projections or studs 24. This plate is adapted to be turned over, so that the studs 24

thereon project under and engage the pawls 15 to withhold them from contact with the teeth 17 of the bar 16.

In order that my device may be used to
5 draw the broken ends of a fence-strand together, I provide the side bar 2 with a suitable means 25 for gripping and securely holding the wire. It will be perceived that by gripping one of the wires by the grip 17 and
10 the other by means of the grip 25 they may be brought together by means of the operating-lever and stretcher-bar in the usual manner.

The operation and uses of my invention may be described as follows: When it is de-
15 sired to use the device for drawing a strand toward a post or standard, so that the same may be stapled thereto, the curved bar 5 is placed against one side of the post, the chain 7 is passed about the other side, and the hook
20 8 is embedded therein, thus holding the frame and operating mechanism securely in position. The wire or fence-strand is then locked within the grip and may be tightened by pushing the lever 12 toward the post. By having
25 the teeth of the stretcher-bar out of alinement it will be seen that all chance of the said bar slipping is obviated, since one of the pawls is always in engagement with the teeth. When used to draw the ends of broken strands to-
30 gether, the said strands are secured in the grips 17 and 25 and drawn toward each other by means of the lever and stretcher-bar.

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

1. In a wire-stretcher, the combination with a frame; of an operating-lever pivoted to the frame and having a slot at one end, oppositely-arranged pawls in the slot, a ratchet-
40 bar extending through the slot and engaged by the said pawls, means for holding the wire to the ratchet-bar and a pivoted leaf adapted to hold the pawls out of engagement with the ratchet-bars.

45 2. In a wire-stretcher, the combination with a frame, of an operating-lever having a slot

at one end thereof, oppositely-arranged pawls in the slot, a ratchet-bar extending through the slot and engaged by the said pawls, wire-
gripping means at one end of the ratchet-bar, 50 laterally-projecting ears on the operating-lever, and a leaf pivoted in the ears and having studs projecting thereon, said leaf being adapted to be turned over so that the studs will engage the pawls of the lever to hold the
55 same from engagement with the ratchet-bar.

3. A wire-stretcher, comprising a frame formed with end and side bars, one of the end bars being formed to engage a standard, wire-gripping means on one of the side bars, 60 longitudinal slots in the side bars registering with each other, an operating-lever pivoted within the slot of one of the side bars and extending through and working within the slot of the other side bar, a slot at one end of the
65 lever, pawls arranged within the slot, a ratchet-bar extending through the slot and engaged by the pawls and having wire-gripping means thereon, and a bracket on one of the side bars having a pawl thereon adapted to
70 engage the ratchet-bar to prevent the backward return thereof.

4. A wire-stretcher, comprising a frame, having an end portion adapted to engage a standard, a lever pivoted on the frame, hav- 75 ing a slot in one end thereof, upper and lower oppositely-arranged pawls within the slot, a stretcher-bar extending through the slot, said bar being provided on its upper and lower surfaces with ratchet-teeth adapted to be en- 80 gaged by the said pawls, wire-gripping means on the stretcher-bar, and on the frame, and a bracket on the frame having a pawl thereon adapted to engage the teeth on the stretcher-bar to prevent the backward return thereof. 85

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

SAM H. DUNLAP.

Witnesses:

H. F. PRINZEL,
H. ENDLER.