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J. MOSSMAN.

COMBINED WIRE STRETCHER, CUTTER, SPLICER, AND STAPLE PULLER.

(Application filed Oct. 3, 1901.)

(No Model.)

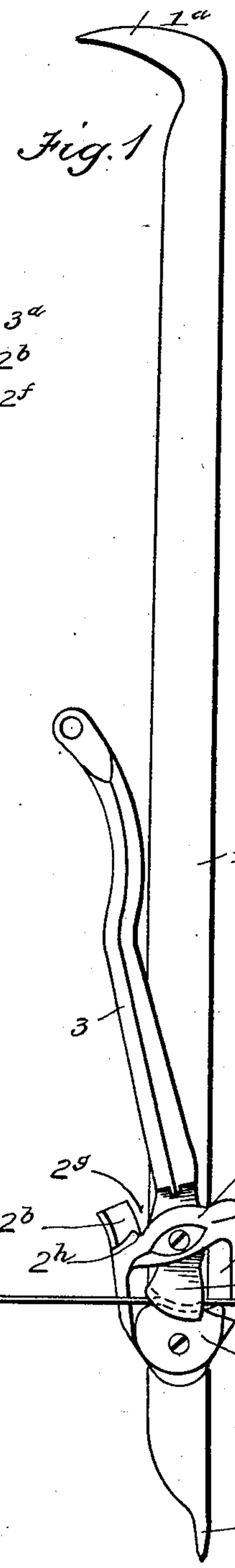

Fig. 1

Fig. 4

Fig. 5.

Fig. 2

Fig. 3.

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JAMES MOSSMAN, OF WESTERVILLE, OHIO.

COMBINED WIRE STRETCHER, CUTTER, SPLICER, AND STAPLE-PULLER.

SPECIFICATION forming part of Letters Patent No. 699,213, dated May 6, 1902.

Application filed October 3, 1901. Serial No. 77,487. (No model.)

To all whom it may concern:

Be it known that I, JAMES MOSSMAN, a citizen of the United States, residing at Westerville, in the county of Franklin and State of Ohio, have invented certain new and useful Improvements in a Combined Wire Stretcher, Cutter, Splicer, and Staple-Puller; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The object of this invention is to provide a tool of simple and economical form that shall be of extensive and varied use, particularly in the erection of wire fencing.

The invention and novelty reside in the details of construction hereinafter described and claimed.

In the accompanying drawings, in which I have delineated one embodiment of the invention, Figure 1 is an elevation of the entire implement. Fig. 2 is a view looking toward the left-hand edge of Fig. 1, the upper end of the main bar being broken off. Fig. 3 is a view looking toward the right-hand edge of Fig. 3 with both the upper and lower ends of the bar broken off. Fig. 4 is a detail view of the inner side of the stretching and cutting portions. Fig. 5 is a detail of Fig. 4 as it would appear after attachment to the bar.

1 designates the main bar or lever. This in practice will be made of wrought-iron and of sufficient length—say about thirty inches—to afford good leverage in use. The upper end of the bar can be shaped into a hook-like form and pointed, as shown at 1^a, so as to be inserted behind the crown of a staple for the purpose of drawing the same from a fence-post or other part into which it may have been driven. The lower end of the bar 1 is formed into a claw 1^b, having a rather long slot 1^c, into which the ends of two wires can be placed and held while the ends are twisted one about the other to splice them.

2 is a frame of cast metal having at one side a holding-rib 2^a, and at the other a similar rib prolonged and divergent, as indicated at 2^b, to constitute also a shearing member, as will be hereinafter further divulged. The two ribs 2^a and 2^b form between them a longitudinal recess 2^c, (see Fig. 4,) into which the bar 1 snugly fits. (See Fig. 5.) Joining the ribs 2^a and 2^b are cross-pieces 2^d and 2^e. The cross-piece 2^d has a wire-seat 2^f, and pivoted to the cross-piece 2^e, as well as to the bar 1, is another lever 3, having a wire-clamping end 3^a to coact with the seat 2^f to pinch and hold the wire that is to be stretched. Both the pinching end of the part 3^a and the seat 2^f are curved slightly upward, as seen in Fig. 4 and indicated by dotted lines in Fig. 1, so that when the upper end of the lever 1 is moved, say, toward the right in Fig. 1 there will be an automatic tendency to grip the wire tighter and tighter.

The upper portion of the rib 2^b, as before stated, curves slightly outward and constitutes a shearing member and diverges from the bar 1, (see Fig. 1,) thus affording a V-shaped opening 2^g between the rib and the said bar 1, into which a wire to be cut can be placed. In the upper edge of the cross-piece 2^e there is also a notch-like wire-seat 2^h, into which the same wire also rests when placed in the V-shaped opening 2^g. The wire to be cut is thus braced at two points while undergoing the action of the shear. The edge of the lever 3 opposite the member 2^b works against that member like one blade of a shear against another to sever a wire placed in the V-shaped opening 2^g. The shearing portions of the lever 3 and the rib 2^b are preferably chilled or otherwise hardened.

The bridges or cross-pieces 2^d and 2^e and the bar 1 can be formed with holes to receive screw-bolts and nuts 4 to secure the frame 2 to the bar 1.

It is hardly necessary to add that the shapes of the parts herein shown are susceptible of some modification without departing from the essence of the construction.

What I claim, and desire to secure by Letters Patent, is—

1. In combination with a bar or lever, a frame secured thereto having a stationary wire-seat 2^f lying next the face of the bar and laterally-extending ribs 2^a and 2^b to fit the opposite edges of the bar the rib 2^b affording a shearing edge and a lever 3 fulcrumed in the said bar having a wire-clamping end 3^a to coact with said wire-seat 2^f and a shearing edge to coact with the shearing member 2^b, substantially as described.

2. In combination with a bar or lever, a frame secured thereto having a stationary wire-seat 2^f lying next the face of the bar and laterally-extending ribs 2^a and 2^b to fit the opposite edges of the bar, the rib 2^b affording a shearing edge, a cross-piece 2^e between the ribs 2^a and 2^b, and a lever 3 fulcrumed between the aforesaid bar and cross-piece and having a wire-clamping end 3^a to coact with said wire-seat 2^f and a shearing edge to coact with the shearing edge of the rib 2^b, substantially as described.

3. In combination with a bar or lever, a frame secured thereto having a stationary wire-seat 2^f lying next the face of the said bar and laterally-extending ribs 2^a and 2^b to fit the opposite edges of the said bar, the rib 2^b affording a shearing edge, a cross-piece 2^e between the ribs 2^a and 2^b, a wire-seating notch 2^h in said cross-piece, and a lever fulcrumed between the aforesaid bar and cross-piece and having a wire-clamping end to coact with the seat 2^f and a shearing edge to coact with the shearing edge of the rib 2^b and the wire-seating notch 2^h in the cross-piece, substantially as described.

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

JAMES MOSSMAN.

Witnesses:

SAMUEL W. LATHAM,

GEORGE M. FINCKEL.