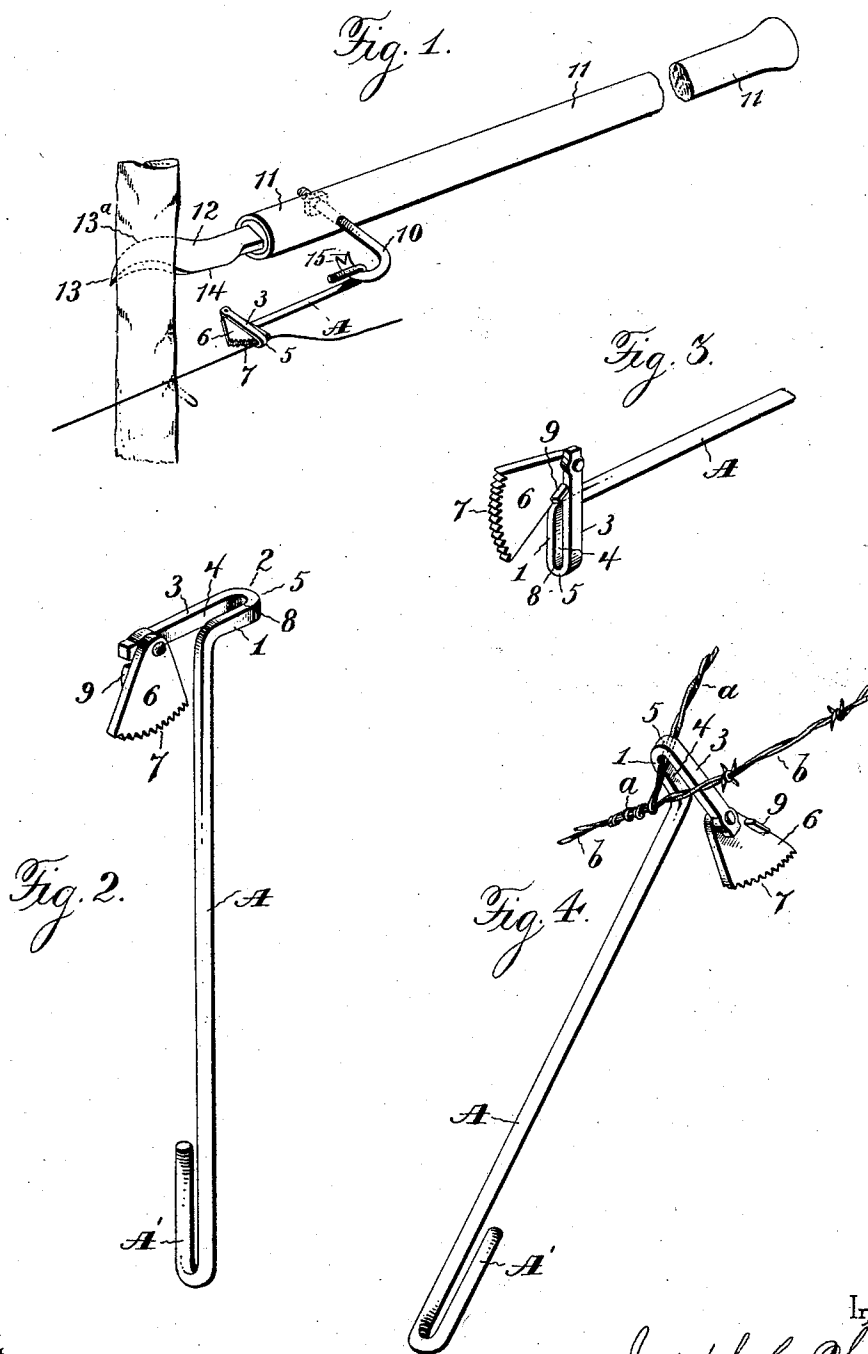


(No Model.)

J. C. WILKES.
FENCE MAKING APPLIANCE.

No. 578,617.

Patented Mar. 9, 1897.



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UNITED STATES PATENT OFFICE.

JOSEPH C. WILKES, OF ATHENS, OHIO.

FENCE-MAKING APPLIANCE.

SPECIFICATION forming part of Letters Patent No. 578,617, dated March 9, 1897.

Application filed June 30, 1896. Serial No. 597,580. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH C. WILKES, a resident of Athens, in the county of Athens and State of Ohio, have invented certain new and useful Improvements in Fence-Making Appliances; 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.

My invention relates to an improvement in fence-making appliances, one object of the invention being to construct fence-making appliances which shall be simple and cheap to manufacture, and by means of which many of the operations necessary in building and repairing a wire fence can be accomplished rapidly and safely.

A further object is to produce a tool with which to handle barbed wire and at the same time use it as a part of the stretcher and thus avoid the danger of handling barbed wire with the hands and yet not necessitate an extra tool.

A further object is to produce a tool that will grasp the barbed wire and is capable of being released without the engagement of the hands in direct contact or close proximity with the wire and thus avoid the danger of being cut or torn in clamping and releasing by keeping the hands at a safe distance from the wire.

A further object is to produce a wire-stretcher which shall be capable of rapid operations and which shall be so constructed as to furnish the operator with all the tools necessary (a hammer excepted) for the construction and repair of a barbed or smooth wire fence—that is, a stretcher, an automatic clammer, a handler, a splicer, a cutter, a staple-puller, a tightener, and a tamper.

A further object is to so construct a wire-stretcher that it shall be durable, capable of being operated rapidly, and be effectual in all respects in the performance of its functions.

With these objects in view the invention consists in certain novel features of construction and combinations and arrangements of parts, as hereinafter set forth, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view showing the application of my inven-

tion. Fig. 2 is a view showing the clamp in position to receive the wire to be stretched. Fig. 3 is a view showing the positions of the parts when the device is to be used for handling wire without clamping it. Fig. 4 is a view showing the application of the device for twisting or mending wire.

A represents a bar, of iron or other suitable metal, the forward end of which is bent to form a lateral arm 1, which preferably projects from said bar at right angles, but which may be disposed at an angle somewhat greater than a right angle. After forming the arm 1 the metal is bent upon itself, as at 2, whereby to form an arm 3 a short distance from arm 1, so as to form a slot or recess 4, which is open at one end and closed at the other end by means of the connecting-piece 5 between said arms 1 and 3. The arm 3 projects some distance beyond the inner end of the arm 1 and also laterally beyond the bar A, and to its free end a clamping jaw or cam 6 is pivotally connected.

The jaw or cam 6 is preferably made segmental in form, having a curved toothed free edge 7, between which and the jaw or shoulder 8 (formed by the connecting-piece 5) the wire to be stretched is clamped. The segmental jaw or cam 6 is provided at a point between its ends with a stop 9, adapted to engage the arm 3, for a purpose hereinafter explained. The rear end of the bar A is bent in the form of a hook A' to form a handhold and also for the reception of a hook 10, secured between the ends of a lever 11. The lever 11 is preferably made about five feet long and is provided at its forward end with a curved pointed prong 12, adapted to bear against a post when the appliances are in use for stretching a wire.

The pointed end 13 of the prong forms a convenient staple-puller, in using which the point will be forced into the staple and the heel 13^a made to bear against the post, said heel thus constituting the fulcrum of the staple-puller. The prong 12 is drawn out at one side to form a wire-cutter 14. The rear end of the lever can be conveniently used as a post-tamper. By means of the lever 11 the wire to which my improved device is attached can be stretched to any desired degree, and the wire can be drawn just as tight at the

last post of the fence as at any other by the engagement of hook 10 with the wire just in front of the clasp (as the clasp keeps hook 10 from slipping on the wire) instead of its engagement with hook A'. This is a point very desirable in fence-building. By making the lever long considerable leverage can be had, thus enabling me to draw the wire tight, as above explained, and enables the operator to keep a distance from the posts to which the other wires are attached.

Instead of using the lever 11 and hook 10 for applying power to the clamp a rope or any suitable device can be attached to the hooked end of the bar A, thus making it capable of being combined with any device used for stretching wire. When a rope is used, it may be provided with a knot adapted to engage the hook A'. The free end of the hook 10 is made with prongs 15, by means of which the wire can be bent or twisted at a post, so as to take up any slack there may be in the wire after the fence has been built for some time and the wires become slack between posts. For this purpose the staple will be withdrawn, the wire at one side of the post tightened and fastened by a staple, and then by means of the prongs 15 the wire will be bent upward and pulled back and fastened with another staple.

My improved stretcher can be easily applied to the wire and made to automatically clamp the same in the following manner:

The tool is first held in a vertical position, as shown in Fig. 2, so that the clamping jaw or cam 6 will swing down out of the slot or recess 4. The device will then be placed on the wire, so that the latter will enter said slot or recess 4, and then it will be turned down, so that the clamping jaw or cam will swing in the slot between the arms 1 3 and clamp the wire between its toothed end and the jaw or shoulder 8. In this manner the tool can be easily and quickly applied to the wire and automatically clamped rigidly thereto, after which the devices by means of which power is to be applied can be quickly placed in position, as above explained. By a reversal of the operations above explained the tool or stretcher can be released from the wire.

My improved tool or stretcher can also be used for twisting or mending wire. When the device is used for this purpose, the wire *a*, Fig. 4, will be placed in the slot or recess 4 and the wire *b* made to rest against the arm 1. Then by turning the tool the wire *a* will be wrapped around the wire *b*.

It may sometimes be desired to employ the

tool for handling wire without clamping the same thereto. In such case the clamping jaw or cam 6 will be thrown over to the position shown in Fig. 3, in which position it will be retained by the engagement of the stop 9 with the arm 3.

My improvements are cheap to manufacture, simple to construct, durable, not liable to slip when once clamped to the wire, can be effectually used on either plain or barbed wire, are safe and certain in operation, are durable, and will operate effectually in every respect in the performance of their functions.

Various slight changes might be made in the details of construction of my invention without departing from the spirit thereof or limiting its scope, and hence I do not wish to limit myself to the precise details of construction herein set forth.

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

1. The combination with a bar bent at its forward end to form a laterally-projecting loop, the inner closed end of which constitutes a rigid jaw, of a cam pivoted to the outer end of the loop, substantially as set forth.

2. The combination with a bar bent at one end to form a laterally-projecting loop, the end of the loop extending laterally beyond the opposite side of the bar, of a cam pivoted to the outer end of said loop, substantially as set forth.

3. The combination with a bar having a hook formed on one end, and having its opposite end bent to form a laterally-projecting loop the free end of which projects from the side of the bar opposite the loop, about the length of the latter, of a cam provided with a toothed edge, said cam being pivoted to the free or outer end of the loop, substantially as set forth.

4. The combination with a bar bent at its forward end to form two arms having a slot between them and a jaw at one end of said slot, of a clamping jaw or cam pivoted to one of said arms and having a toothed edge to act in conjunction with the other jaw to clamp a wire, and a stop on said clamping jaw or cam adapted to engage one of said arms, substantially as and for the purpose set forth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

JOSEPH C. WILKES.

Witnesses:

WM. S. WILSON,
H. H. WICKHAM.