No. 721,442. PATENTED FEB. 24, 1903.

H. E. HERRICK.

WIRE STRETCHER AND CUTTER.

APPLICATION FILED APR. 18, 1902.

NO MODEL.

Fig. 1.

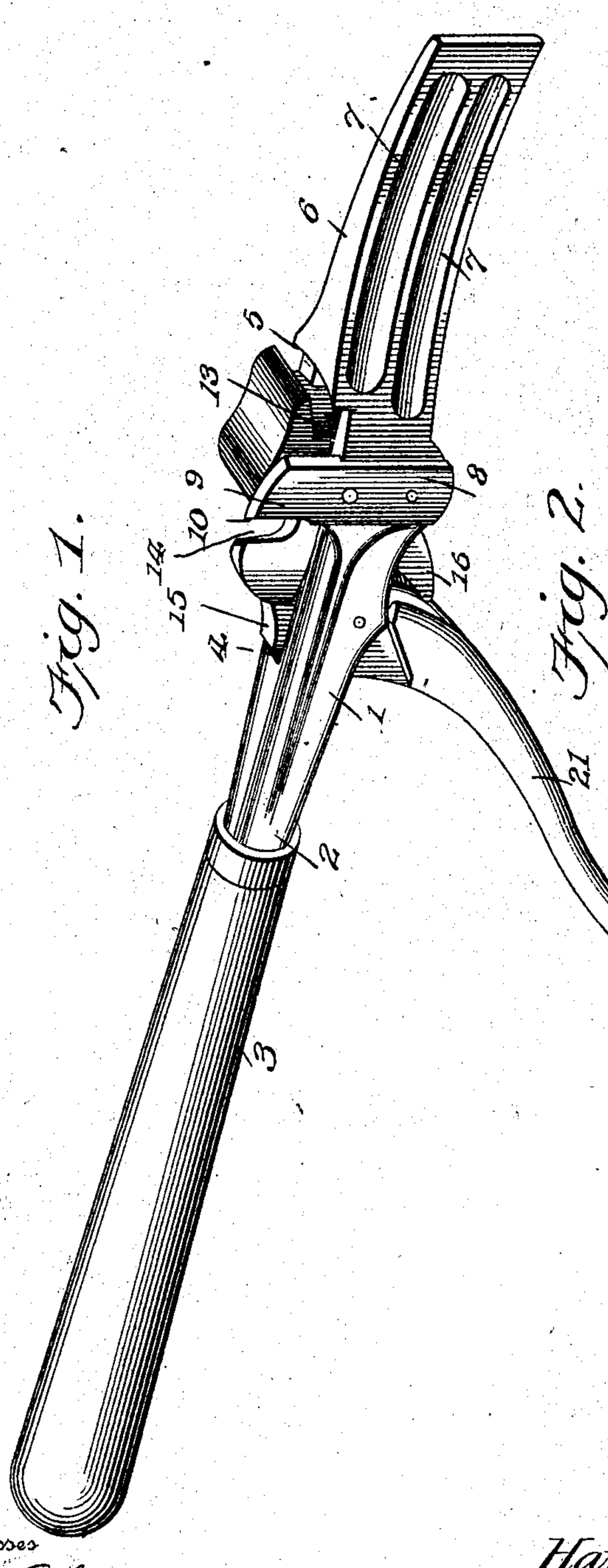
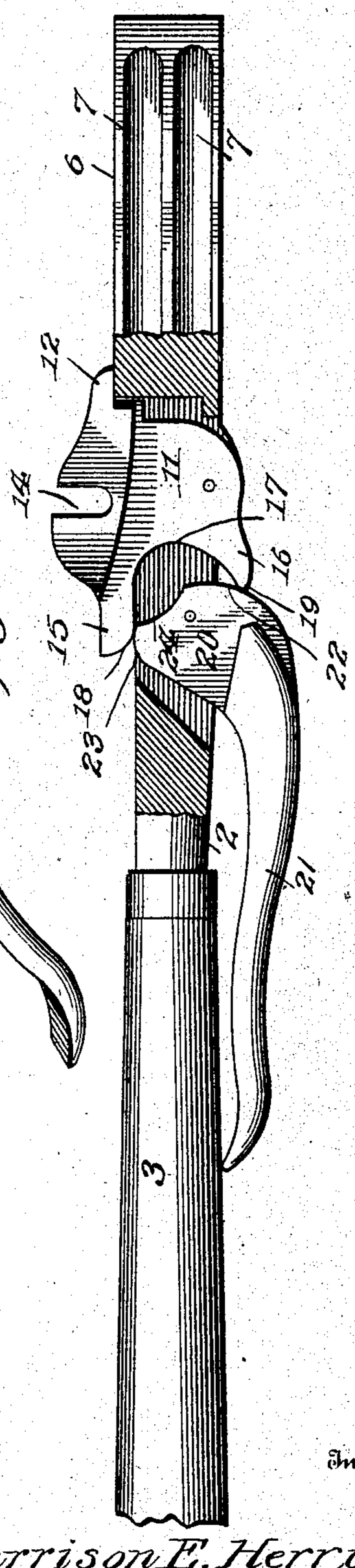


Fig. 2.



Witnesses

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HARRISON E. HERRICK, OF MERRIMAC, NEW HAMPSHIRE.

WIRE STRETCHER AND CUTTER.

SPECIFICATION forming part of Letters Patent No. 721,442, dated February 24, 1903.

Application filed April 18, 1902. Serial No. 103,602. (No model.)

To all whom it may concern:

Be it known that I, HARRISON E. HERRICK, a citizen of the United States, residing at Merrimac, in the county of Hillsboro and State of New Hampshire, have invented new and useful Improvements in a Combined Wire Stretcher and Cutter, of which the following is a specification.

This invention relates to a combined wire stretcher and cutter; and the object of the same is to provide a simple and effective form of tool which can be conveniently employed in stretching wire in the construction of fences or other purposes and also for severing the wire, as may be desired.

The invention consists in the construction and arrangement of the several parts, which will be more fully hereinafter described and claimed.

In the drawings, Figure 1 is a perspective view of a tool or implement embodying the features of the invention. Fig. 2 is a side elevation broken away in part to show the mode of applying and operating the movable elements.

Similar numerals of reference are employed to indicate corresponding parts in the views.

The numeral 1 designates a shank which is reduced at its rear extremity to form a tang 2, fitted in a suitable handle 3. The shank 1 has a longitudinally-extending slot 4 formed therein and vertically disposed to open out through the upper and lower edges of said shank. At the front terminal of the slot 4 the shank is formed with an upstanding shoulder 5, extending completely across the upper edge of said shank and formed with a rear concave face, and from the said shoulder the said shank continues into a concavo-convex bracing-arm 6, adapted to be brought in contact with a post or other device during the wire-stretching operation, the concave face of the said bracing-arm being formed with longitudinally-extending corrugations or grooves 7 to provide reduced biting-surfaces to sink into a post or other device and prevent vertical slipping movement of the said arm during the wire-stretching operation. On one side of the shank 1, in rear of the shoulder 5, a cutter 8 is secured and has its upper extremity 9 projecting above the upper edge of the shank and given an inward inclination, the rear edge of said extremity being beveled to provide a cutting edge 10, adapted to coact with a movable element, which will be presently set forth. The front edge of the upper extremity of the cutter is far enough in rear of the shoulder 5 to obviate obstruction of the ready insertion or placement of the wire against the said shoulder.

Within the forward part of the slot 4 a jaw 11 is pivotally mounted, the fulcrum or pivot device for the said jaw being located nearer its lower edge. The front end of the jaw has a forwardly-projecting lip 12 at its upper portion, which is adapted to overlap the shoulder 5, and immediately under said lip is a convex bearing-surface 13, conforming in degree of curvature to the concave face of the shoulder 5, and between the bearing-surface 13 and the concave face of the shoulder 5 the wire is adapted to be clamped during the stretching operation, the said curvatures preventing the wire from slipping between the contiguous surfaces engaging therewith. The forward portion of the jaw 11 has its upper portion rising above the upper edge of the shank 1 and of greater transverse extent than the lower portion of said jaw, and in the rear part of the jaw which stands above the shank is a wire-receiving recess or slot 14, with front and rear vertical straight walls, the cutting edge 10 of the cutter 8 bearing closely against one side of the portion of the jaw which stands above the upper edge of the shank adjacent to the recess or slot 14. The rear extremity of the jaw 11 is formed with upper and lower contact projections 15 and 16, defined by the formation of a slot 17, the upper projection having a curved bearing edge 18 and the lower projection a reduced rounded terminal 19. In rear of the jaw the head 20 of an operating-lever 21 is pivotally mounted in the slot 4, the head 20 being of greater width than the lever and reduced in thickness to work in the said slot. This head 20 has an extended convex edge 22 to engage the rounded terminal 19 of the projection 16. The head 20 also has a shorter convex edge portion 23 and a concave recess 24 to coöperate with the curved surface 18 of the projection 15. The particular-shaped edge portions of the head 20 are always in contact with the projections 15 and 16, and by moving the le-

ver downwardly the pressure on the projection 15 is relieved by bringing the recess 24 thereunder and applied to the projection 16 to throw the lip 12 upwardly and rearwardly from the shoulder 5, as clearly shown by Fig. 1. By drawing the lever 21 upwardly toward and against the shank 1 and handle 3 the shorter convex edge portion 23 of the head 20 is brought against the curved edge 13 of the projection 15, thereby lifting the rear extremity of the jaw 11 and throwing the lip 12 downwardly on the shoulder 5.

In the operation of the device the jaw 11 is opened, as shown by Fig. 1, and the wire to be stretched is drawn in between the bearing-surface 13 and the shoulder 5. The lever 21 is then drawn upwardly to close the jaw against and clamp the wire, and the bracing-lever is then applied to a post or other device toward which it is desired to stretch the wire, the entire device then becoming a lever, as will be readily understood. After the wire has been sufficiently stretched it will be secured by any of the well-known methods, and if it is desired to sever the same it is inserted in the recess or slot 14 after the jaw has been first opened. The lever 21 is then again drawn upwardly toward the shank and handle, and in view of the upwardly-moving action of the rear extremity of the jaw the wire to be severed is gradually raised and drawn toward the cutting edge 10 of the cutter 8 to thereby produce a shearing cut, which is facilitated by the inwardly-inclined arrangement of the upper extremity 9 of the said cutter.

The improved tool or implement is adapted for use in connection with barbed or plain wire and also will be found exceptionally convenient for the purpose for which it has been devised.

Having thus fully described the invention, what is claimed as new is—

1. In a tool of the class set forth, the combination of a shank having a handle at one extremity and a bracing-arm at the other extremity, the said shank having a slot therein, a jaw pivotally mounted in the said slot and having a forwardly-projecting clamping element to coöperate with a portion of the shank, and a lever for opening and closing the jaw.

2. In a tool of the class set forth, a shank having a handle at one end and a bracing-arm at the other end, a shoulder being formed at the upper portion of the rear terminal of the bracing-arm, a jaw movably mounted in the shank and having a forwardly-projecting lip to overlap the shoulder, and a bearing-surface to coact with the latter, and a lever for opening and closing the said jaw.

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

HARRISON E. HERRICK.

Witnesses:
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