

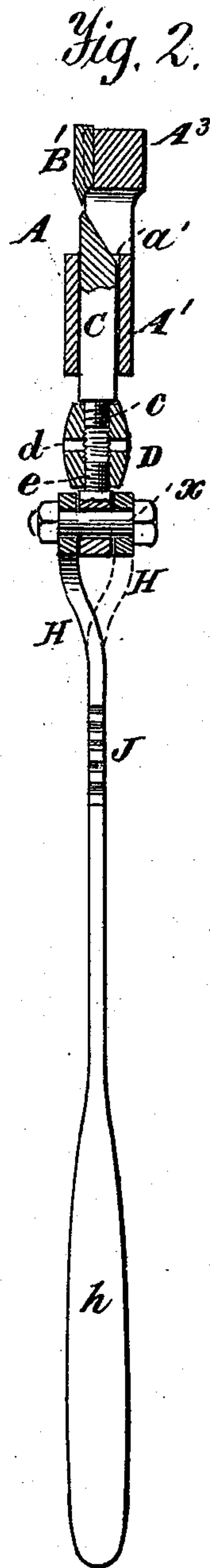
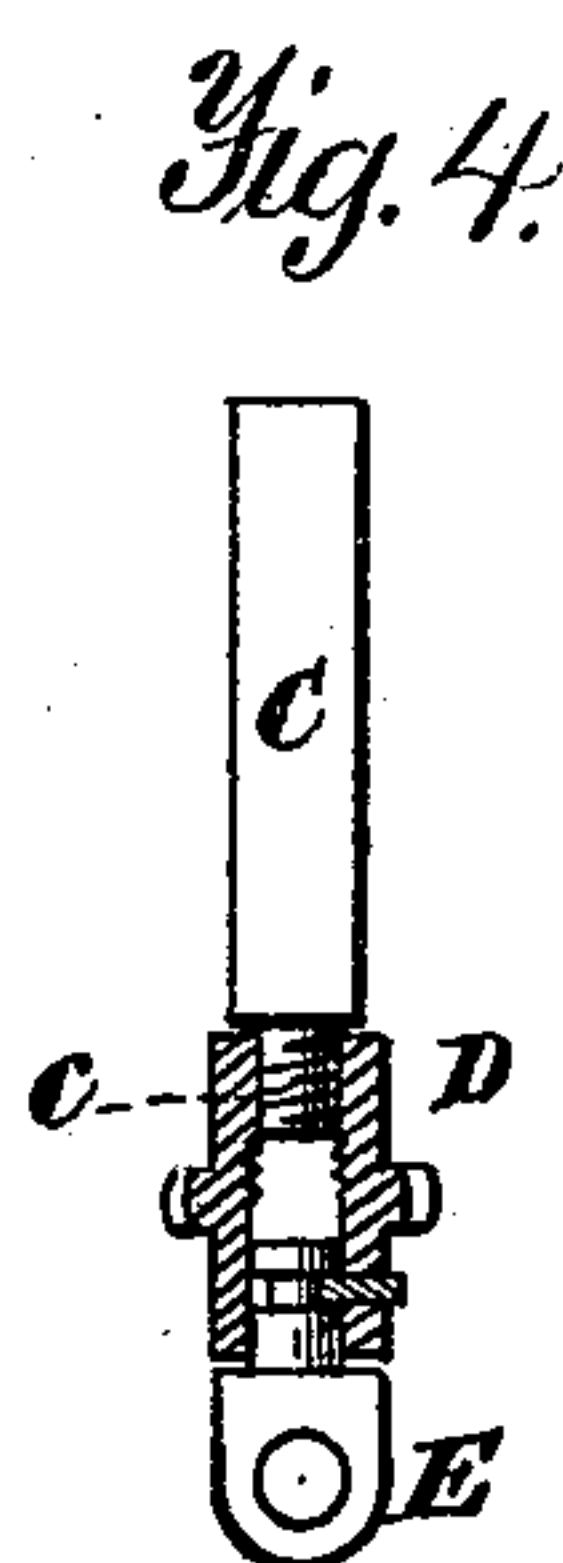
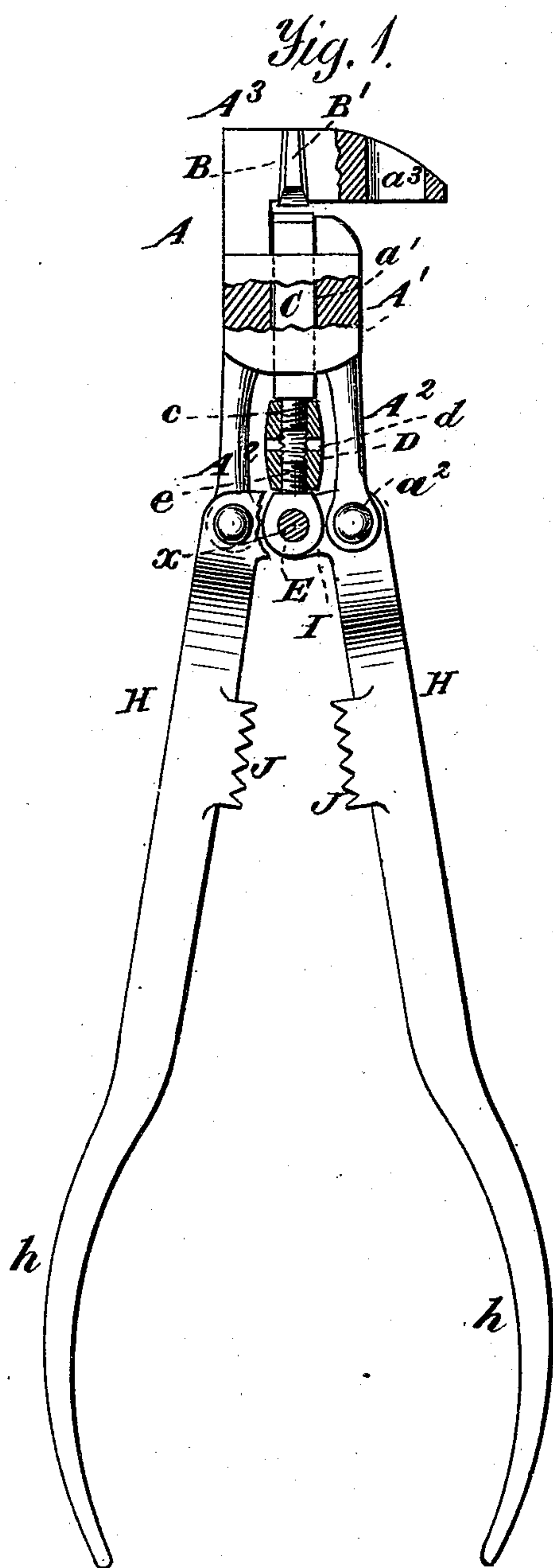
(No Model.)

S. G. WILCOX.

Rod and Wire Cutting and Twisting.

No. 230,377.

Patented July 20, 1880.



Witnesses.
A. Rupert.
Jas. H. Lange.

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UNITED STATES PATENT OFFICE.

SPENCER G. WILCOX, OF WEEDSPORT, NEW YORK, ASSIGNOR TO A. H. WHITING, OF HARRISBURG, PENNSYLVANIA.

ROD AND WIRE CUTTING AND TWISTING.

SPECIFICATION forming part of Letters Patent No. 230,377, dated July 20, 1880.

Application filed April 13, 1880. (No model.)

To all whom it may concern:

Be it known that I, SPENCER G. WILCOX, of Weedsport, in the county of Cayuga and State of New York, have invented certain new and useful Improvements in a Rod and Wire Cutting and Twisting Machine, for the use of tinsmiths, blacksmiths, telegraph-constructors, fence-builders, and all other persons having occasion to cut metal rods, wires, nails, or small bars; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

My invention relates to a bolt and wire cutter; and the novelty consists in the construction and arrangement of parts, as will be more fully hereinafter set forth.

The invention is peculiarly adapted for service in making wire or barbed fences, forming wire bands or ties, and the like, peculiar twisting means for the wire ends being provided; but the device is equally applicable to other uses.

The invention is designed as an improvement upon, or as an improved application of, the patent granted me January 21, 1879, No. 211,608, reissued February 3, 1880, No. 9,064. The device herein described is operated upon the same principle as the device described in said patent, but is improved in construction and in its adaptation for specific use.

The object of the invention is to dispense with the rack and cogged mechanism heretofore employed for transmitting motion from the levers to the reciprocating cutting-tool, to render the tool adjustable, and to provide twisting and gripping devices upon the tool, as will be more fully hereinafter described.

To these ends the invention consists in the employment, in connection with a stationary tool or head, of a reciprocating cutter operated by levers having slotted elbows and pivotal connections. A dovetail recess in the head receives a stationary cutter, and the reciprocating cutter is secured by screw-connection to an adjuster or adjusting-sleeve, the turning of

which limits the stroke of the cutter and compensates for wear. A slot in the transverse hammer-head is adapted to receive the ends of a wire band and twist them by turning the tool, and between the levers a toothed abutting-surface serves a similar purpose, as well as a powerful griper or holder. The head is constructed so as to be used as a hammer when desired.

The adjusting barrel or sleeve may have threaded connections at each end for double adjustment, it may have a friction-surface in light tools and be turned by the thumb and finger, or it may be perforated and adapted to be operated by a separate tool or short lever.

Figure 1 is a longitudinal view, partly in section; Fig. 2, a side section, and Figs. 3 and 4 detail views.

Referring to the drawings, A represents a stationary head, composed of the body A', having cutter-slot a', arms A², having pivot-holes a², and hammer-head A³, having slot a³. In the hammer-head A³ is an inclined dovetailed slot, B, which receives the stationary cutter B', which is removed at will.

Within the slot a' operates the reciprocating cutter C, which, having a threaded shank, c, operates in an adjusting-sleeve, D, having perforations d and female threads at each end.

An eyed rod, E, having a threaded shank, e, is received in the rear end of the adjusting-sleeve D, and the threads upon each end of the adjusting-sleeve being arranged as right and left screws, it will be seen that a turn of the sleeve acts to project or withdraw the cutter with double force and speed.

H H represent elbow-levers, each having conveniently-curved handle portions h, and the inner surface of each having an abutting projection, J, the object of which is to prevent a cutter being projected too far. They are toothed or notched to receive the ends of the wires for twisting, or to afford a firm griper if the implement is used for other purposes. These teeth J may interlock, if desired. These levers have elbow-arms I, and they are pivoted at the junction of the shank and elbow to the arms A² a², and the inner ends are pivoted, by a pin, x, which passes through elongated eyes i i, to the eyed rod E.

From this description, the operation of the device is obvious.

Various modifications may be made without departing from the principle of my invention or sacrificing the advantages thereof. For instance, the adjusting-sleeve may have only one end screw-threaded, a groove and pin serving.

What I claim is—

1. The combination of the levers H I *i* with the head A' *a'* A² *a*² A³ and cutter B', constructed and serving in relation to and in combination with a reciprocating cutter, C, substantially as set forth.

2. The head A' A² *a*² A³ *a*³, in combination with the elbow-levers H I *i*, as set forth.

3. The head A, in combination with the levers H, having stops J, provided with serrations, as and for the purpose set forth.

4. The combination, with the head A, of levers H I, cutter C, having threaded shank *c*, rod E, having threaded shank *e*, and sleeve D, as and for the purpose specified.

In testimony that I claim the foregoing as my own I affix my signature, in the presence of two witnesses, this 10th day of June, A. D. 1879.

SPENCER G. WILCOX. [L. S.]

Attest:

WM. HENDERSON,
C. M. HENDERSON.