

(No Model.)

C. B. RUMSEY.
WIRE TWISTING TOOL.

No. 382,666.

Patented May 8, 1888.

Fig. 1.

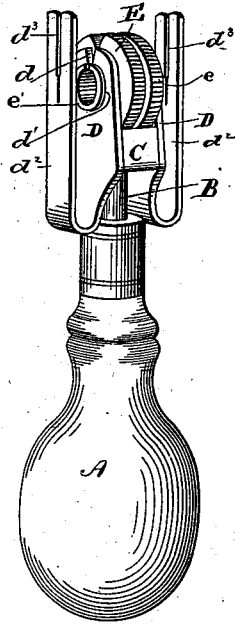


Fig. 2.

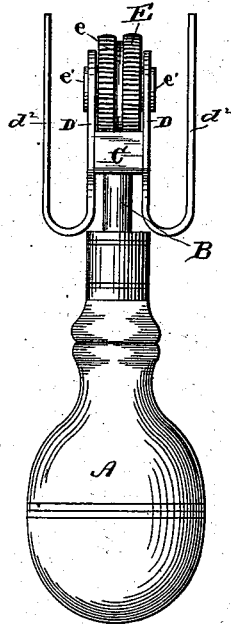


Fig. 3.

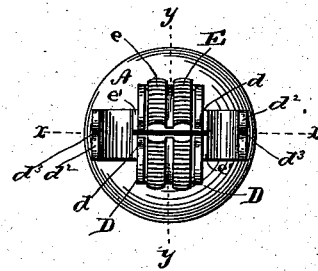


Fig. 4.

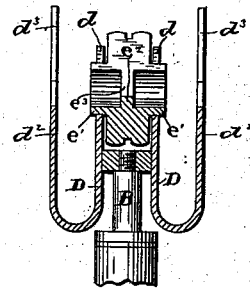


Fig. 5.

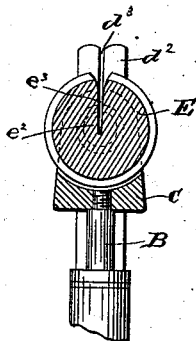


Fig. 6.

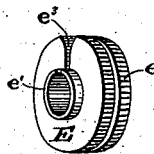


Fig. 7.



Fig. 8.



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UNITED STATES PATENT OFFICE.

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WIRE-TWISTING TOOL.

SPECIFICATION forming part of Letters Patent No. 382,666, dated May 8, 1888.

Application filed February 23, 1888. Serial No. 264,969. (No model.)

To all whom it may concern:

Be it known that I, CHARLES B. RUMSEY, of Homer, in the county of Cortland and State of New York, have invented certain new and useful Improvements in Wire-Twisting Tools; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, and to the figures and letters of reference marked thereon.

In the manufacture of wire fabric inconvenient delays are often occasioned when it becomes necessary to join the ends of a broken wire or to connect a new supply of wire, and these delays result from the fact that the workmen are not provided with any proper tool or appliance for making the joints, they relying mostly upon their skill in twisting the parts of the wire together with their fingers. To remedy this difficulty, I have designed a tool by which wires can be easily and quickly united, and which will produce a joint both strong and inconspicuous.

Referring to the accompanying drawings, Figure 1 represents a perspective view of my improved tool; Fig. 2, a side elevation of the same; Fig. 3, a top plan view; Fig. 4, a sectional view taken on the line *x x*, Fig. 3; Fig. 5, a sectional view taken on the line *y y*, Fig. 3; Fig. 6, a perspective view of the twister-wheel detached. Figs. 7 and 8 represent views of a partially and fully completed joint, respectively, made by means of my improved tool.

Similar letters of reference in these several figures indicate the same parts.

The letter A represents the handle of the instrument; B, a shank secured therein, and bearing at its extremity a head, C. Formed with or secured to this head in any suitable manner are plates D D, that are slotted at their upper ends, as shown at *d*, and provided with perforations *d'* *d'*, into which the said slots *d* lead.

E is a twister-wheel, having, preferably, a milled or roughened circumference, *e*, and cylindrical hubs or bearings *e'*, which are journaled in the perforations *d'* *d'* of the plates D D, as shown in Figs. 3 and 4. The hubs or

bearing portions *e'* are bored out from opposite sides, so as to leave at the center of the twister a comparatively thin web or partition, *e''*, and a radial slot, *e'''*, is cut from the circumference of the twister down through the hub portion *e'*, and part way through the web or partition *e''* to the center of the twister, the said slot *e'''* in the twister being in line with the slots *d* in the plates D D when the twister is turned to the proper point. I preferably make the entrances to the said slots *e'''* and *d* flaring or V-shaped, in order to facilitate the introduction of the wires to be united.

Formed integral with and secured to the plates D D are arms *d''* *d''*, whose upper portions are provided with slots *d'''* *d'''*, also in line with the before-mentioned slots *e'''* and *d* in the twister and bearing-plates, respectively. These slotted arms *d''* *d''* serve to hold the wires to be united in proper position while being twisted.

The way in which the tool is used in practice is as follows: The operator grasps the handle with one hand, and with his thumb applied to the milled or roughened circumference of the twister turns the latter until the slots *e'''*, *d*, and *d'''* *d'''* coincide. He then with his other hand inserts in said slots the lapped ends of the wires to be united; and while holding said wires with his thumb and finger down in the slots *d'''* in the arms rotates with the thumb of the hand holding the instrument the rotary twister five or six times, thereby causing a joint to be formed similar to that shown in Fig. 7, which joint is fully completed by breaking off the projecting ends *w* of the wire, (shown in said Fig. 7,) thus leaving the joint as represented in Fig. 8.

By means of this little instrument wires can be united much quicker and neater than by the fingers alone, and the joints produced are not so noticeable in a woven fabric as are hand-made joints.

I do not desire to be limited to any particular mode of constructing the parts of the instrument, as there are various ways of making them that may be practiced. For instance, the rotary twister, instead of being bored or cut,

as described, may be cast or otherwise formed with its slots and recesses, as will be readily understood.

Having thus described my invention, what I
5 claim as new is--

A hand-tool for twisting wire, consisting of the handle, the slotted bearing-plates, the slotted wire-holding arms, and the slotted twister-wheel, its circumference extending beyond the

bearing-plates and in such relation to the latter that the wheel can be rotated by the thumb of the hand engaging the handle, substantially as described.

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