

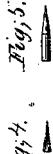
*C. Jillson,*

*Wire-Pointing Machine,*

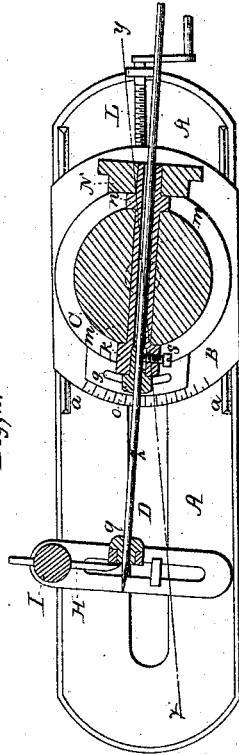
*N<sup>o</sup> 47,954.*

*Patented May 30, 1865.*

*Fig. 4.*



*Fig. 2.*



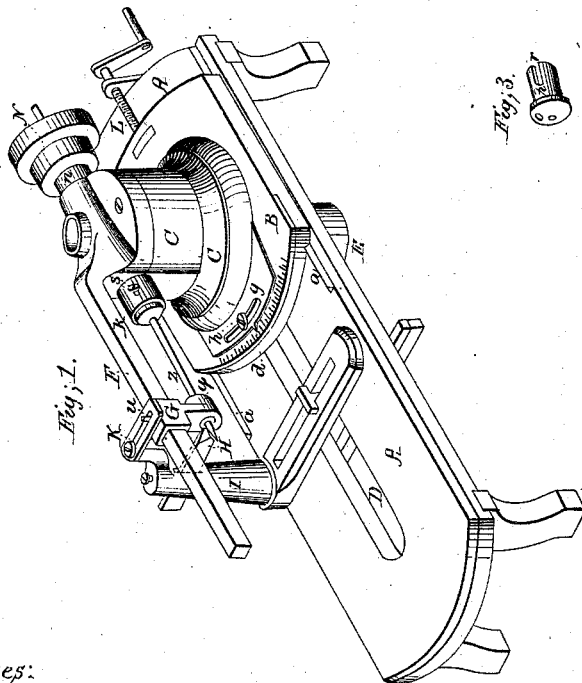
*Fig. 6.*



*Fig. 3.*



*Fig. 1.*



*Witnesses;*

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*Inventor;*

*C. Jillson*  
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# UNITED STATES PATENT OFFICE.

C. JILLSON, OF WORCESTER, MASSACHUSETTS.

## IMPROVED WIRE-POINTING MACHINE.

Specification forming part of Letters Patent No. 47,954, dated May 30, 1865.

*To all whom it may concern:*

Be it known that I, C. JILLSON, of Worcester, in the county of Worcester and State of Massachusetts, have invented certain new and useful Improvements in Wire-Pointing Machines; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, in which—

Figure 1 represents a perspective view of said wire-pointing machine. Fig. 2 represents a horizontal section through the same. Figs. 3, 4, 5, and 6 are detached views, hereinafter to be referred to.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

A represents the bed-plate of the machine, upon which the index base-piece B is set on the ways *a*, on which it can be made to slide to feed the wire to the cutter. The stand C rests on the base-piece B, and is provided with a vertical spindle, which passes through said base-piece and through the slot D of the bed A, and a weight, E, is suspended to the spindle of the stand C, so as to keep it in its position. The index-point *d* is fastened to the stand C, and its plate is provided with a slot, *g*, through which the set-screw *h* is inserted, and the stand C can thus be adjusted to any desired angle to point the wire to the desired taper.

*m* represents a hollow shaft, which has its bearing within the stand C, and is held therein from moving longitudinally by means of the collars *k* and *n*. The wire to be pointed passes through said shaft and through an eye, *o*, fastened to it at its front end. The eye *o* is represented in a detached view at Fig. 3. Its sleeve or hollow shank *p* has a slot, *r*, through which the fastening-screw *s* passes, which presses with its end against the wire in the eye, and thus said eye *o* and the wire within are both secured to the shaft *m* or its collar *k* by the fastening-screw *s*.

From the upper part of the stand C extends a swinging arm, F, on which an adjustable hanger, G, is supported, which can slide on said arm. An eye, *q*, is secured to the hanger G, and the end of the wire Z is passed through said eye, to support it properly when the cutter or tool H acts upon it. The cutter H is secured

to a stand, I, which is fastened in the ordinary manner to the bed A of the machine, and whose upper slotted arm, K, holds the pin or projection *u* of the hanger G on the swinging arm F, so that both the stand I and the hanger G are connected to each other; but still hanger G is at liberty to move laterally toward or from the cutter H in the operation of pointing the wire.

The feed of the wire to the cutter is effected by means of the feed-screw L, by which the base-piece B is moved toward or from the cutter H. It will be observed that said feed-screw is parallel with the ways *a*, on which the base-piece B moves; but the stand C, its swinging arm F, and wire-support G having been previously adjusted to the desired angle, it is evident that in operating the feed-screw L the wire Z will be moved not only in its longitudinal direction, but also laterally to or from the cutter H, which is essential to cut the taper thereon.

In the operation of the machine the stand C is first adjusted by means of the index and pointer *d* to give the wire the desired taper. The hanger G and cutter-stand I are then properly adjusted, so as to bring the point of the cutter close to the outer face of the wire support or hanger G. Motion being given to the pulley N and to the feed-screw L, the wire is turned, and the stand C, wire Z, and arm F are moved forward, and consequently the hanger G and eye *q*, which are prevented from participating in said movement by their connection with the cutter-stand, move laterally from the cutter by reason of their oblique position in relation to the feed motion, and hence the wire as it passes through the eye *q* is pointed, as represented in Figs. 1 and 2.

When it is desired to cut from the wire short pointed pieces such as are represented at Figs. 4 and 5 the stand C is turned so as to bring the wire Z to the position represented by line *x y* at Fig. 2, and the cutter-stand I and cutters H are moved in the corresponding direction, so as to bring the latter to act upon the wire Z in the manner shown at Fig. 6. In that position the wire, while being fed forward, is moved toward the cutter, instead of being moved away from it, as above described, and the result is that the point is made in the opposite direction, and is eventually cut off from the wire. In this manner points as shown at Figs. 4 and 5 may be made. The eyes *o* and

*g*, which support the wire, are made so that they can be easily removed and be replaced by such as to conform to the size of the wire to be pointed.

In pointing wire as shown at Figs. 1 and 2 the cutter commences to operate at the center of the eye *y* and of the wire, while when the machine is arranged to point wire as shown at Fig. 6 the cutter commences to act first upon the outer surface of the wire, and hence if in such cases it be desired to have some part of the wire of full size, as seen at Fig. 5, the wire should be run through the proper distance before the cutter commences to act upon the same. In my wire-pointing machine the cutter remains stationary, while the wire, being supported on an angular position and its standard or support moved on the parallel ways *a a*, recedes and approaches the cutter, as the case may be, as above described, and indicated in the drawings.

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

1. In combination with the adjustable stand *C*, which supports the wire-shaft, the swinging arm *F*, cutter-stand *I*, and hanger or wire-support *G*, whereby the latter is connected with the cutter-stand but moved laterally as the wire is fed forward, substantially as and for the purposes specified.

2. Combining the cutting and holding devices in a wire-pointing machine with the stand which supports the wire in such a manner that the machine can be used for simply pointing

wire or for pointing and cutting off the pointed pieces, substantially in the manner described.

3. The combination of the pivoted stand which supports the hollow wire-shaft with the sliding table *B*, for the purpose of adjusting the taper of the wire to be pointed, substantially as and for the purposes specified.

4. Securing the wire within its hollow shaft by the application of a slotted eye-piece, *o*, substantially in the manner and for the purposes specified.

5. The combination of the cutter and stand for supporting the wire in a wire-pointing machine in such a manner as that the cutter remains stationary during the operation of pointing the wire, substantially as described.

6. The combination of mechanism in a wire-pointing machine in such a manner as to cause the wire that is being pointed to recede from or approach the cutter by a simple movement of the standard which holds the wire to be pointed in a line parallel with the ways or base of the machine, substantially as herein described.

7. The combination, with arm *F*, of sliding hanger *G*, for supporting the wire, substantially as set forth.

8. The combination, with arm *F*, of hanger *G*, slotted arm *K*, and guide *u*, substantially as set forth.

C. JILLSON.

Witnesses:

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