

(No Model.)

W. H. DAYTON.
WIRE POINTING MACHINE.

No. 341,558.

Patented May 11, 1886.

Fig. 1.

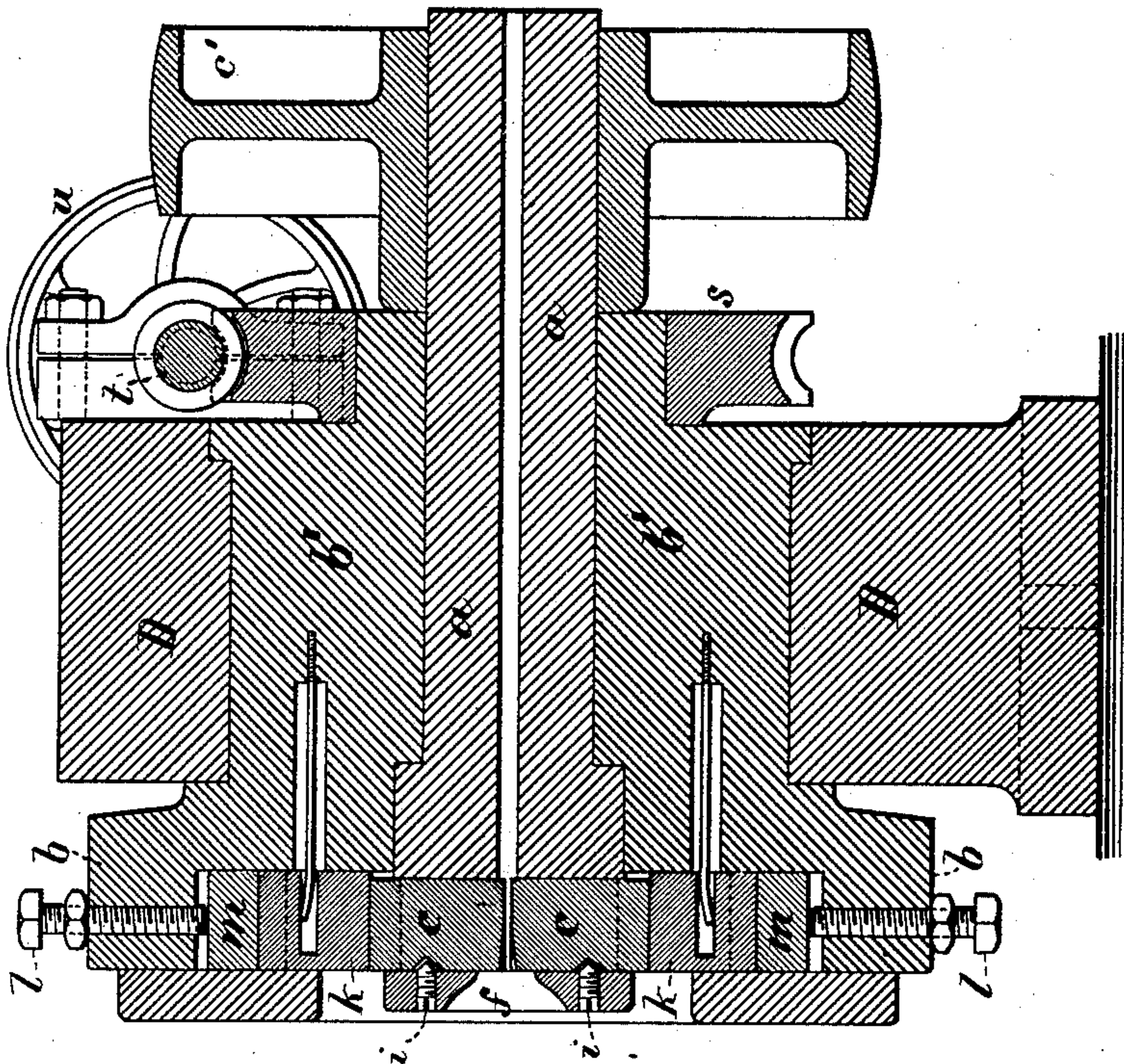
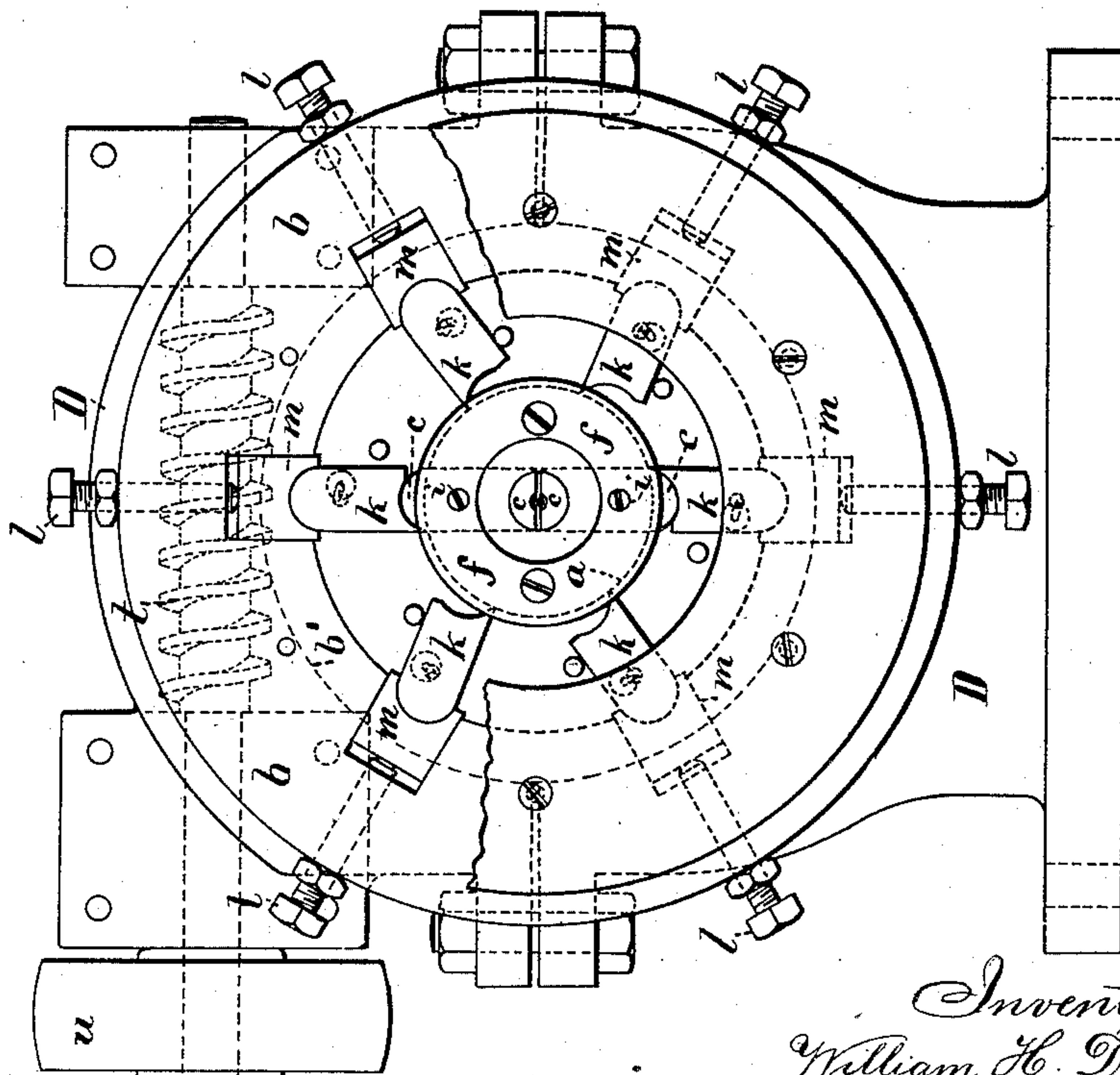


Fig. 2.



Witnesses:
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UNITED STATES PATENT OFFICE.

WILLIAM H. DAYTON, OF TORRINGTON, CONNECTICUT.

WIRE-POINTING MACHINE.

SPECIFICATION forming part of Letters Patent No. 341,558, dated May 11, 1886.

Application filed November 2, 1885. Serial No. 181,602. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. DAYTON, of Torrington, in the county of Litchfield and State of Connecticut, have invented an Improvement in Machines for Making Needle-Blanks and other Articles, of which the following is a specification.

A wire has been pointed and needle-blanks have been formed by the compressing action of dies that are revolved by and with a shaft, and are acted upon by swinging toggle-blocks. A reference is hereby made to Letters Patent No. 52,493, granted February 6, 1866, to Hopson, Brooks and Manville, and to Letters Patent No. 58,730, granted October 9, 1866, to E. J. Manville. In wire-pointing machines of this general character a difficulty has been experienced from the dies compressing the metal in certain directions only. For instance, in the first-named patent the compressing actions are ninety degrees apart, and in the last-named such compressing actions are sixty degrees apart; hence in both instances there is a tendency to consolidate the metal more in some radial lines than in others. I rectify this tendency and overcome the aforesaid difficulty by gradually revolving the head that holds the toggle blocks, in order that no two compressions shall be in exactly the same radial lines. Thereby the swaging action is much more uniform and the needle-blank more perfect.

In the drawings, Figure 1 is a vertical longitudinal section showing the parts of my swaging apparatus, and Fig. 2 is a front elevation.

The shaft *a* is provided with a transverse mortise at one end, into which is received the two swaging-dies *c c*. These are held in place by a cap-plate, *f*, and the extent to which the dies may be opened between each compressing operation is determined by the pointed screws *i*, passing through the cap-plate *f* into conical recesses in the dies *c c*, as in the said Patent No. 58,730; or any other suitable appliance may be made use of, having this object in view. The shaft *a* is tubular, so as to allow for the passage into it of the reduced needle-blank or other article that is being operated upon, and

this shaft *a* and the dies *c c* are revolved at the desired speed by a pulley, *c'*, or other suitable device. Around this shaft *a* there is a tubular journal, *b'*, and this is supported in a suitable head-stock, *D*, and upon the tubular journal *b'* is the circular head-block *b*, having recesses for the reception of the toggle-blocks *k* and bearing-blocks *m*, against which the radial set-screws *l* act to adjust the operation of the toggle-blocks, as in the said Patent No. 52,493. At the back end of the tubular journal *b'* there is a gear-wheel, *s*, and upon the head-stock a worm-pinion, *t*, is supported in contact with the wheel *s*, and this worm-pinion *t* is revolved by suitable power applied to the pulley *u*, or in any suitable manner. It is now to be understood that the shaft *a* is revolved with rapidity, and carries with it the swaging-dies *c c*, and that the toggle blocks *k* act upon such swaging-dies to press them toward each other, as in the aforesaid patents; but in consequence of the gradual revolution given to the head-block by the worm-pinion *t* and gear-wheel *s* the toggle blocks *k* are carried around with the head block, and hence they are constantly changing their position in relation to the piece of wire that is being operated upon, so that the compressing actions follow one another all the way round the piece of wire operated upon, thus rendering such compressing actions more uniform and the work performed more perfect.

I claim as my invention—

The combination, with the revolving shaft and swaging-dies, of a head-block and the toggle blocks carried by the same, and mechanism, substantially as specified, for gradually revolving the head-block and changing the points at which the swaging operations take place, successively, upon the wire or article that is being reduced or pointed, substantially as specified.

Signed by me this 23d day of May, A. D. 1885.

WILLIAM H. DAYTON.

Witnesses:

ISAAC W. BROOKS,
CHAS. L. MCNEIL.