

J. E. WHEELER.
SOLE-CHANNELING MACHINE.

No. 173,836.

Patented Feb. 22, 1876.

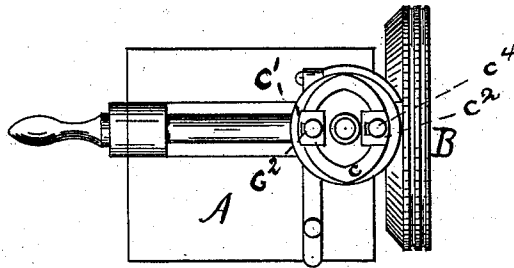


Fig. 1.

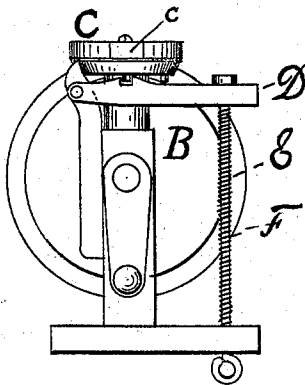


Fig. 2.

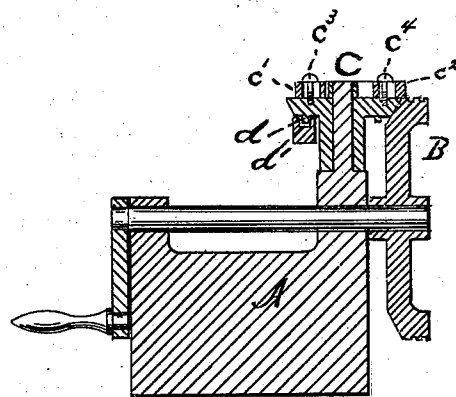


Fig. 3.

WITNESSES

L. H. Clement

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JOHN E. WHEELER, OF LYNN, MASSACHUSETTS.

IMPROVEMENT IN SOLE-CHANNELING MACHINES.

Specification forming part of Letters Patent No. 173,836, dated February 22, 1876; application filed January 26, 1876.

To all whom it may concern :

Be it known that I, JOHN E. WHEELER, of Lynn, in the county of Essex and State of Massachusetts, have invented an Improvement in Channeling-Machines, of which the following is a specification:

This invention has for its object the adjustability of the guide in relation to the feeding and cutting mechanisms of a channeling-machine, for the purpose of forming a channel at irregular distances from the edge of the article operated upon automatically.

Figure 1 is a plan of the top of the attachment. Fig. 2 is a side elevation; and Fig. 3 is a cross-section.

Like letters of reference indicate like parts.

A is the standard of the machine carrying the feed-wheel B, and the rotary disk C, which has a bearing on the standard, and is arranged at right angles to the feed-wheel, and is beveled on its under surface to conform to the bevel on the face of the feed-wheel, against which it abuts. Projecting from the revolving disk is the cone-shaped or oblong wall *c*, the face of which forms the guide against which the work presses as it is fed; the bearing-blocks *c*¹ *c*², adjusted by the set-screws *c*³ *c*⁴, are arranged to have a movement to and from the center of the plate or disk on the line of the shortest diameter of the oblong guide to furnish a further adjustment. The revolution of the disk is intermittent, regulated by the stop *d* projecting from the under surface of the disk, which engages with the recess *d'* in the lever D when the rod E is released, permitting the spring F to operate against the end of the lever. The arrangement, location, and adjustment of the cutting and grooving mechanism, in relation to the guide and feeding mechanism, is the same as in the ordinary "McKay Channeler."

The operation of the device is as follows: The article to be channeled is inserted between the feed-wheels, with its side against the face of the wall *c* on the disk C, which forms the guide; as the feeding progresses the distance of the channel from the edge is regulated by the revolution of the disk, which forces the article channeled toward, or allows it to feed away from, the cutting-tools as the diameter of the oblong wall increases or diminishes.

It is obvious that the greatest difference that can be obtained in regard to the relative distance of the channel from the edge is that existing between the longest and shortest diameter of the wall forming the guide; to lessen this difference the bearing-blocks *c*¹ *c*² are caused to project when necessary.

In channeling a sole it is often desirable to channel nearer the edge from shank to shank around the toe than in the shank; to effect this the guide is set so that in commencing the feeding and cutting at the heel-end of the shank the channel is cut at the greatest distance from the edge, and the disk is held in that position by suitable restraining mechanism; as the feeding progresses from the shank the disk is released, and by its partial revolution carries the guide nearer the cutting devices, throwing the channel gradually out toward the edge until a quarter revolution is made, and the greatest diameter of the guide is at right angles with the cutting and feeding mechanism, the channel is then cut at a uniform distance from the edge of the sole around the toe to the commencement of the shank on the opposite side, when the disk is again released and the channel is directed inward gradually until the shortest diameter is at right angles with the feed, when the disk is stopped, and the channeling again proceeds at a uniform distance from the edge.

Having thus fully described my invention, I claim and desire to secure by Letters Patent of the United States—

1. The revolving disk forming an adjustable guide, provided with the projecting guiding-wall of unequal diameters, substantially as set forth.

2. In combination with the revolving disk-guide, substantially as described, the bearing-blocks *c*¹ *c*² adjusted thereon by the set-screws *c*³ *c*⁴, substantially as and for the purpose set forth.

3. In channeling-machines, the combination of the disk-guide with suitable restraining mechanism arranged to stop the disk at determined points in its revolution, substantially as described.

JOHN E. WHEELER.

Witnesses:

L. H. CLEMENT,
FREE. F. RAYMOND.