

G. H. MILLER.
Centering Chucks.

No. 142,642.

Patented September 9, 1873.

Fig. 1

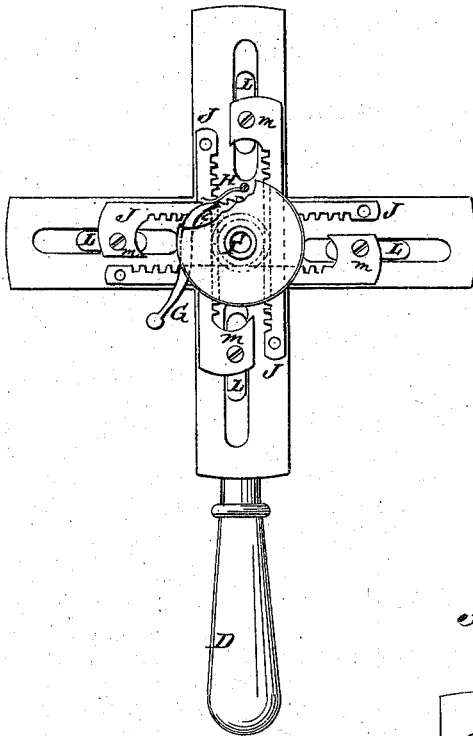


Fig. 2

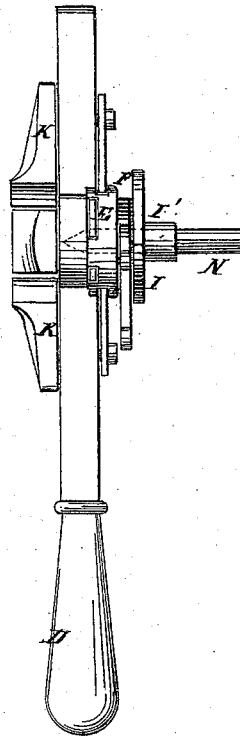
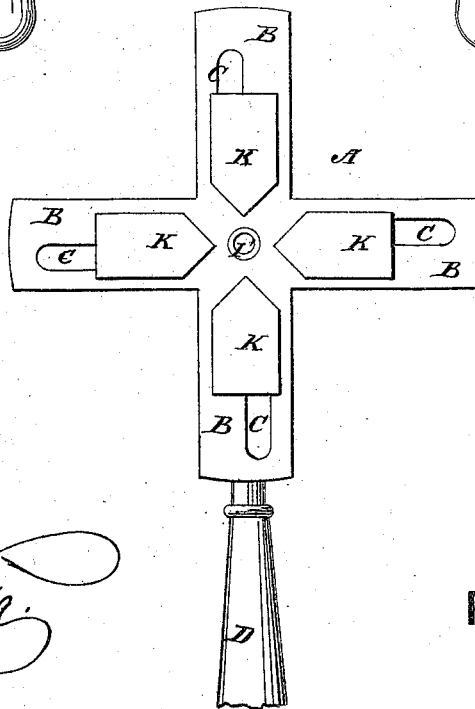


Fig. 3



Witnesses:

Chas. Nida.
Seigneur

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UNITED STATES PATENT OFFICE.

GEORGE H. MILLER, OF BINGHAMTON, NEW YORK. *

IMPROVEMENT IN CENTERING-CHUCKS.

Specification forming part of Letters Patent No. 142,642, dated September 9, 1873; application filed July 12, 1873.

To all whom it may concern:

Be it known that I, GEORGE H. MILLER, of Binghamton, in the county of Broome and State of New York, have invented a new and useful Improvement in Centering-Chuck, of which the following is a specification:

The invention relates to an improved chuck for centering shafting and other work to be turned in a lathe; and consists in a frame formed of arms crossing each other, and provided with slots to receive the clamping-dogs, a crank and pinion and ratchet mechanism for moving the dogs toward or from each other and holding them at any point, and of a central tube and a punch working through the same, as hereinafter described.

In the drawing, Figure 1 is a back-side view, partly in section, of the complete machine. Fig. 2 is an edge view; and Fig. 3 is a face view, showing the dogs.

Similar letters of reference indicate corresponding parts.

A is the cross, the arms B of which have slots C, and to one arm is attached a handle, D. E is a hollow cap, which contains a central pinion, (represented in Fig. 1 in dotted lines.) This cap is rigidly attached to the center of the back side of the cross. F is a ratchet attached to the cap. G is a spring-pawl, which engages with the ratchet. H is the spring. I is a crank-wheel, which is fast on a central tube, I', which tube passes through the cap and the center of the cross. The pawl G is attached to this wheel I. J is a rack attached to each dog. K represents the dogs. L is a lug on each of the dogs, which passes through the slot C, to which lugs the racks

are attached, as seen at *m*. These racks are arranged as seen in Fig. 1. They cross each other and engage with central pinion, as is indicated in the drawing in dotted lines. When the crank-wheel I is turned the racks move the dogs on the face of the cross toward or from the center, as may be required. The ratchet and pawl are so arranged as to prevent back motion when the dogs are moved for centering, and so as to hold the dogs in position. N is the center-punch, which passes through the tube I', by means of which the center is marked.

The manner of using this centering-chuck is as follows: The dogs are first moved back from the center, and then the article to be centered is brought in contact with the cross, and the dogs are moved up to it, which brings the article to a central position, when the center is marked with the punch N. This centering-chuck may be used for either wood or iron, and its use will greatly economize time, while determining the center with unerring certainty.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The combination, with the punch N and slotted arms B, of a ratchet mechanism, crank-wheel I, and the central pinion-racks J, lugs L, dogs K, tube I, and cap E, substantially as shown and described.

GEORGE H. MILLER.

Witnesses:

WM. M. CROSBY,
PETER K. KENNEDY.