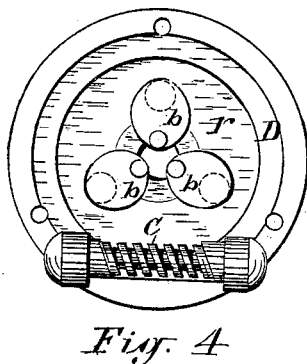
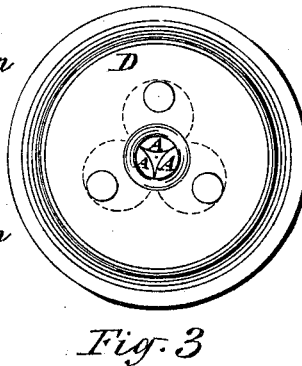
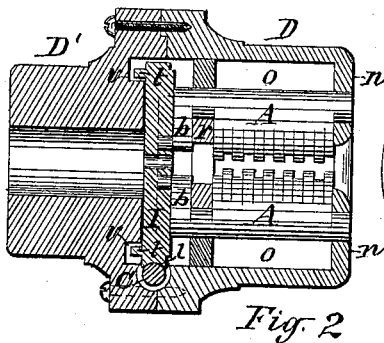
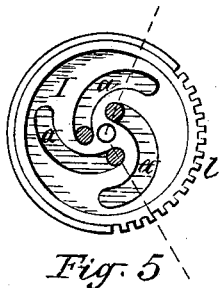
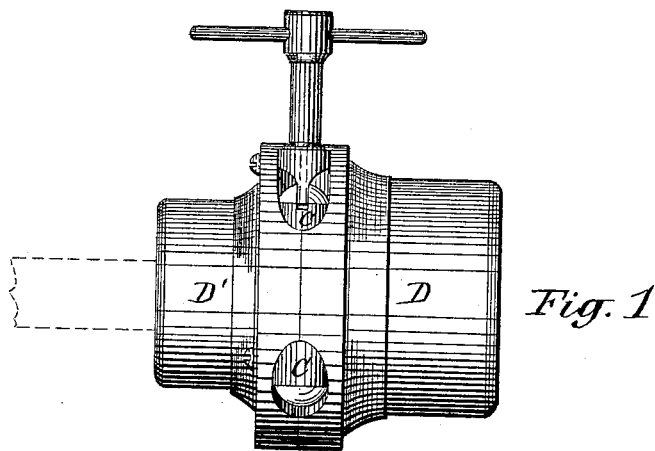


(No Model.)

C. R. MEAD.  
LATHE CHUCK.

No. 372,482.

Patented Nov. 1, 1887.



WITNESSES:

*A. F. Waly*  
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INVENTOR:

*Charles R. Mead*  
BY  
*Hull, Lacey & Hull*  
ATTORNEYS.

# UNITED STATES PATENT OFFICE.

CHARLES R. MEAD, OF ONEIDA, NEW YORK.

## LATHE-CHUCK.

SPECIFICATION forming part of Letters Patent No. 372,432, dated November 1, 1887.

Application filed February 28, 1887. Serial No. 229,159. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES R. MEAD, of Oneida, in the county of Madison, in the State of New York, have invented new and useful Improvements in Lathe-Chucks, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

This invention has special reference to the chuck for which I have obtained Letters Patent of the United States No. 321,740, dated July 7, 1885. In the use of said chuck I have found some difficulty in retaining the jaws thereof in their gripping positions, owing to the capability of the jaw-carrying portion of the chuck-head of rotating on the rear section thereof.

The object of my present invention is to obviate said defect and to render the chuck more effective in general; and to that end the invention consists in the improved construction and combination of parts, as hereinafter fully described, and specifically set forth in the claims.

In the accompanying drawings, Figure 1 is a side view of my improved chuck. Fig. 2 is a longitudinal section of the same, taken in a plane parallel with the axis of two of the jaws. Fig. 3 is a face view. Fig. 4 is a detached rear-end view of the front section of the head, showing the cranks of the jaws and the adjusting-screw; and Fig. 5 is a detached plan view of the cam-grooved plate by which the cranks of the jaws are turned.

Similar letters of reference indicate corresponding parts.

D and D' represent, respectively, the front and rear sections of a transversely-divided chuck-head, which sections are detachably yet firmly secured to each other, so as to compel them to turn in unison. The front section, D, is formed with a central cavity, *o*, which extends from the rear end of said section forward and is terminated by an annular flange, *n*, on the face end of the front section. In the rear portion of the front section, D, is rigidly secured a ring, *r*, and this ring and the aforesaid flange *n* are provided with coinciding eyes, in which the jaws A A A are pivoted eccentrically. Back of the ring *r* are cranks

*b b*, which are rigidly attached to or formed integral with the rear journals of the jaws.

The rear section, D', is provided with an annular groove, *v*, in the end adjacent to the front section, and on said end of the rear section is pivoted an annular plate, I, having an annular flange, *t*, entering the groove *v* and forming therewith the pivot of the said plate. This plate is provided with the segmental cam-grooves *a a a*, into which project the wrist-pins of the cranks *b b*, and the engagement of these parts causes the jaws to be turned on their axes and to move toward and from the center of the chuck by the turning of the plate I.

The edge of the plate I is provided with a screw-threaded groove, *l*, with which engages the adjusting-screw C, which is journaled in grooves in the adjacent ends of the head-sections D D' and shouldered therein, so as to prevent the screw from moving longitudinally. By turning this screw the plate I receives rotary motion, and by the engagement of the cranks *b b* with the cam-grooves *a a a* of the aforesaid plate the jaws A A A are turned on their axes and caused to move either toward or from the center of the chuck, as before stated.

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

1. The combination of the chuck-head, eccentrically-pivoted jaws, and cranks on said jaws, the rotatable plate I, provided with segmental cam-grooves *a a a* and with a screw-threaded groove, *l*, in its edge, and the adjusting-screw, C, journaled in the head and engaging the plate I, substantially as described and shown.

2. The combination of the chuck-head divided transversely and having the two sections rigidly secured to each other, and the front section formed with a central cavity extending from the rear end of said section forward and terminated by an annular flange, *n*, on the face end of the front section, the ring *r*, secured to the rear portion of the interior of the front section, the jaws A A A, pivoted eccentrically in the aforesaid flange and ring and provided with the cranks *b b b*, the annu-

lar plate I, pivoted in the head and provided with the cam-grooves *a a a* and with the screw-threaded groove *l*, and the adjusting-screw C, journaled in the head and engaging the plate  
5 I, substantially as described and shown.

3. In combination with the front section, D, and the jaws A A A, pivoted eccentrically therein and provided with the cranks *b b b*, the rear section, D', rigidly secured to the  
10 front section and provided with the annular groove *v*, the annular plate I, provided with cam-grooves *a a a*, engaging the aforesaid cranks and formed with the annular flange *t*,

entering the groove *v* and provided with a screw-threaded groove, *l*, and the adjusting-screw C, journaled in the head, substantially  
15 as described and shown.

In testimony whereof I have hereunto signed my name and affixed my seal, in the presence of two attesting witnesses, at Oneida, in the  
20 county of Madison, in the State of New York, this 24th day of February, 1887.

CHARLES R. MEAD. [L. s.]

Witnesses:

J. R. H. WHITWALL,  
A. B. FRENCH.