

(No Model.)

C. RACINE.  
Chuck for Turning-Lathes.

No. 227,297.

Patented May 4, 1880.

Fig. 1.

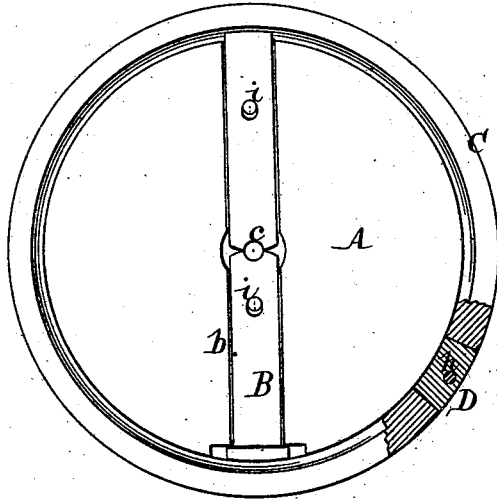


Fig. 3.

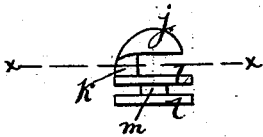


Fig. 2.

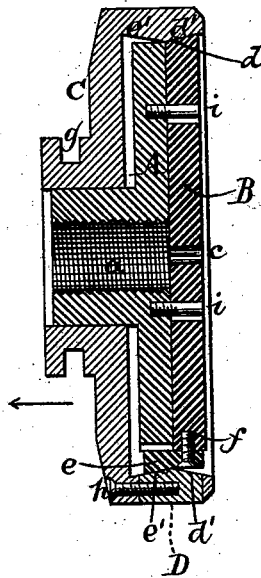


Fig. 4.



Witnesses.  
*Chas. Nahlers.*  
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Inventor.  
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 his attys.

# UNITED STATES PATENT OFFICE.

CHARLES RACINE, OF NEWARK, NEW JERSEY.

## CHUCK FOR TURNING-LATHES.

SPECIFICATION forming part of Letters Patent No. 227,297, dated May 4, 1880.

Application filed March 20, 1880. (No model.)

To all whom it may concern :

Be it known that I, CHARLES RACINE, a citizen of the United States, residing at Newark, in the county of Essex and State of New Jersey, have invented new and useful Improvements in Chucks for Turning-Lathes, of which the following is a specification.

This invention consists in the combination, in a chuck, of a head adapted to be secured on the spindle of a turning-lathe, a diagonal slide fitted into the face of said head and provided with an opening to receive and hold the material to be turned, two inclines formed on the opposite ends of said slide, and a sleeve which is fitted on the head of the chuck and adapted to move on the same in the direction of its axis, and on the inner surface of which are formed two inclined faces corresponding to and acting on the inclines of the slide, so that when the sleeve is moved forward the hole in the slide is brought in the center of the chuck, and when the sleeve is drawn back said hole is brought in an eccentric position, and thereby a button or other article can be turned one or more portions of which are eccentric with the remaining portion or portions.

In the accompanying drawings, Figure 1 represents a face view of my chuck. Fig. 2 is a central section of the same. Fig. 3 is a side elevation of a button produced by my chuck. Fig. 4 is a section of this button in the plane  $x$ , Fig. 3.

Similar letters indicate corresponding parts.

In the drawings, the letter A designates the head of my chuck, which is provided with an internal screw-thread,  $a$ , for securing the same on the end of a lathe-spindle. Any other suitable means may, however, be employed for fastening the chuck to the spindle, and I do not wish to confine myself in this respect to the precise construction shown in the drawings.

In the face of the head A is formed a groove,  $b$ , which receives a slide, B, and in the middle of this slide is a hole,  $c$ , to receive and retain the wire or other article to be turned. In the example shown in the drawings the slide B is made in two parts, which are inserted into the groove  $b$  from opposite sides, each part being provided in its inner end with a semi-circular groove, so that when the two ends meet the circular hole  $c$  is produced, as shown in Fig. 1. On one end of the slide B is formed

an upwardly-inclined plane,  $d$ , and on its opposite end a downwardly-inclined plane,  $e$ , which latter, in the example shown in the drawings, is made on a separate piece secured to the end of the slide by a screw,  $f$ , as shown in Fig. 2; but, if desired, said inclined plane  $e$  may be formed directly on the end of the slide.

On the head A is fitted a sleeve, C, to which a sliding motion can be imparted in the direction of the axis of the chuck. For this purpose said sleeve is provided with a circular groove,  $g$ , to receive the forked end of a lever, (not shown in the drawings,) so that the sleeve can be moved with facility and without stopping the motion of the lathe-spindle, to which the chuck is secured. On the inner surface of said sleeve are formed two inclined faces,  $d'$   $e'$ , corresponding, respectively, to the inclined planes  $d$   $e$  on the ends of the slide B, as shown in Fig. 2. In order to be able to introduce the head A into the sleeve C a portion of the circumference of said sleeve is cut away, and this cut-away part is replaced by piece D, which is held in position by a screw,  $h$ , Fig. 2.

When the sleeve C is moved forward to the position shown in Fig. 2 the slide B is moved so as to bring the hole  $c$  in line with the axis of the chuck, and by moving the sleeve C backward the inclined face  $e'$  acts on the inclined plane  $e$  of the slide, so as to impart to said slide a lateral movement and to throw the hole  $c$  in an eccentric position. In either position both the inclines  $d$   $e$  of the slide bear against the inclined faces  $d'$   $e'$  of the sleeve, so that, whatever the position of the sleeve, the slide is securely retained in the desired position. Pins or set-screws  $i$  may also be used to confine the movement of the slide within certain limits. If desired, the slide may be so constructed that it can be extended or contracted, so as to obtain different degrees of eccentricity.

My chuck is intended to be used particularly for turning articles—such, for instance, as a button—one or more portions of which are eccentric with the remaining portion or portions.

In Fig. 3 I have shown an enlarged view of a button of this kind, which consists of a head,  $j$ , an eccentric stud,  $k$ , two flanges,  $l$   $l$ , and a stud,  $m$ , connecting said flanges. The eccentric position of the stud  $k$  is also shown

in Fig. 4. The head *j* is first turned while the hole *c* in the slide *B* is in line with the axis of the lathe-spindle; then the slide *B* is moved so as to throw the hole *c* in an eccentric position, and the stud *k* is finished, and finally the slide is moved back and the flanges *l l m* are finished.

The button which I have here described will form the subject-matter of a separate application for a patent.

What I claim as new, and desire to secure by Letters Patent, is—

The combination, in a chuck, of a head constructed to be secured on the spindle of a turning-lathe, a diagonal slide fitted into the face of said head and provided with an open-

ing to receive and hold the material to be turned, two inclines formed on the opposite ends of said slide, and a sleeve which is fitted on the head of the chuck and constructed to move on the same in the direction of its axis, and on the inner surface of which are formed two inclined faces corresponding to and acting on the inclines of the slide, substantially as and for the purpose described.

In testimony whereof I have hereunto set my hand and seal in the presence of two subscribing witnesses.

CHARLES RACINE. [L. S.]

Witnesses:

EMILE VERPILLIER,  
W. HAUFF.