No. 630,202. Patented Aug. 1, 1899.

E. EKERDT.

JAW FOR FACE PLATES OR CHUCKS FOR TURNING LATHES.

(Application filed July 5, 1898.)

(No Model.) 2 Sheets—Sheet 1.

Fig. 3.

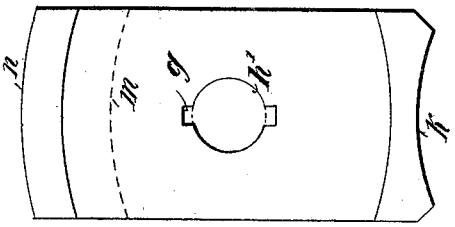

Fig. 2

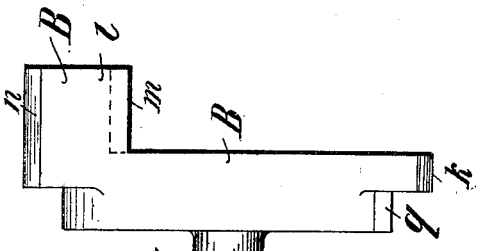

Fig. 1

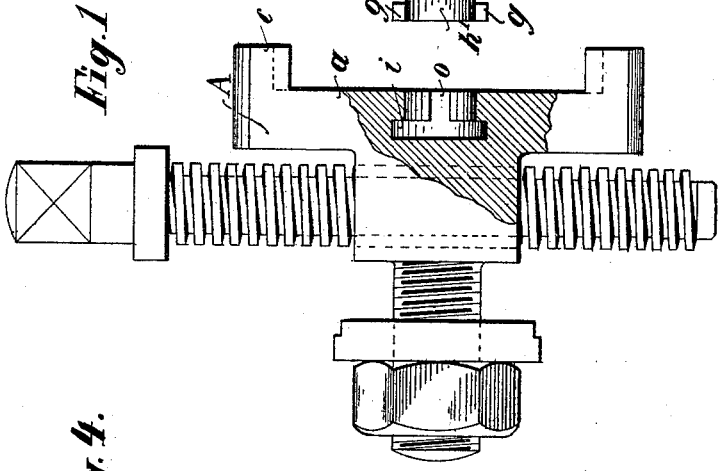

Fig. 4.

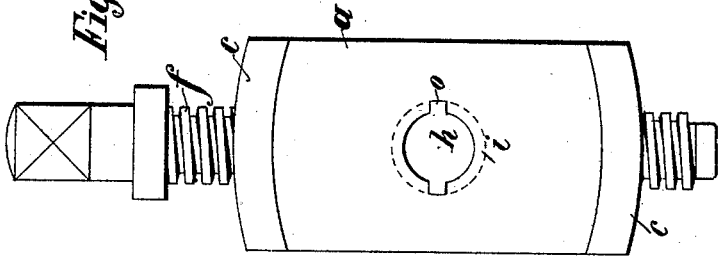

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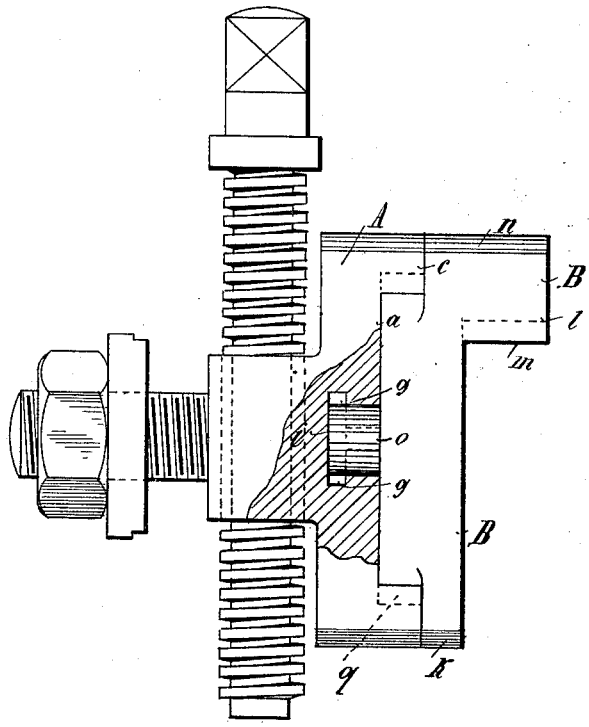
Fig. 5.



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UNITED STATES PATENT OFFICE.

EDUARD EKERDT, OF BIBERACH, GERMANY.

JAW FOR FACE-PLATES OR CHUCKS FOR TURNING-LATHES.

SPECIFICATION forming part of Letters Patent No. 630,202, dated August 1, 1899.

Application filed July 5, 1898. Serial No. 685,173. (No model.)

To all whom it may concern:

Be it known that I, EDUARD EKERDT, a subject of the King of Würtemberg, residing at Biberach, in the Kingdom of Würtemberg, Germany, have invented certain new and useful Improvements in Jaws for the Face-Plates or Chucks for Turning-Lathes, (for which I have applied for patents in Germany, dated April 25, 1898; in Austria, dated May 19, 1898; in Hungary, dated May 20, 1898, No. 7,255; in France, dated May 21, 1898, No. 265,933; in Belgium, dated May 21, 1898, No. 105,976, and in Switzerland, dated May 21, 1898, No. 18,478,) of which the following is a specification.

My invention relates to improvements in jaws for face-plates or chucks of lathes; and the object of my invention is to improve the construction and operation of lathe-chucks.

In order that the said invention may be properly understood, I will first describe the same with reference to the accompanying drawings, which form a part of this specification.

In said drawings, Figure 1 is a side view, partly in section, of an old but somewhat altered face-plate jaw. Fig. 2 is a side view of the improved jaw which forms the subject-matter of the invention. Fig. 3 is a back view of the chuck-jaw, and Fig. 4 is a front view of the altered old form of jaw shown in Fig. 1. Fig. 5 is a side elevation, partly broken away, showing the parts of the invention assembled.

The new chuck-jaw consists of two parts A B. The part A, which is a slightly-altered form of the usual jaw, consists of the short center piece *a*, which is provided with the face-segments *c* and secured by means of its integral nut *b* at the back in the corresponding slot of the face-plate, (not shown,) in which it is guided, as usual. The stud *d*, with the nut and washer *e*, serves to secure the jaw in adjusted position in the usual manner. The screw-spindle *f*, working in nut *b*, serves in the usual manner to radially move the jaw on the face-plate. In the face of the center piece *a* is bored a hole *h*, which is widened out or undercut at *i*, as shown, so as to form a circular recess, which is rectangular in cross-section. Two channel-grooves *o* are cut in the wall of hole *h*, at points diametrically opposite, of the same depth as undercut *i* for the purpose hereinafter explained. The new part B of the jaw, which is provided with working faces *n*, *m*, and *k* to secure the work, has at its back a round stud *h'*, which latter is propided at its end with two lugs or projections *g*, arranged diametrically opposite one another. The part B is further provided with two faces *q*, which are concentric with the stud *h'* and which when bearing against the inner faces of the segments *c* of the part A serve to support the part B.

The part B is secured to the part A as follows: The part B is supported in horizontal position, so that the projections *g* may enter through the grooves *o* into the undercut groove or recess *i*, and when this has been done it is turned into the vertical position, so that the faces *q* will bear against the inner surfaces of the segments *c* and the part B lie parallel to the part A. The whole jaw (A and B) is now ready for use, and a piece of work may be secured by either of the surfaces *k* or *m* of the face-plate, (the outer surface *q* of the part B of such jaw bearing against the exterior segment *c*,) the pressure being put on by the screw *f*, as usual. The lugs or projections *g*, owing to the fact that they have been turned through an angle of ninety degrees in the recess *i*, prevent the part B coming apart from A. Should the movable jaw for any well-known reason require to be turned, all that is necessary is to turn the part B through an angle of one hundred and eighty degrees on its pin *h'*, while the part A is allowed to remain in its proper position on the face-plate.

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

The combination with the jaw A, having face-segments *c*, *c*, and hole *h* having undercut recess *i* and diametrically opposite grooves *o*, *o*, of a jaw B, having a plurality of working faces, a central stud *h'* having diametrically-opposed lugs *g*, *g*, and faces *q* concentric with stud *h'* and coacting with segments *c*, *c*, substantially as and for the purpose set forth.

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

EDUARD EKERDT.

Witnesses:
WILHELM BECK,
HERMANN EKERDT.