

No. 794,582.

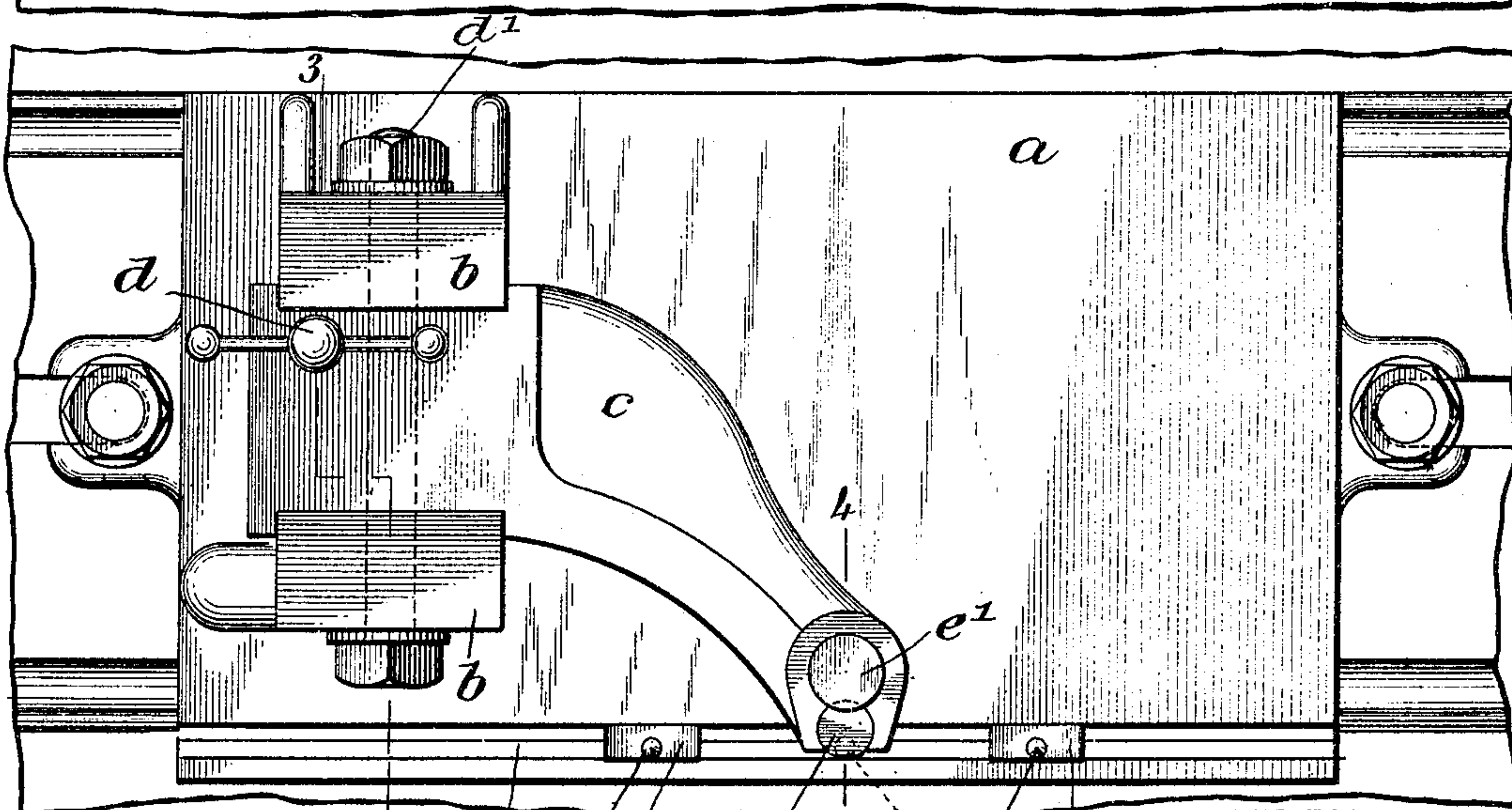
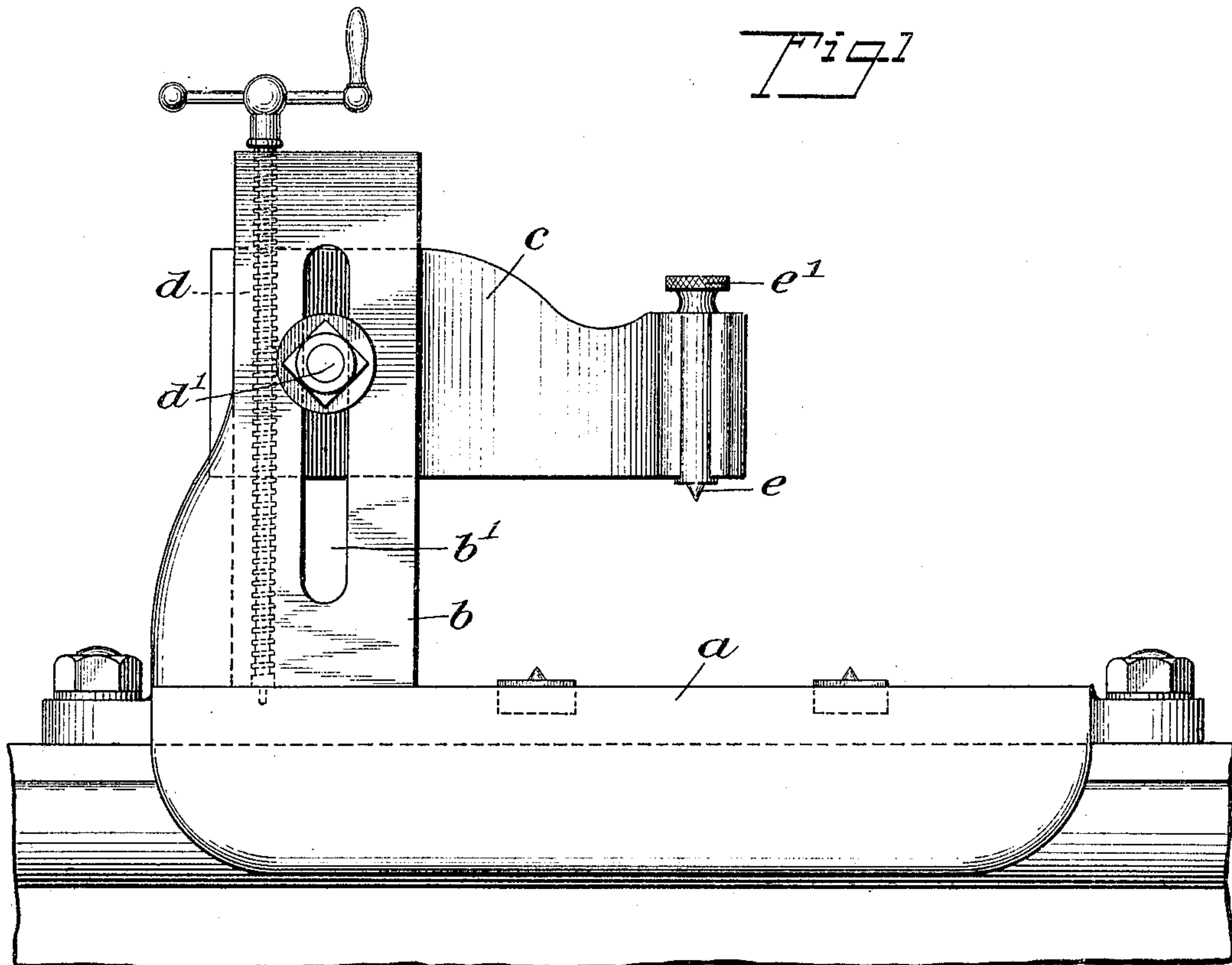
PATENTED JULY 11, 1905.

C. O. BERGMAN & M. ELMER.

CHUCK.

APPLICATION FILED MAY 24, 1904.

2 SHEETS—SHEET 1.



WITNESSES:

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2 SHEETS—SHEET 2.

Fig. 3

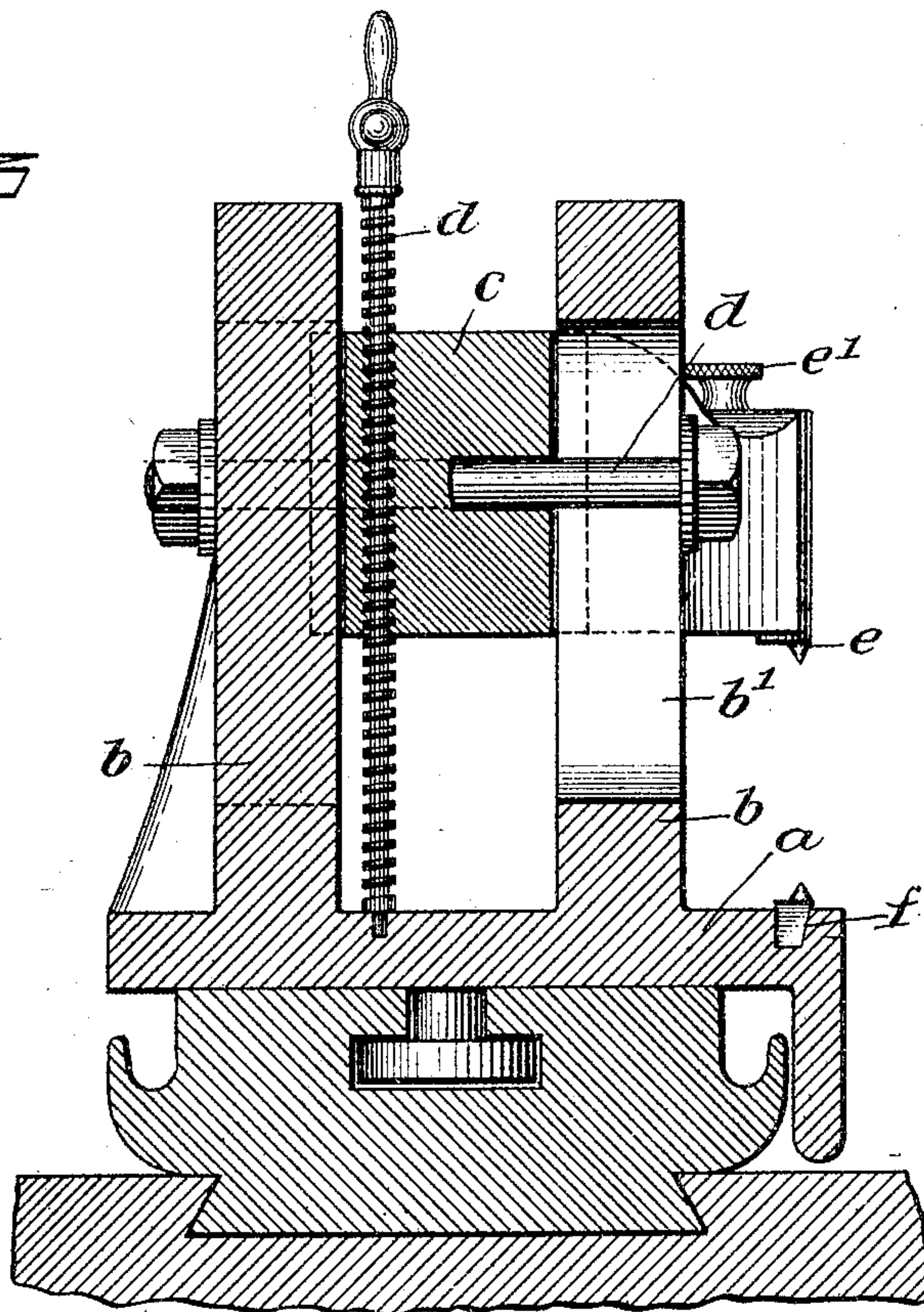


Fig. 4

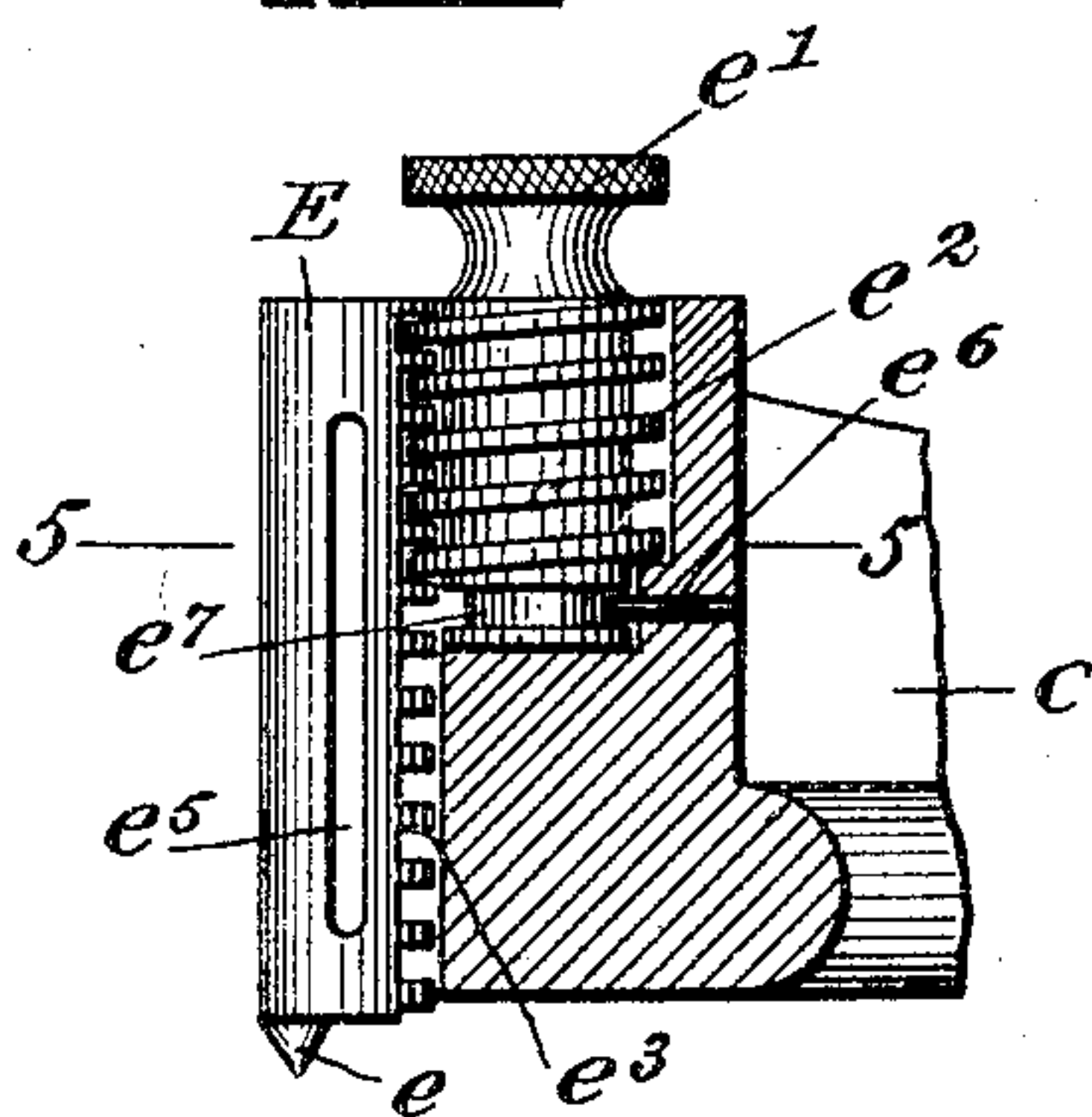
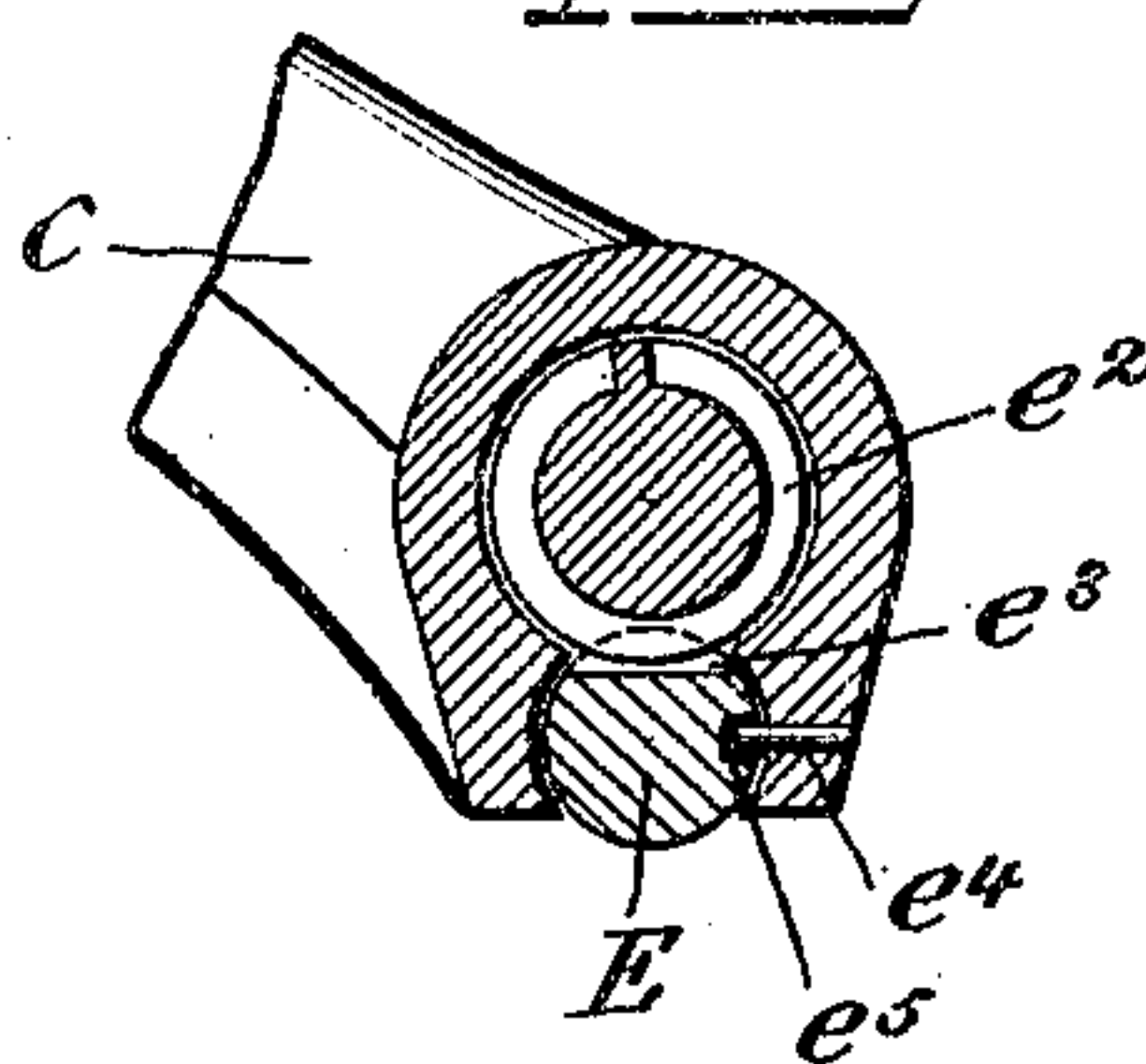


Fig. 5



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UNITED STATES PATENT OFFICE.

CARL OTTO BERGMAN AND MARTIN ELMER, OF HASTINGS, MICHIGAN.

CHUCK.

SPECIFICATION forming part of Letters Patent No. 794,582, dated July 11, 1905.

Application filed May 24, 1904. Serial No. 209,558.

To all whom it may concern:

Be it known that we, CARL OTTO BERGMAN and MARTIN ELMER, subjects of the King of Sweden and Norway, and residents of Hastings, in the county of Barry and State of Michigan, have invented a new and Improved Chuck, of which the following is a full, clear, and exact description.

Our invention relates to a chuck for use on milling-machines and similar machine-tools.

The objects of the invention are to provide for conveniently holding the work on machines of the character mentioned and to do away with the objectionable features of the devices now employed for that purpose.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a side view of a preferred form of our invention. Fig. 2 is a plan view thereof. Fig. 3 is a sectional view on the line 3 3 of Fig. 2. Fig. 4 is a sectional view on the line 4 4 of Fig. 2, and Fig. 5 is a sectional view on the line 5 5 of Fig. 4.

In the drawings, *a* represents a base provided with a support, in the present instance consisting of a pair of standards *b b*.

c is an arm adapted to be supported by the standards, and *d* is a screw or equivalent device for raising and lowering the arm along the standards.

d' is a bolt passing through the arm and adapted to be secured to the standards in order to hold the arm in fixed position with relation thereto.

b' is a slot in which the bolt *d'* is adapted to reciprocate.

At the end of the arm *c* is placed a steel spur *e*, which is supported in a block E. This spur is adapted to be raised and lowered with respect to the arm *c* and adjusted by means of a thumb-nut *e'*, having a screw *e''* attached thereto. The block E has a rack *e'''*, with which the screw *e''* meshes and which is adapted

to be raised and lowered by the turning of the screw.

e'''' is a pin attached to the arm *c* and working in a slot *e'''''* in the block E for the purpose of preventing the rotation of the block upon its axis.

e'''''' is a pin also attached to the arm *c* and entering a circumferential groove *e'''''''* in the end of the screw to keep the latter from vertical motion.

Along one edge of the base *a* is a groove *f*, in which two steel spurs *g g* are adapted to be placed. These steel spurs are mounted upon blocks *g'*, which rest in the groove *f* and are adapted to be slid along the groove and adjusted to any desired position therein.

The operation of the device will be obvious. When it is desired to center a piece of metal which is too large to be held in the milling-machine or shaper-chuck, two prick-punches are made upon one side of the piece and one upon the other, and the three spurs *e g g* are manipulated so as to enter the prick-punches and securely hold the work in place. It will be observed that the spur *e* is adjustable by means of the screw *d* and also by means of the second screw *e''*, which provides for both long and delicate adjustments.

While the drawings illustrate one form of our invention, it will be obvious that it may be embodied in many other forms and that it is not limited to the particular embodiment shown.

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

1. A chuck comprising a support, a pair of spurs mounted thereon, facing in the same direction and adjustable toward and from each other, and a third spur opposite said pair of spurs facing toward them and adjustable toward and from them.

2. A chuck comprising a base having a groove, a pair of spurs located in and adjustable along said groove, and a third spur lo-

cated opposite the groove and adjustable toward and from said pair of spurs.

- 5 3. A chuck comprising a base having a groove, a pair of spurs located in and adjustable along said groove, a support on said base, an arm mounted on said support, and a third spur carried by said arm opposite the pair of spurs and adjustable toward and from them.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

CARL OTTO BERGMAN.
MARTIN ELMER.

Witnesses:

CHAUNCEY R. BISHOP,
FRED L. HEATLE.