

No. 631,893.

Patented Aug. 29, 1899.

W. T. JONES & J. E. SHORE.

MULTIPLE TOOL HOLDER.

(Application filed June 16, 1899.)

(No Model.)

FIG. 3.

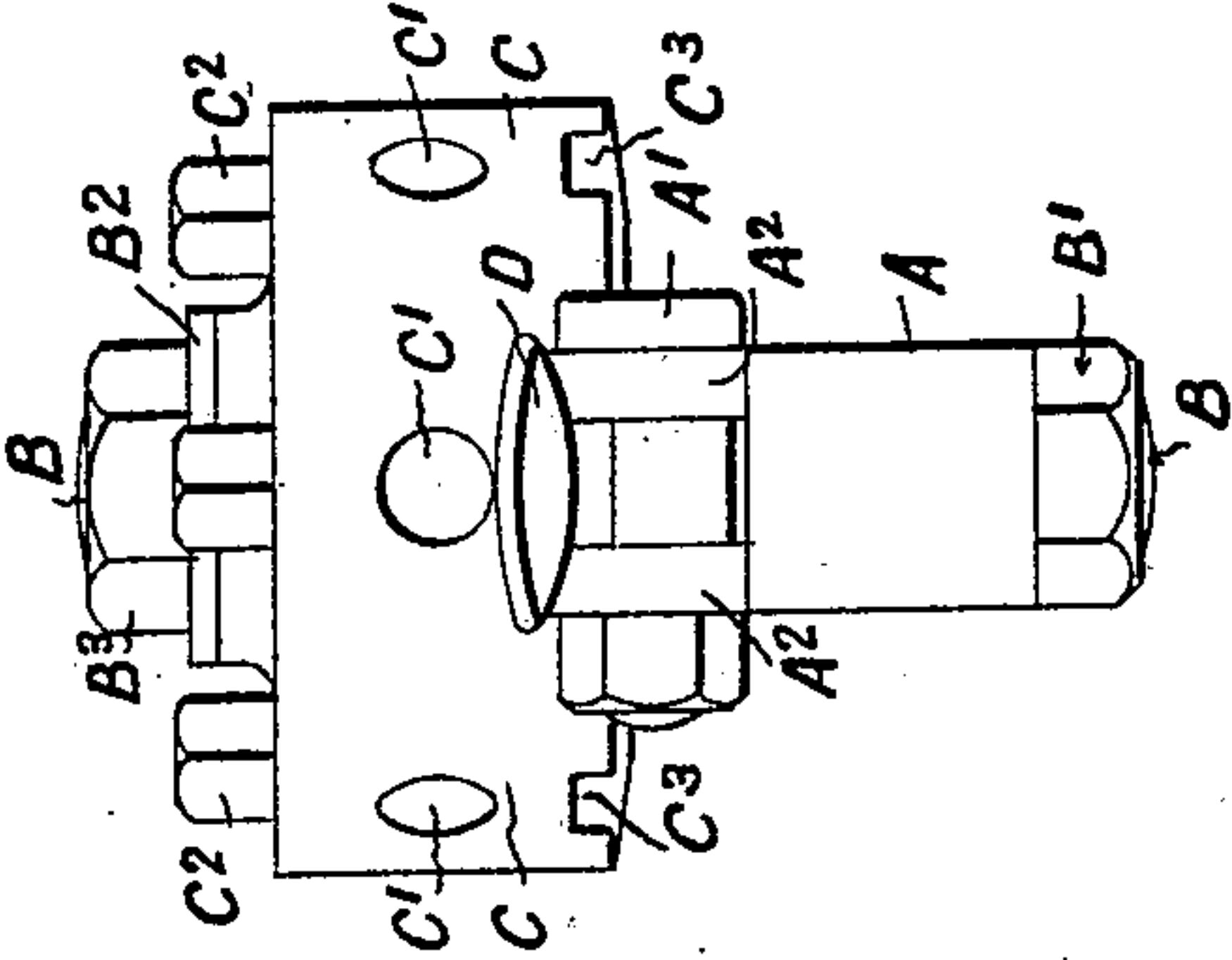
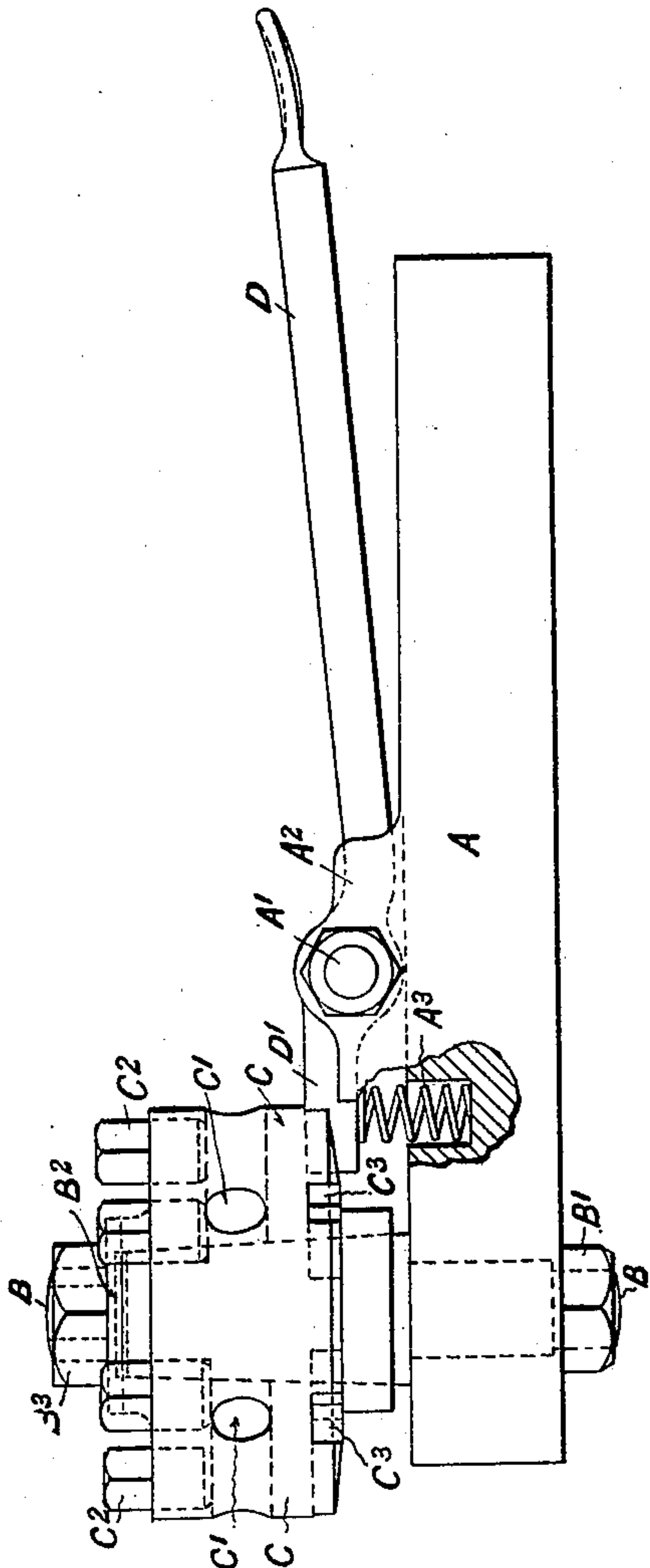


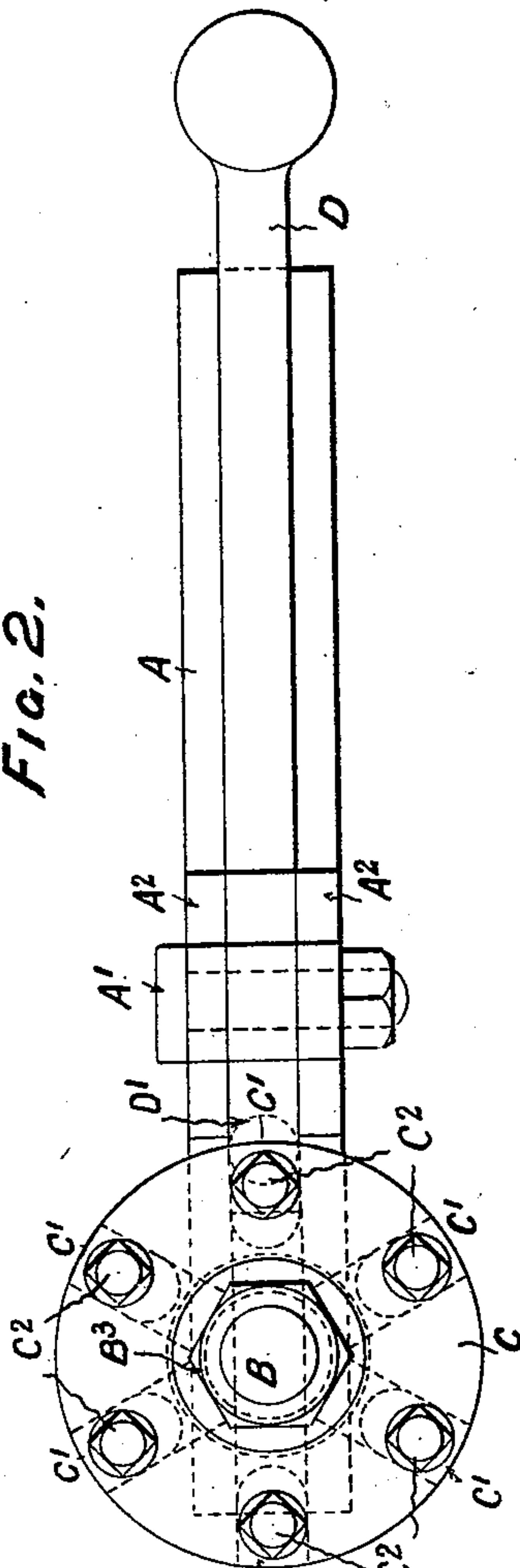
FIG. 1.



Witnesses:  
R. H. Lee

R. H. Summers

FIG. 2.



Inventors:

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by

James E. Shore

Att'y

# UNITED STATES PATENT OFFICE.

WILLIAM THOMAS JONES, OF THAMES DITTON, AND JAMES EATON-SHORE,  
OF RUGBY, ENGLAND.

## MULTIPLE TOOL-HOLDER.

SPECIFICATION forming part of Letters Patent No. 631,893, dated August 29, 1899.

Application filed June 16, 1899. Serial No. 720,849. (No model.)

*To all whom it may concern:*

Be it known that we, WILLIAM THOMAS JONES, residing at Thames Ditton, in the county of Surrey, and JAMES EATON-SHORE, residing at Rugby, in the county of Warwick, England, subjects of the Queen of Great Britain and Ireland, have invented a certain new and useful Improved Multiple Tool-Holder; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

This invention relates to a multiple tool-holder, which when used in the slide-rest of an ordinary lathe converts the latter to all intents and purposes into a turret-lathe and which is also applicable to other machine-tools, such as planing-machines and the like.

Figure 1 of the accompanying sheet of drawings represents a side elevation of a tool-holder constructed according to our invention in plan. Fig. 2 is a plan thereof, and Fig. 3 is an end elevation thereof.

The shank A has mounted at or near one end a pivot B or the like, on which is mounted a box C. The lower parallel part of the pivot B is made to fit tightly into a hole near the end of the shank A and is fixed there by means of a nut B'. The upper part of the pivot B is made partly conical, as indicated by the dotted lines, Fig. 1. Above the conical part the pivot is screw-threaded, and, if desired, it is made flat on one side, so that the washer B<sup>2</sup> may fit easily thereon, but cannot turn. The nut B<sup>3</sup> serves to clamp the box C securely in any position on the shank A. The box C

has a number of holes C' therein, radiating from the center, for the reception of the various cutters required, and at right angles to these holes C' there is a number of holes drilled and tapped, passing into the said holes C' for the reception of the cutters. The tapped holes have set-screws C<sup>2</sup> therein for jamming the cutters in their holes. In order to hold the box steady and to prevent it from turning around, there is a lever D, pivoted to a bolt A' and guided between, say, cheeks A<sup>2</sup> on the shank A. One end of this lever D—say at D', Fig. 1—is made slightly tapered and adapted to take into each of a number of parallel or slightly-tapered holes or slots C<sup>3</sup> in the box C, and the lever is normally kept in place by means, for instance, of a spring A<sup>2</sup>.

We claim—

A tool-holder comprising a shank adapted to be clamped in the tool-clamp of a machine, a conical pivot perpendicular to said shank and bolted in its end, a box revoluble on said pivot, radial perforations therein for the reception of cutters, set-screws for locking the cutters, radial notches on the under face of the box, a lever pivoted in ears on the shank whose spring-operated nose takes into said notches, and a washer and nut on the end of the pivot adapted to force the box on the cone and hold it in position substantially as described.

In testimony that we claim the foregoing as our invention we have signed our names in presence of two subscribing witnesses.

WILLIAM THOMAS JONES.  
JAMES EATON-SHORE.

Witnesses:

E. D. ECAILLE,  
WALTER J. SKERTEN.