

(No Model.)

J. A. ROTHWELL.  
TOOL HOLDER FOR LATHES.

No. 545,314.

Patented Aug. 27, 1895.

Fig. 1.

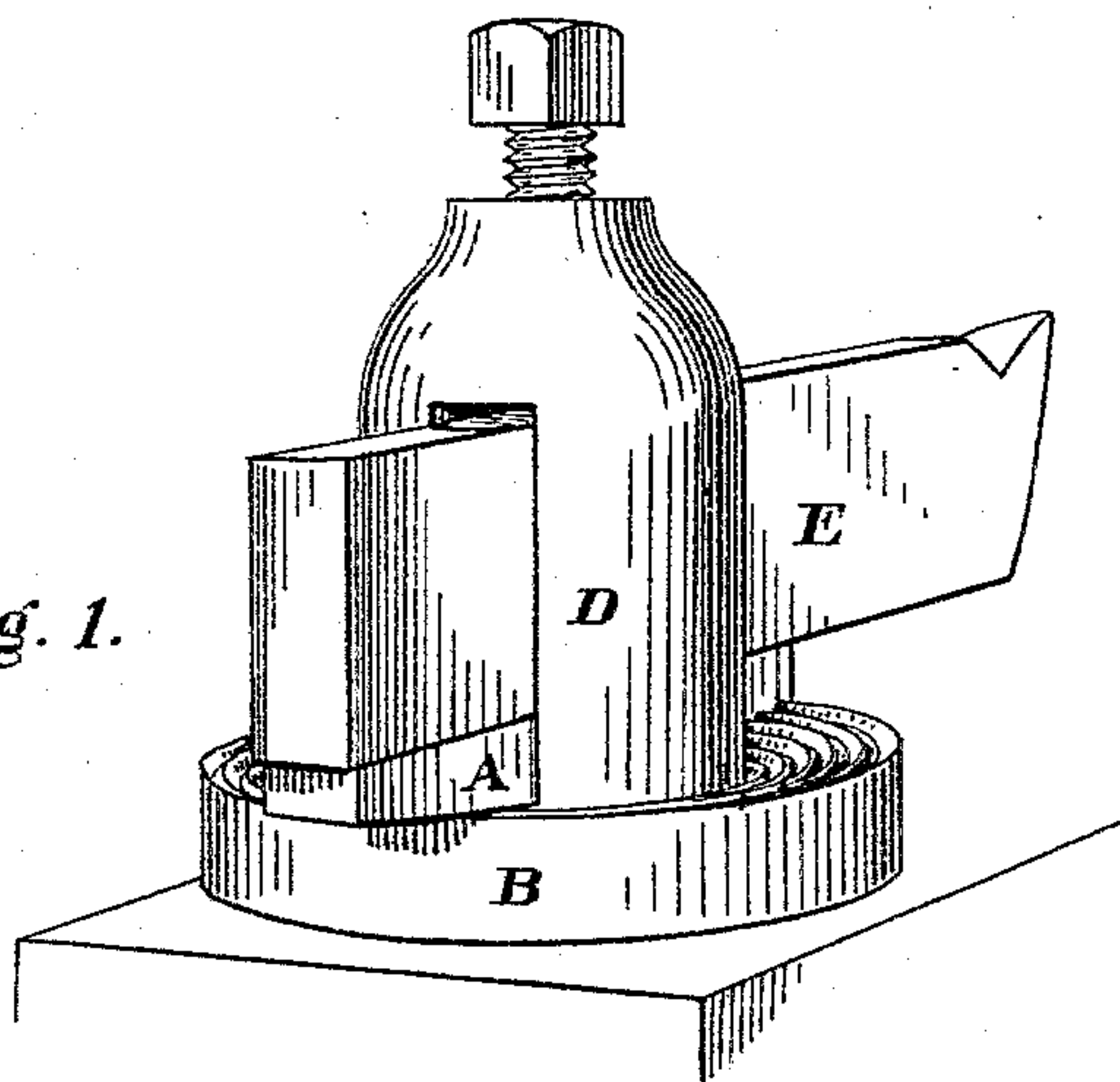


Fig. 2.

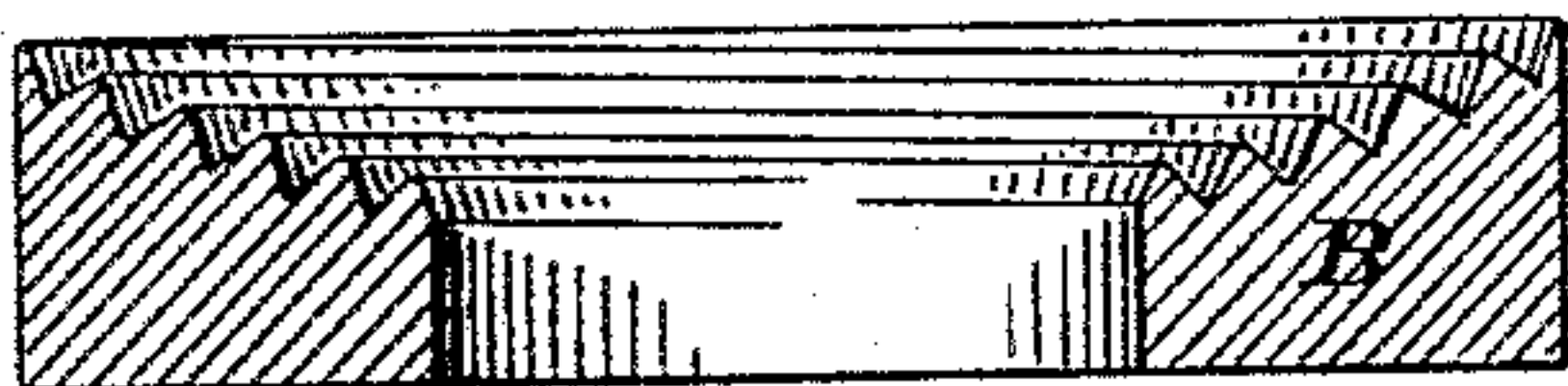
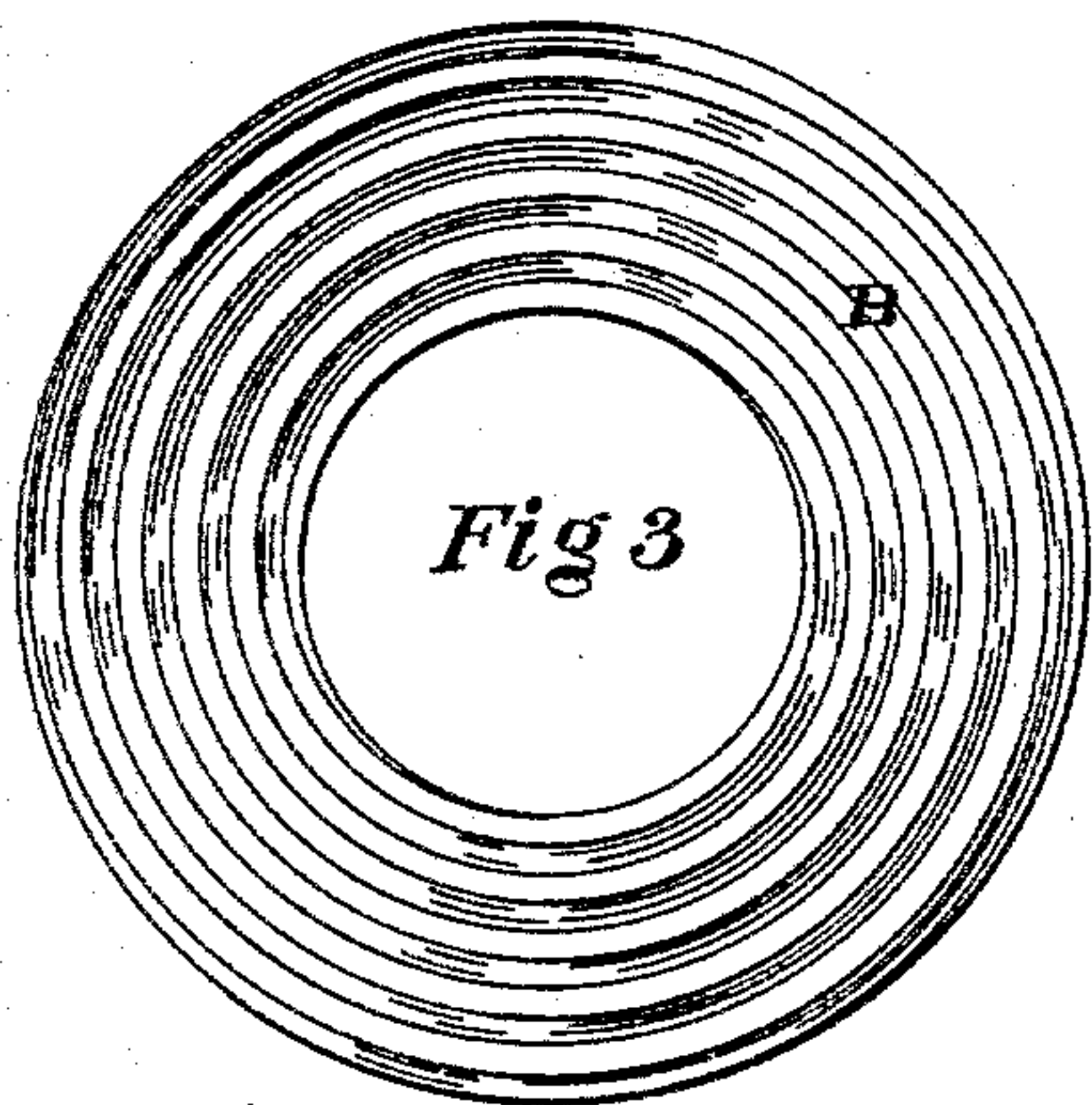


Fig. 4.



Fig 3



WITNESSES:

*J. H. Lofthouse*  
*Arthur W. Aldridge*

INVENTOR

*Joseph A. Rothwell.*

# UNITED STATES PATENT OFFICE.

JOSEPH A. ROTHWELL, OF BROOKLYN, NEW YORK.

## TOOL-HOLDER FOR LATHES.

SPECIFICATION forming part of Letters Patent No. 545,314, dated August 27, 1895.

Application filed May 13, 1895. Serial No. 549,203. (No model.)

*To all whom it may concern:*

Be it known that I, JOSEPH A. ROTHWELL, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented a new and useful Tool-Holder for Lathes, of which the following is a specification.

My invention relates to improvements in tool-holders for lathes in which a loose collar operates in conjunction with a shoe and post; and the objects of my invention are, first, to provide a tool-holder which may be readily and accurately adjusted; second, to avoid the danger of slipping, as in ordinary tool-holders; and, third, to provide a tool-holder from which the tool may be removed for the purpose of grinding and be replaced without the usual delay in resetting. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of the entire tool-holder. Fig. 2 is a section of the collar B. Fig. 3 is a top view of the collar B, and Fig. 4 a perspective view of the shoe A.

Similar letters refer to similar parts throughout the several views.

The collar B is provided with a spherical spiral on its upper surface, as shown in Figs. 2 and 3. The shoe A is provided with projections on a portion of its spherical surface to correspond with the spiral on the collar B,

and is held in position by the slot in the post D and resting in any desired position on the collar B. It will be understood that the rotary movement of the collar B on the post D will move the shoe A by the action of the spiral on the projections of the shoe A, and so change the plane of the upper surface of the shoe A that the cutting-edge of the tool E may be elevated or lowered at the desire of the operator. The projections on the shoe A engaging in the spiral of the collar B also avoids the possibility of its moving while the tool is cutting, and thereby removes the danger of destroying the work. It will also be understood that the tool E may be removed for the purpose of grinding and replaced without the delay occasioned by resetting, as in ordinary tool-holders, the shoe A having no tendency to change its position during the operation.

I claim as my invention—

The combination of the collar B, provided with a spherical spiral, the shoe A, provided with projections to engage in the spiral of the collar B, and the ordinary post D, to constitute a tool-holder substantially as set forth in the foregoing specification.

JOSEPH A. ROTHWELL.

Witnesses:

THOS. LOFTHOUSE,  
ARTHUR W. ALLDRIDGE.