(No Model.)

J. A. ROTHWELL.

TOOL HOLDER FOR LATHES.

No. 545,314. Patented Aug. 27, 1895.

Fig. 1.

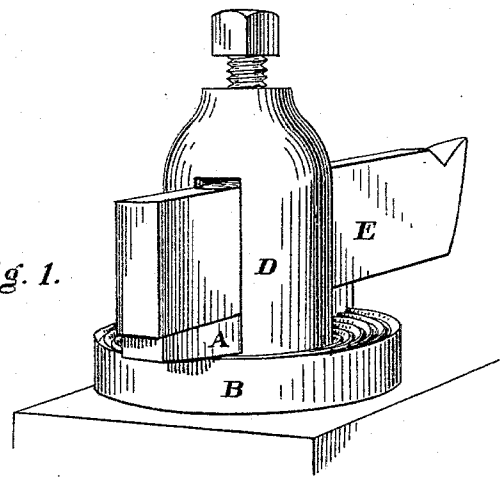

Fig. 2.

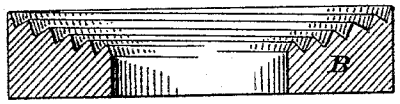

Fig. 4.

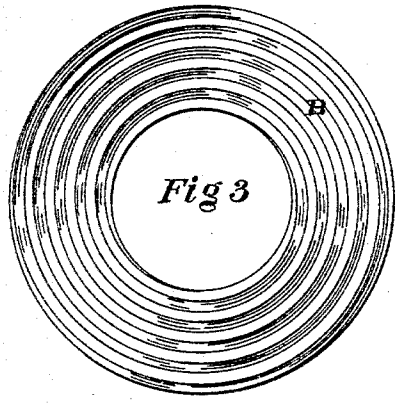

Fig 3

WITNESSES:

Thos Lofthouse

Arthur W. Alldredge

INVENTOR

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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.