

(No Model.)

I. FONDA.
TURNING LATHE TOOL.

No. 362,827.

Patented May 10, 1887.

Fig. 1.

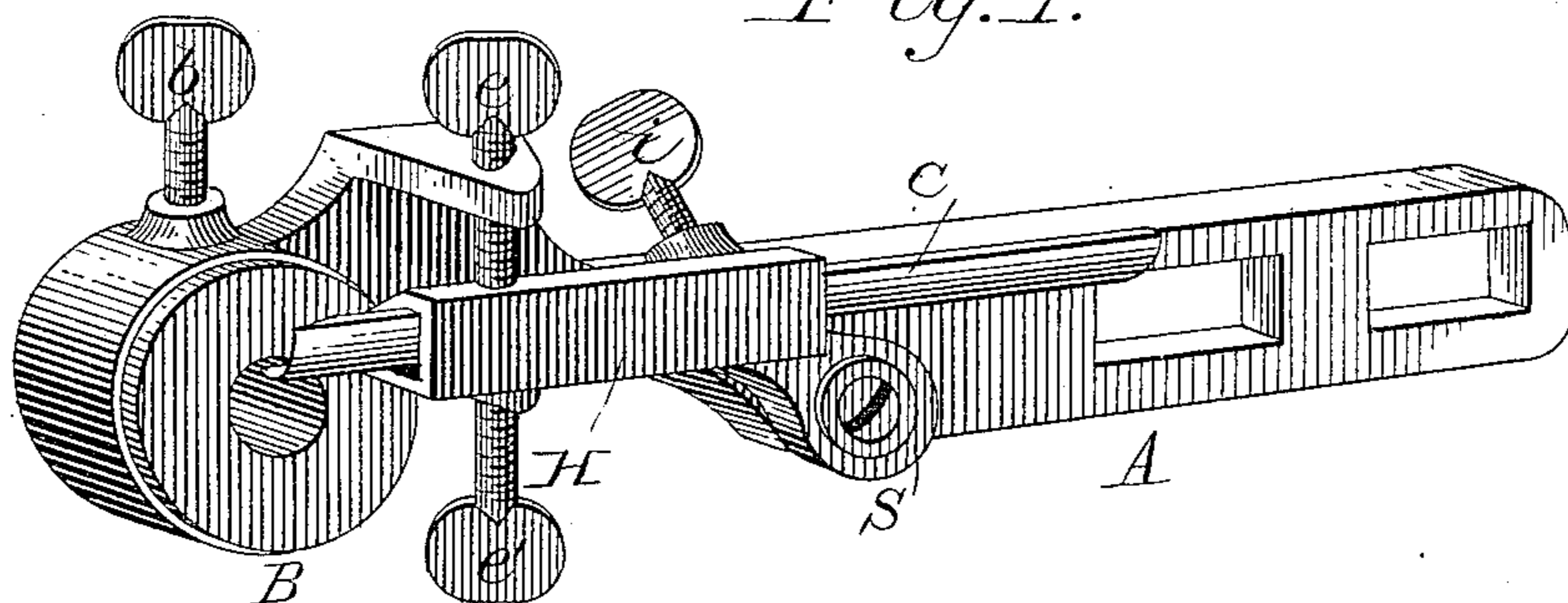


Fig. 2.

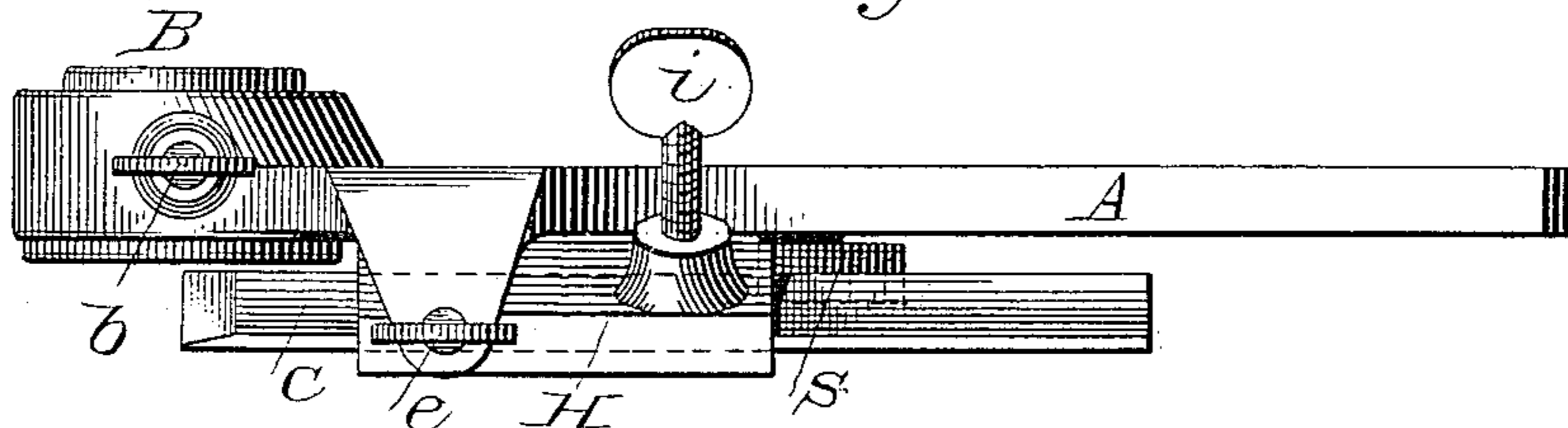


Fig. 3.

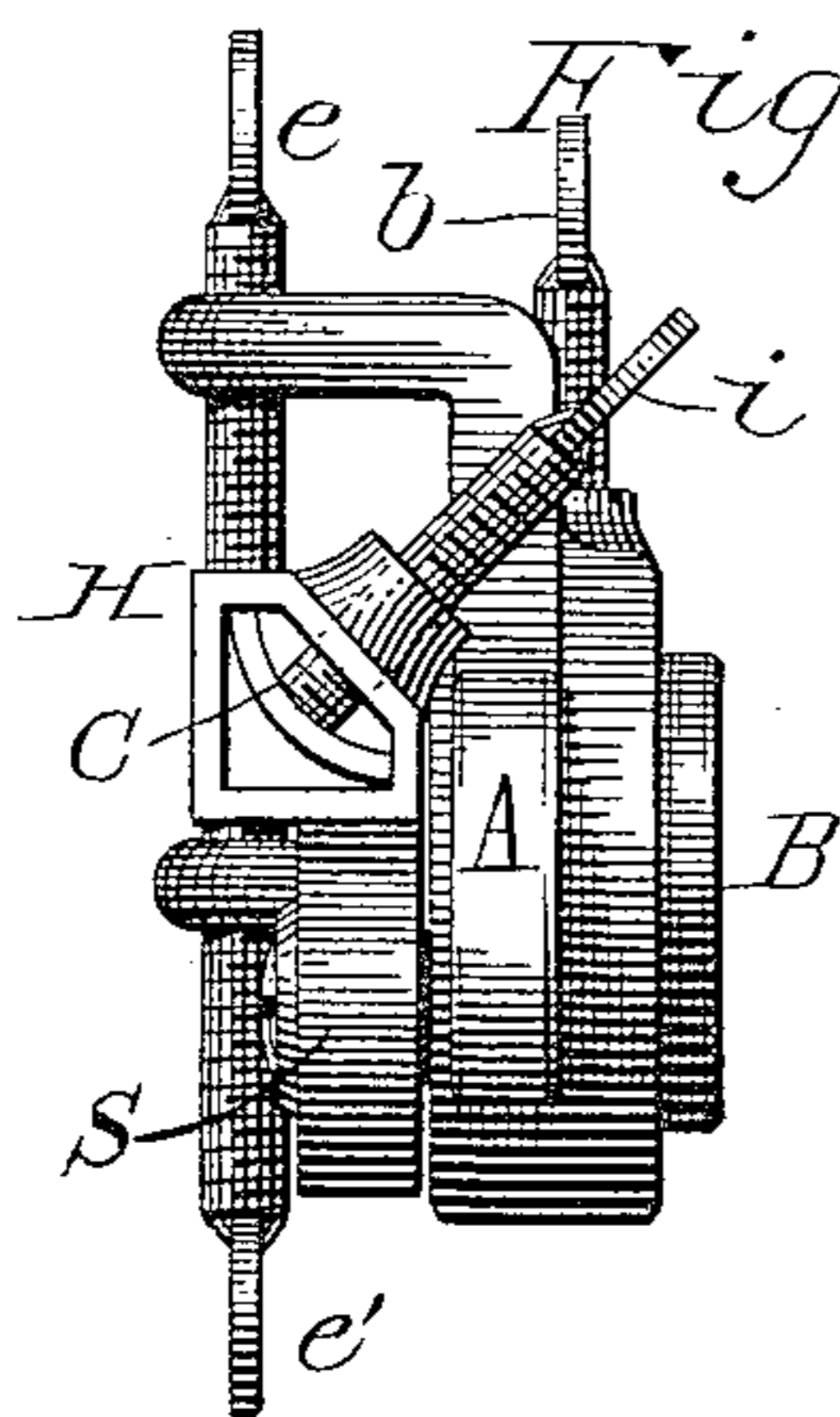
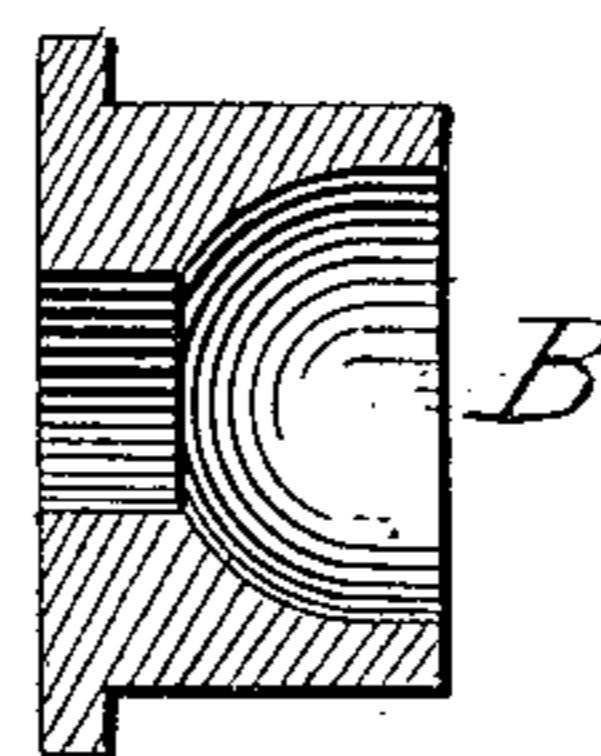
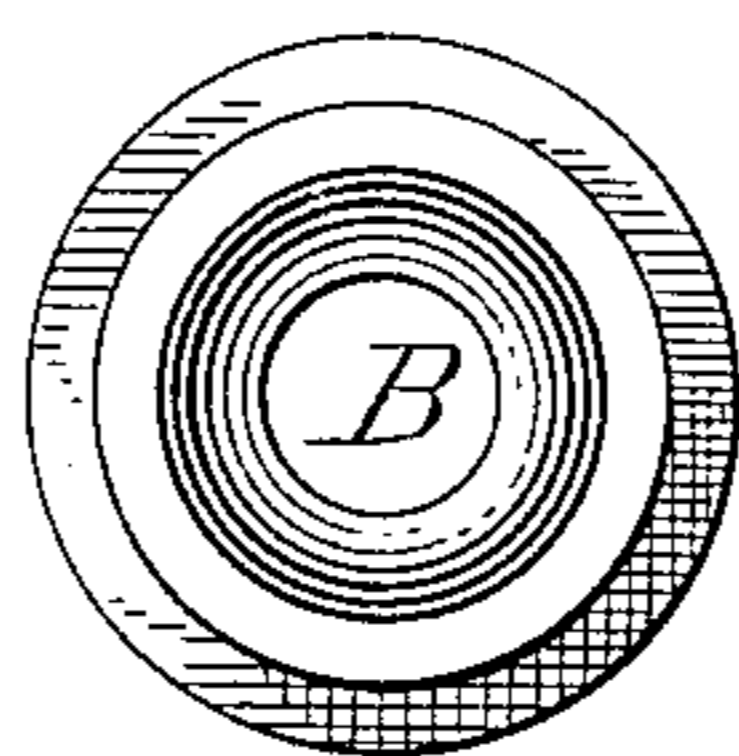


Fig. 4. Fig. 5.



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ISAAC FONDA, OF LACONIA, NEW HAMPSHIRE.

TURNING-LATHE TOOL.

SPECIFICATION forming part of Letters Patent No. 362,827, dated May 10, 1887.

Application filed April 16, 1884. Serial No. 128,186. (No model.)

To all whom it may concern:

Be it known that I, ISAAC FONDA, a citizen of the United States, residing at Laconia, in the county of Belknap and State of New Hampshire, have invented a certain new and useful Tool to be Used in Connection with a Turning-Lathe, of which the following is a specification.

My invention relates to a tool for making round rods of wood of any desired size, in which tool interchangeable rings or bushings are used in connection with an adjustable cutting-tool.

The objects of my invention are, first, to provide a convenient and suitable frame or body of the tool; second, to provide any number of interchangeable bushings of any desired form, cylindrical preferred, having different-sized holes or round apertures of any size desired to guide and steady the rod while being operated upon by a cutting-tool; and, third, to provide for a proper adjustment of the cutting-tool independently of the bushing. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of the entire tool. Fig. 2 is a top view. Fig. 3 is an end view. Fig. 4 is a rear end view of a bushing, and Fig. 5 is a section of bushing.

Similar letters refer to similar parts throughout the several views.

The frame or body of the tool A has an orifice near one end, in which are fitted several rings or bushings, B. The opposite end of the frame is made in such form that it may be held in the hand, if desired, or fastened in the tool-post of a lathe-carriage or sliding rest, or to any device or substitute for a sliding rest—such as a frame of wood or iron, or a block of wood—and there are several longitudinal apertures in the frame A, to allow of its being so fastened with bolts or screws. The frame of the tool A is also provided with several set-screws, *b*, *e*, and *e'*.

A stud, S, is provided as a pivot or axis, on which the cutter-holder H is allowed to turn, in order that it may be elevated or depressed by the set-screws *e* and *e'* to bring the cutter C to conform with the size of the orifice in the bushing B. The stud S may be at either end

or in the center of the cutter-holder H, and it may also be of one piece with the cutter-holder H, or of the body of the tool A, or any other device that will serve as a pivot or axis on which the cutter-holder H may turn and be adjusted. The cutter-holder H has a longitudinal aperture, in which the cutter C is fitted, so that it may be readily withdrawn in order to change the bushings B, and also to allow the cutting-tool C to be withdrawn for sharpening and set to correspond with the orifice in the bushing B. The cutter-holder H is also pivoted on the stud S, as described.

The bushings B may be cylindrical, square, or of any other preferable form, and are made of uniform size on the outside diameter, to correspond with the orifice in the body of the tool A, in which they are fastened by the screw *b*.

The bushings B may be of any number desired, each having a different-sized round orifice, which is partly concave or enlarged at the rear end of the bushing B, in order to reduce the friction on the small rods that are being turned, and gradually increase the length of the bearing for larger rods in proportion to the diameter of the rod. The cutting-tool C may be in the form of a gouge or any other preferable shape, and is fitted in the cutter-holder H so that it may be readily removed or adjusted, and is fastened in the desired position by the set-screw *i*.

I am aware that previous to my invention there have been in use gage-lathes with carriages or sliding rests having a post or other device for holding the cutting-tool, and also traveling rests for supporting the work for the purpose of turning long handles, neck-yokes, whiffletrees, &c., and also machines having a hollow spindle with revolving cutting-tools for the purpose of turning round rods of wood—such as chair-rounds, &c.—and such I do not broadly claim; but I am not aware that any tool has ever been invented which embraces convenient form, simplicity, and effectiveness, in combination with the essential working parts, for the purpose herein specified and described; and

What I claim as my invention, and wish to secure by Letters Patent, is—

1. A lathe-tool consisting of the frame or

body provided with a tool-holder, H, pivoted to the body, and having a longitudinal aperture formed therein, a tool adapted to be secured in the aperture of said holder, and set-screws
5 for rigidly adjusting said tool-holder in different positions on said body, substantially as described.

2. A lathe-tool consisting of the frame or body, a tool-holder, H, pivoted to the body and
10 provided with a tool, set-screws for rigidly adjusting said tool-holder in different positions on said body, and the removable and interchangeable bushings B, adapted to be secured to the body in such position with relation to
15 the cutting-tool as to guide and steady the rod or other material being operated upon by the tool in the tool-holder, substantially as described.

3. A lathe-tool consisting of the frame or
20 body A, in combination with the tool-holder

H, pivoted to the body, a cutting-tool adapted to be secured in the tool-holder, and set-screws *e e'*, for adjusting the position of the tool-holder with respect to the frame or body, as set forth.

4. A lathe-tool consisting of the frame or
25 body A, in combination with the removable bushing B, adapted to be secured to the body in such relation to the cutting-tool as to guide and steady the rod being operated upon by the cutting-tool, set-screws *b*, to secure said
30 bushing in position, the tool-holder H, pivoted to the body, a cutting-tool adapted to be secured in the tool-holder, and set-screws *e e'*, for adjusting the position of the tool-holder, as set forth.

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Witnesses:

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