

A. STEVENSON.
LATHE TOOL.
APPLICATION FILED APR. 21, 1909.

937,886.

Patented Oct. 26, 1909.
2 SHEETS—SHEET 1.

Fig. 1.

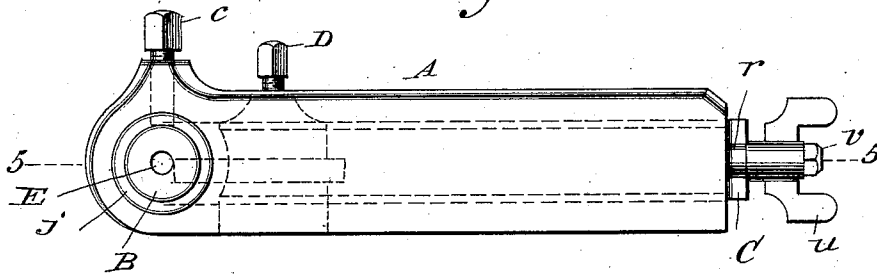


Fig. 2.

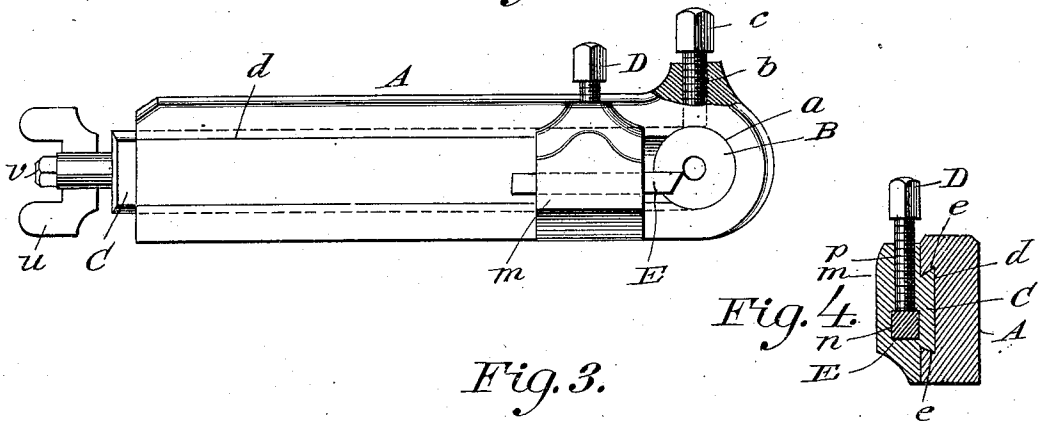


Fig. 3.

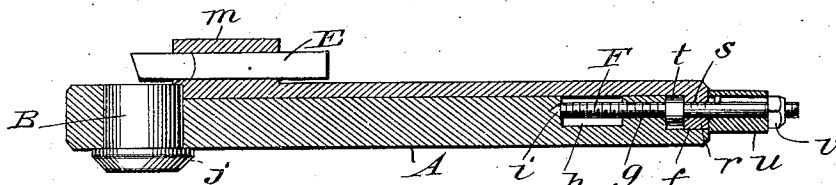
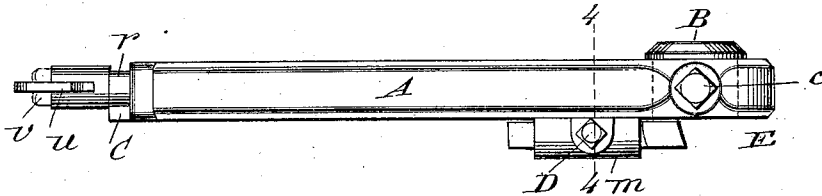


Fig. 5.

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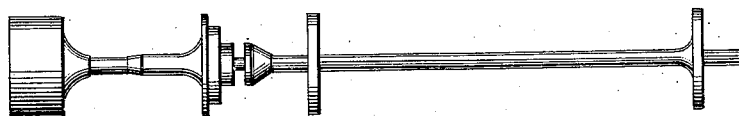
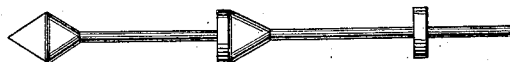
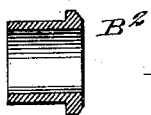
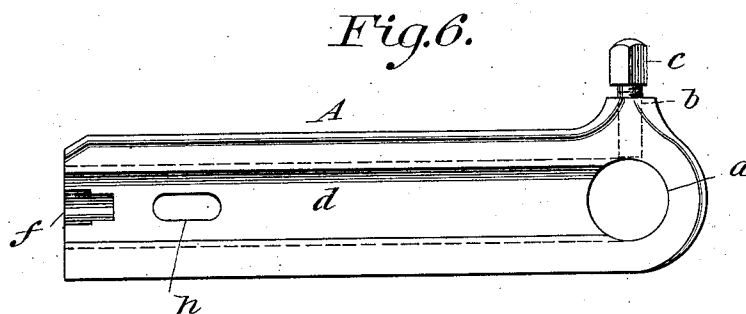
Witnesses

Phil E. Barnes
J. J. Shucky Jr.

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WITNESSES

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UNITED STATES PATENT OFFICE.

ANDREW STEVENSON, OF SEATTLE, WASHINGTON.

LATHE-TOOL.

937,886.

Specification of Letters Patent.

Patented Oct. 26, 1909.

Application filed April 21, 1909. Serial No. 491,365.

To all whom it may concern:

Be it known that I, ANDREW STEVENSON, citizen of the United States, residing at Seattle, in the county of King and State of Washington, have invented new and useful Improvements in Lathe-Tools, of which the following is a specification.

My present invention has to do with lathe tools; and it contemplates the provision of what may be properly denominated a combined lathe tool and follower rest, embodying such a construction that it is calculated to retain its own work without the use of a dead center, to any size and length, and with the use of a certain kind of bushing is adapted to be employed to advantage for duplicate or any irregular work.

With the foregoing in mind, the invention will be fully understood from the following description and claims, when the same are read in connection with the drawings, accompanying and forming part of this specification, in which:

Figure 1 is an elevation showing one side of a tool and follower rest constructed in accordance with my invention. Fig. 2 is an elevation showing the opposite side of the same. Fig. 3 is a view taken at right angles to Figs. 1 and 2. Fig. 4 is a transverse section taken in the plane indicated by the line 4—4 of Fig. 3. Fig. 5 is a longitudinal central section, taken in the plane of the line 5—5 of Fig. 1. Fig. 6 is a view showing in elevation the opposite side of the tool body *per se* with reference to that shown in Fig. 1. Fig. 7 is a view of the interchangeable bushing. Figs. 8 to 12 are elevations of irregular forms for which the tool may be used when the alternate bushing, Fig. 7, is employed.

Referring by letter to the said drawings and more particularly to Figs. 1 to 5, thereof: A is the body or major portion of the tool, which is preferably in one piece of steel. The said body is provided adjacent its forward end with a through and through transverse aperture *a* with which communicates a threaded bore *b*, disposed at a right angle to the aperture, and designed to receive a set screw *c*. The body A is also provided on one side with a longitudinal groove *d* which extends from the aperture *a* to the rear end of the body and has undercut side walls *e*. At its rear end the body has a longitudinal central, smooth-bore aperture *f*, in advance of which is a threaded bore *g* which com-

municates at its forward end with a chamber *h*, having a seat *i* in its forward end wall. The transverse aperture *a* in body A is designed to receive a bushing B, flanged at *j* to engage one side of the body and designed to be detachably fixed in the body through the medium of the set screw *c*. It will be manifest from this that when desired the bushing B², Fig. 7, may be expeditiously and easily substituted for the bushing B, and I would have it understood that when the said bushing B² is employed the tool can be used to advantage for duplicate or any irregular work such as shown in Figs. 8 to 12.

C is the rectilinearly movable slide of the tool. This slide has its edges beveled in conformity to the undercut walls of the body groove *d* in which it is movable fore and aft, and is provided on the outer side of its forward portion with an enlargement *m* in which is a longitudinally-disposed, cutter-receiving socket *n*, preferably of angular form in cross-section, and a threaded bore *p* which communicates with said socket and is designed to receive a set screw D for detachably fixing a suitable cutter E in the socket *n*. At its inner side and adjacent its rear end the slide C is provided with a lateral projection *r* in which is a longitudinally-disposed aperture *s*.

F is the screw for adjusting and adjustably fixing the slide and consequently positioning the cutter E, relative to the center of the bushing B. The said screw F is journaled in the aperture *s* of projection *r* and is held against endwise movement with respect to the slide C, by the enlargement *t* disposed in front of the projection *r*, and the finger-piece *u*, disposed in rear of the projection *r* and held on the screw shank and in engagement with a key thereof by a nut *v*.

It will be manifest from the foregoing that when the screw F is turned in one direction through the threaded bore *g* in the body A, the slide C and the parts carried thereby will be moved forwardly, while when the screw F is turned in the opposite direction through bore *g*, the slide and the parts thereon will be retracted. It will also be manifest that when the slide C reaches the extremity of its forward adjustment, the forward end of the screw will bring up in the seat *i*, and the lateral projection *r* on the slide will occupy the aperture *f* in the rear end of the body.

It will be gathered from the foregoing

that my improved device is simple and compact in construction and is susceptible of quick and easy adjustment; also, that the parts that are adjustable are supported and
5 reinforced by the body A.

The construction herein illustrated and described constitutes the best practical embodiment of my invention of which I am cognizant, but it is obvious that in the future practice of the invention such changes
10 in the form, construction and relative arrangement of parts may be made as do not involve departure from the scope of my invention as defined in the claims appended.

15 Having described my invention, what I claim and desire to secure by Letters-Patent, is:

1. A lathe tool comprising a body having a longitudinal groove extending from its rear end forwardly, a longitudinal threaded
20 bore parallel with the groove, a seat disposed in front of the bore and a smooth aperture disposed in rear of the bore, a slide movable rectilinearly in the groove of the body and
25 adapted to receive and carry a cutter, a lateral projection having an aperture on the inner side of the rear portion of the slide,

and a screw journaled in the aperture of said projection and held against endwise movement with respect thereto and provided in rear of the projection with a finger-piece and having its forward portion engaged with the longitudinal threaded bore in the body. 30

2. The combination in a lathe tool, of a body, a rectilinearly movable slide disposed in a longitudinal guideway in the body and adapted to receive and carry a cutter, and a longitudinally disposed adjusting screw bearing in and carried by the slide and engaging a complementary thread in the body to adjust and adjustably fix the slide with respect to the body; the forward end of the said screw being adapted to bring up against a portion of the body at the extremity of the forward adjustment of the slide. 35 40 45

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

ANDREW STEVENSON.

Witnesses:

M. B. SACHS.

JAS. N. SOMMER.