C. A. BAUER.

Lathe-Rests.

No. 136,579. Patented March 11, 1873.

Fig. 1.

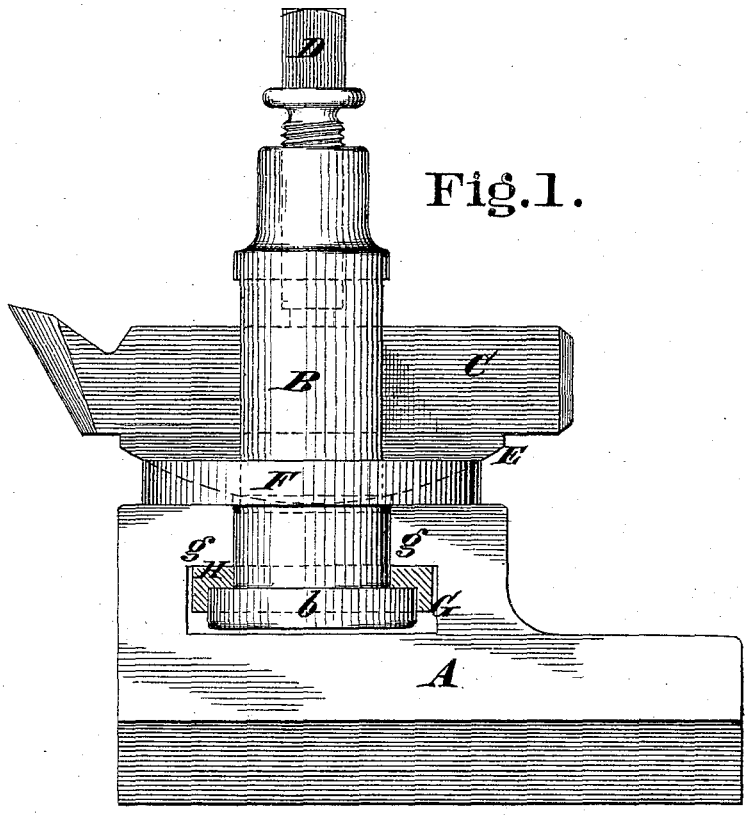
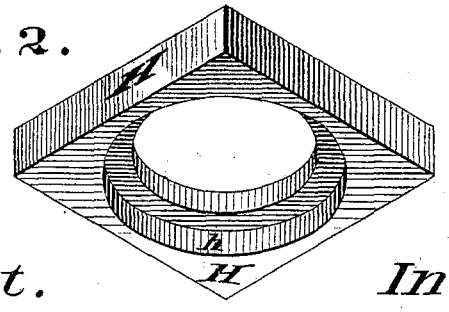


Fig. 2.



Attest.

W. F. Bauer

E. Haeseler

Inventor.

Charles A. Bauer

UNITED STATES PATENT OFFICE.

CHARLES A. BAUER, OF HAMILTON, OHIO.

IMPROVEMENT IN LATHE-RESTS.

Specification forming part of Letters Patent No. **136,579**, dated March 11, 1873.

To all whom it may concern:

Be it known that I, CHARLES A. BAUER, of Hamilton, in the county of Butler and State of Ohio, have invented a certain new and useful Improvement in Lathe-Rests, of which the following is a specification:

Nature and Objects of Invention.

My invention is designed to decrease the wear upon the lower collar of a tool-post of a lathe-rest by rendering the same uniform throughout the entire annular surface of the collar; and my invention consists in the provision of a ring or washer to surround the tool-post, and fit between the collar of the tool-post and the slot for the same in the tool-rest, the outer surface of the collar having a rectangular bearing-surface in the said slot.

Description of Accompanying Drawing.

Figure 1 is an elevation of a tool-post and rest embodying my invention. Fig. 2 is a perspective view of the ring which is interposed between the collar of the tool-post and the rest.

General Description.

A is the customary form of rest used on engine-lathes, and B the tool-post of the same. A tool, C, passes through a slot in the tool post, and is secured therein by the set-screw D, the customary convex gib E and concave washer F being interposed between the tool and the top of the rest. The collar *b* of the tool-post is fitted to move across the T-shaped slot G in the rest.

Heretofore it has been customary to so construct the rest that the upper surface of the collar *b* presses against the overhanging metal *g* above the wide part of the groove G or slot; and it has been found that, owing to lack of sufficient bearing-surface between the round collar and straight sides of the groove or slot G, the collar, after short use, is so cut and unevenly worn as to be unfit for service. To remedy this defect I provide and interpose between said collar *b* and the overhanging projections *g* of the rest a ring or washer, H, whose exterior configuration is rectangular, so as to have an extensive bearing-surface along the straight sides of the groove G, and whose interior configuration is a circle, snugly inclosing the tool-post, in the manner shown in Fig. 1. By this provision it will be seen that the collar *b* has a complete annular bearing-surface upward against the ring or washer H, and that the ring or washer H in turn has a wide bearing-surface upward against the projections *g* of the rest, and thus uneven wear, notching, and other objectionable characteristics of the old device, hereinbefore specified, are fully obviated.

The ring or washer H may be counterbored on the under side, as shown in both figures and indicated by the letter *h*, so that it may have the requisite lightness with the necessary stiffness; but where, as in some kinds of lathes, a great depth of space below the projections *g* can be provided, the ring or washer H may have a plain surface on both sides.

Claim.

In combination with the tool-post B *b* and grooved rest A G *g* of a lathe, I claim the loose ring or washer H, constructed and operating substantially as and for the purpose specified.

In testimony of which invention I hereunto set my hand.

CHARLES A. BAUER.

Witnesses:
G. A. GRAY, Jr.,
W. F. BAUER.