

(No Model.)

J. K. P. MILLER.
REST FOR PIVOTING LATHES.

No. 562,407.

Patented June 23, 1896.

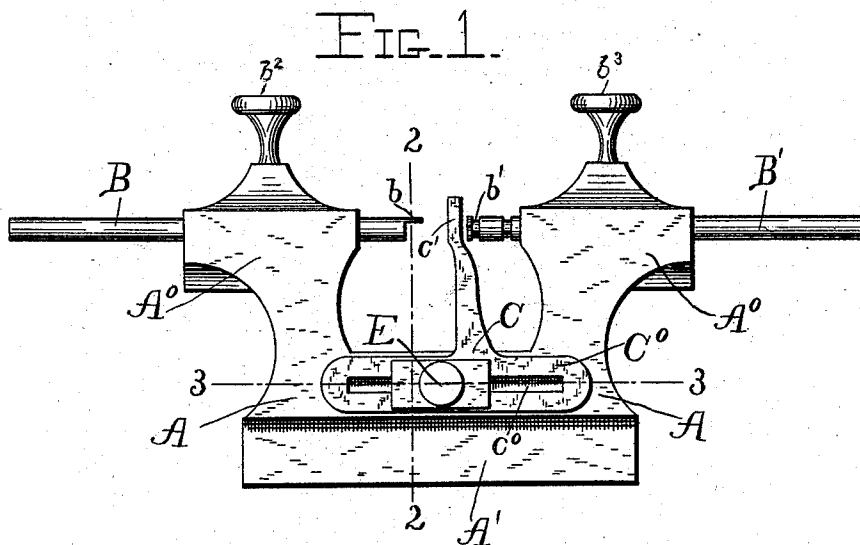


FIG. 2.

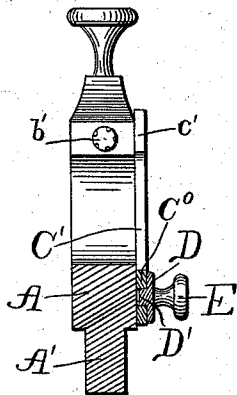


FIG. 3.

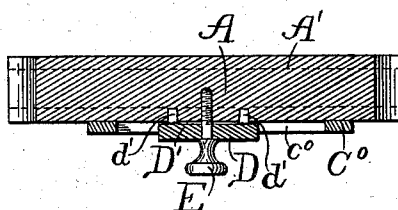


FIG. 4.

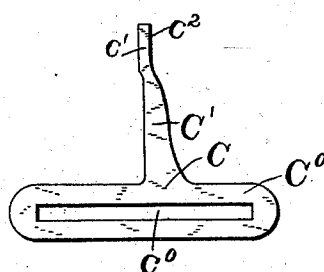
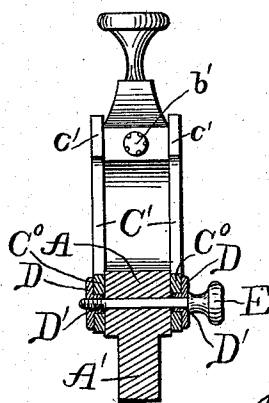


FIG. 5.



Witnesses

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UNITED STATES PATENT OFFICE.

JAMES K. POLK MILLER, OF WOODVILLE, TEXAS, ASSIGNOR OF ONE-HALF
TO STEPHEN P. WEST, OF SAME PLACE.

REST FOR PIVOTING-LATHES.

SPECIFICATION forming part of Letters Patent No. 562,407, dated June 23, 1896.

Application filed March 24, 1896. Serial No. 584,686. (No model.)

To all whom it may concern:

Be it known that I, JAMES K. POLK MILLER, a citizen of the United States, residing at Woodville, in the county of Tyler and State of Texas, have invented certain new and useful Improvements in Rests for Pivoting-Lathes; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in watchmakers' lathes; and it consists in the improved file-rest for use in connection with such lathes, hereinafter described and claimed.

My invention will be understood by reference to the accompanying drawings, wherein the same parts are indicated by the same letters throughout the several views.

Figure 1 is a side elevation of a watchmaker's lathe provided with my improved file-rest. Fig. 2 is a section on the line 2 2 of Fig. 1 and looking to the right in said figure. Fig. 3 is a section taken on the line 3 3 of Fig. 1 and looking down. Fig. 4 is a detail side elevation of the file-rest detached from the lathe; and Fig. 5 is a sectional view similar to Fig. 2, showing two rests and the manner of attaching the same.

A represents the body of the lathe, having narrow base A', by which the lathe may be gripped and clamped in a vise when in use.

A⁰ A⁰ represent the stocks which carry the pins B and B', the ends b and b' of which form the male and female centers, respectively, for the pivot to be turned. The said pins B B' are held in position by means of clamping-screws b² b³ in the usual way.

C represents the file-rest, made, preferably, of metal and having the base portion C⁰ provided with an elongated longitudinal slot c⁰. The arm C' extends upward from said base portion C⁰ and terminates at its upper end in the vertical portion c', having straight side c², against which the side of the file rests, as will be hereinafter more fully described.

D represents a plate having a central longitudinal rib or flange D', which is of the proper width to fit into the slot c⁰ in the file-rest, and which rib serves as a guide for the file-rest. A thumb-screw E passes through

said plate D and rib D' and screws into a screw-threaded hole in the side of the body of the lathe. By means of the said thumb-screw E the plate D is clamped upon the base portion C⁰ of the file-rest, and the said rest is held firmly against the body of the lathe. A pair of studs d' d' project from the interior side of said rib D' on the plate D and fit into the smooth holes or sockets drilled into the side of the body of the lathe, and serve to hold the said plate always in the true position.

When the rest is in position upon the body of the lathe, it may be readily adjusted longitudinally in relation to the axis of the lathe, and may be clamped rigidly in the desired position.

My improved rest is especially adapted for use in forming a pivot upon a staff the pivot of which has been broken, or any pivot when it is necessary to protect the shoulder of staff while turning. The usual process in such a case is to drill a hole into the end of the staff from which the pivot has been broken, and then drive a piece of steel into the hole. This piece of steel is then cut off slightly longer than the proper length and then the staff is put into the lathe and the pivot turned down to the proper size. In this operation of turning down the pivot care must be taken not to cut away the shoulder on the staff, or it will be spoiled for further use.

In operation, the article to be turned being held by the male and female centers b and b' and the rest adjusted to the proper position, the operator rests his file against the side c² of the top c' of the rest, and the article being operated upon is rotated by any suitable means.

If the rest is properly adjusted, the pivot may be turned down without cutting away the shoulder of the staff, the side of the rest forming a support for the file, which will prevent any liability of the file getting against the shoulder of the staff.

My improved rest may be applied to any well-known form of pivoting-lathe, it being simply necessary to drill three holes into the side of the body of the lathe for the reception of the thumb-screw E and the pair of studs d' d', the hole for the screw E being screw-threaded.

If preferred, two rests may be used, one on either side of the lathe, as shown in Fig. 5, in which form the hole for the thumb-screw E is drilled clear through the body of the lathe and the said thumb-screw is made long enough to pass through said hole and screw into the holding-plate on the opposite side of the lathe, as also shown in Fig. 5.

Having thus described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

1. The combination, with a lathe of the character described, of a file-rest having a longitudinally-slotted base and a vertical arm integral with said base; a holding-plate provided with a longitudinal rib fitting in said slot and adapted to allow of longitudinal adjustment of said rest; and a thumb-screw passing through said holding-plate and engaging in a screw-threaded hole in the body of said lathe, substantially as described.

2. The combination, with a lathe of the character described, of a file-rest having a longitudinally-slotted base and a vertical arm integral with said base; a holding-plate provided with a longitudinal rib fitting in said slot and adapted to allow of longitudinal adjustment of said rest; a pair of studs on said holding-plate fitting into sockets in the body of the lathe; and a thumb-screw passing through said holding-plate and engaging in a screw-threaded hole in the body of said lathe, substantially as described.

3. The combination, with a lathe of the character described, of a file-rest having a lon-

gitudinally-slotted base and a vertical arm integral with said base, said vertical arm provided at its upper end with a plain vertical face against which the file is held when in use; a holding-plate provided with a longitudinal rib fitting in said slot in the base of the file-rest, and adapted to allow of longitudinal adjustment of said rest; a pair of studs on said rib fitting into sockets in the body of the lathe; and a thumb-screw passing through said holding-plate and said rib and engaging in a screw-threaded hole in the body of the said lathe, substantially as described.

4. The combination, with a lathe of the character described, of a pair of file-rests, one on either side of said lathe, each of said rests having a longitudinally-slotted base and a vertical arm integral with said base; a holding-plate provided with a longitudinal rib fitting in said slot in each of said rests, and adapted to allow of longitudinal adjustment of said rests; a pair of studs on each of said plates fitting into sockets in opposite sides of the body of the lathe; and a thumb-screw passing through both of said plates and through the body of the lathe, and adapted to clamp said plates and hold said rests in any desired position, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

JAMES K. POLK MILLER.

Witnesses:

G. R. ENLOE,
MARTIN DIES.