(No Model.)

J. A. MYERS.

TOOL POST FOR LATHES.

No. 409,484. Patented Aug. 20, 1889.

Fig. 1.

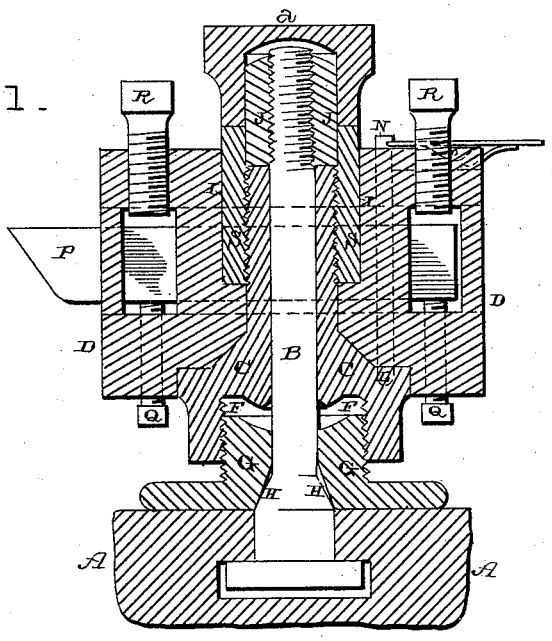
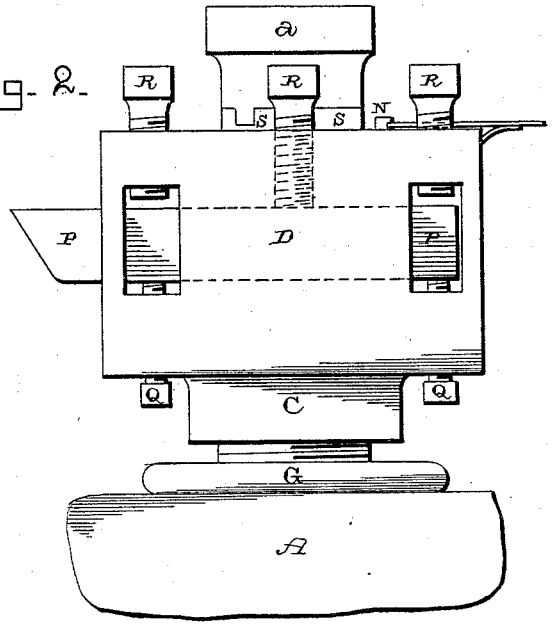


Fig. 2.



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UNITED STATES PATENT OFFICE.

JOHN A. MYERS, OF LOUISVILLE, KENTUCKY.

TOOL-POST FOR LATHES.

SPECIFICATION forming part of Letters Patent No. 409,484, dated August 20, 1889.

Application filed May 13, 1889. Serial No. 310,550. (No model.)

To all whom it may concern:

Be it known that I, JOHN A. MYERS, of Louisville, in the county of Jefferson and State of Kentucky, have invented certain new and useful Improvements in Tool-Posts for 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 pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in tool-posts for lathes; and it consists in the combination of the body in which the tools are held at any desired angle, and which is adapted to be turned freely around into any desired position and then locked in place, a screw by which the body is supported and upon which it turns, a sleeve through which the screw passes and which passes through the body and is screw-threaded at each of its ends, nuts applied to the ends of the screw and the sleeve for locking the parts rigidly together, and a nut which screws into the end of the sleeve for raising and lowering the post, as will be more fully described hereinafter.

The object of my invention is to provide a tool-post that is adapted to lathes of all kinds now in use, and in which all of the ordinary tools can be freely used, and which can be raised and lowered to adapt the tools to be used in different positions.

Figure 1 is a vertical section of a post which embodies my invention. Fig. 2 is a side elevation.

A represents the slide-rest of the lathe provided with a recess, slot, or groove, in which the headed end of the screw-rod B catches. Placed upon this screw-rod is the sleeve C, which projects beyond the body D of the post at one end, and which has its other end to pass nearly through the body, as shown. In the projecting end is formed a screw-threaded socket F, into which the flanged nut G screws for the purpose of raising or lowering the body of the post and the tools secured therein, and thus adjusting the tools to the work to be performed. The flanged end of this nut does not rest directly upon the conical shoulder H of the screw-rod, but against the end of the tool-rest, and hence it is only necessary to turn this nut in one direction to raise the post and in the other to lower it.

The body D of the post has an opening through it corresponding to the shape of the sleeve C, and the body is supported and revolves upon the enlarged lower end of the sleeve, which is preferably shaped as shown. In the top of the body is formed a circular recess I, in which fits a round nut S, which screws on the screw-threaded end of the sleeve and secures the body and sleeve together. A second nut J screws upon the end of the screw-rod, and bears against the end of the sleeve, so as to secure all of the parts to the tool-carriage or slide-rest A.

In the horizontal part of the shoulder on the sleeve are a number of small sockets or recesses L, which correspond to the number of the faces of the body D and the slots to receive the tools, and passing down through the body D is a locking-rod N, which has its lower end to catch in one of the recesses and thus prevent the body from revolving upon the sleeve. This locking-rod may either operate from gravity alone, or be operated by a small spring-actuated lever pivoted upon the top of the body.

The tools P are placed in the slots in the body D, and after their inclinations are adjusted by the screws Q, which pass up through the body from below, they are rigidly secured in place by the screws R, which bear against their upper edges. The post is first fastened lightly to the slide-rest by the screw-rod and its nut, and then the tools adjusted to the work to be done. The body is raised or lowered, so as to bring the tools to their proper elevation by means of the flanged nut G, and then the nut J is tightened. The nut S is slightly loosened, so as to allow the body to turn on the sleeve C, and then the locking-rod N is raised so as to free its lower end from the recess L in the sleeve, and then the body D can be freely turned upon the sleeve so as to bring the nearest tool into position, the rod dropped back so as to lock the body, and then nuts S J are tightened up. The nut

upon the screw-rod must be turned by means of a wrench or other tool, while the recessed nut upon the sleeve is preferably operated by a tubular hand-wrench *a*, such as is shown.

The conical shoulder upon the screw-rod has the sleeve to bear against it, and thus prevent the body and the sleeve from moving beyond a certain distance inward toward the slide-rest. The adjusting flanged nut G bears directly against the tool-rest and remains stationary while the body can be adjusted into any desired position.

Having thus described my invention, I claim—

1. In a tool-post, the combination of the body in which the tools are held, the sleeve which is screw-threaded at its inner end, and a nut for adjusting the post vertically, substantially as shown.

2. The combination of the body, the sleeve provided with a collar and recess, with a locking rod or device whereby the body is prevented from being revolved upon the sleeve, substantially as described.

3. The combination of the screw-rod provided with a head at one end and a nut at the other, and the sleeve through which the rod passes, with the body provided with slots through which the tools are passed, and the locking-rod by which the body is prevented from being revolved, substantially as set forth.

4. The combination of the headed screw-rod, the sleeve through which the head passes, the nut by which the post is raised and lowered, the body placed upon and adapted to revolve upon the sleeve, the locking-rod which passes through the body and engages with the sleeve, the nuts upon the rod and the sleeve, the slots for tools which are passed through the body, and the set-screws for adjusting them, substantially as specified.

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

JOHN A. MYERS.

Witnesses:
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