

(No Model.)

J. RICHARDS.
TAPERING ATTACHMENT FOR LATHES.

No. 534,666.

Patented Feb. 26, 1895.

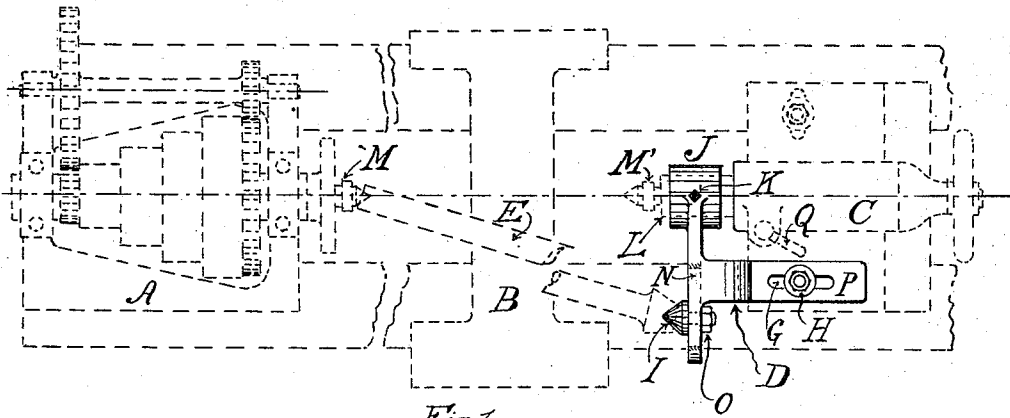


Fig. 1.

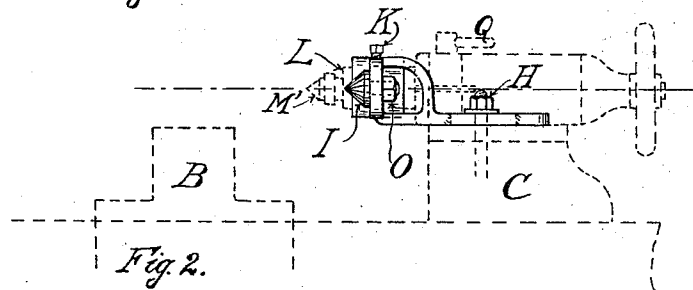


Fig. 2.

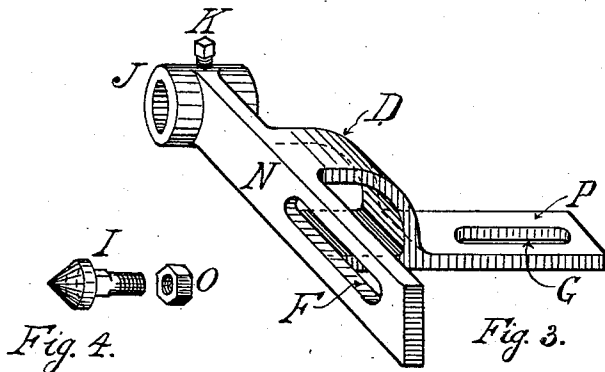


Fig. 4.

Fig. 3.

WITNESSES:

Francis M. Hoef Jr.
Chas. L. Brown

Jackson Richards
INVENTOR

BY
Rudolph Kraus & Keyser
his ATTORNEYS

UNITED STATES PATENT OFFICE.

JACKSON RICHARDS, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR OF
ONE-HALF TO JOHN T. JOHNSON AND EDWARD B. SCHNIDER, OF
SAME PLACE.

TAPERING ATTACHMENT FOR LATHES.

SPECIFICATION forming part of Letters Patent No. 534,666, dated February 26, 1895.

Application filed May 1, 1894. Serial No. 509,691. (No model.)

To all whom it may concern:

Be it known that I, JACKSON RICHARDS, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a certain new and useful Improvement in Tapering Attachments for Lathes, of which the following is a specification.

My invention relates to an attachment designed to be affixed to the tailstock of a lathe, by means whereof a greater taper can be given to the article to be turned, than is possible with the ordinary lathe now in use. I attain this object by the mechanism shown in the accompanying drawings, in which—

Figure 1 is a plan view of a lathe with my attachment affixed. Fig. 2 is a side view of the rear part of the lathe and attachment. Fig. 3 is a perspective view of the attachment. Fig. 4 is a center, and tightening nut for same, which is movable in the slot F. in Fig. 3, and is capable of being affixed rigidly in any chosen position within the limits of said slot.

Similar letters refer to similar parts throughout the several views.

A. is the headstock of an ordinary lathe.

B. is the carriage of the lathe.

C. is the tailstock, to which the taper attachment D. is affixed.

In the lathe now in use, the article to be turned is carried between the center M. on the headstock A. and the center M' on the tailstock C., and, as the tailstock is now arranged, only a limited taper can be obtained.

The attachment D. is constructed as shown in Fig. 3. The boss J. is bored to fit over the spindle L. of the tailstock C., and is held in position on said spindle by the set screw K. The body N. of said attachment has the slot F., in which the center I. may be moved to the desired position to obtain the desired taper, as hereinafter described.

After the center I. is adjusted to obtain the proper angle on the article E. to be turned, it is fixed rigidly to said body N. by means of the nut O. (See Figs. 1, 2 and 4.) The ex-

tension P. on said attachment D. has the slot G., which permits the attachment to be moved backward and forward when the bolt H. is loosened, in order to adjust said attachment to, or remove it from, the article to be turned. When the attachment D. is adjusted to the article to be turned, the said attachment can be secured rigidly in place by tightening the bolt H., and clamping the tailstock spindle L. by means of the clamp screw Q. (which is part of the tailstock).

It will be apparent to any one skilled in mechanical arts, that when it is desired to obtain a greater taper on the article to be turned than is possible upon the ordinary lathe, this purpose can be effected by securing the boss J. of the attachment D. to the spindle L. of the tailstock C. The center I. is then adjusted to the desired position in the slot F. in said attachment, and the article E. to be turned is inserted between the said center I. and the center M. on the headstock A. The attachment is then rigidly secured by tightening the bolt H., and the lathe is operated in the usual manner. The attachment is removable from the lathe at the pleasure of the operator.

The attachment can be made of either wrought iron, cast iron, malleable iron, brass or steel.

Having described my attachment, what I claim as my invention, and desire to secure by Letters Patent, is—

A taper attachment having a boss designed to be secured to the spindle of the tailstock of a lathe, a body provided with a longitudinal slot, a movable center working in said slot, capable of adjustment at any desired point therein, an extension at the rear thereof, and suitable means for attaching and detaching said extension to and from the body of the tailstock; substantially as described.

JACKSON RICHARDS.

Witnesses:

CHAS. L. BROWN,
FRANK M. WOLF, Jr.