(No Model.) 2 Sheets—Sheet 1.

J. J. COLE.

LATHE REST.

No. 467,341. Patented Jan. 19, 1892.

FIG. 2.

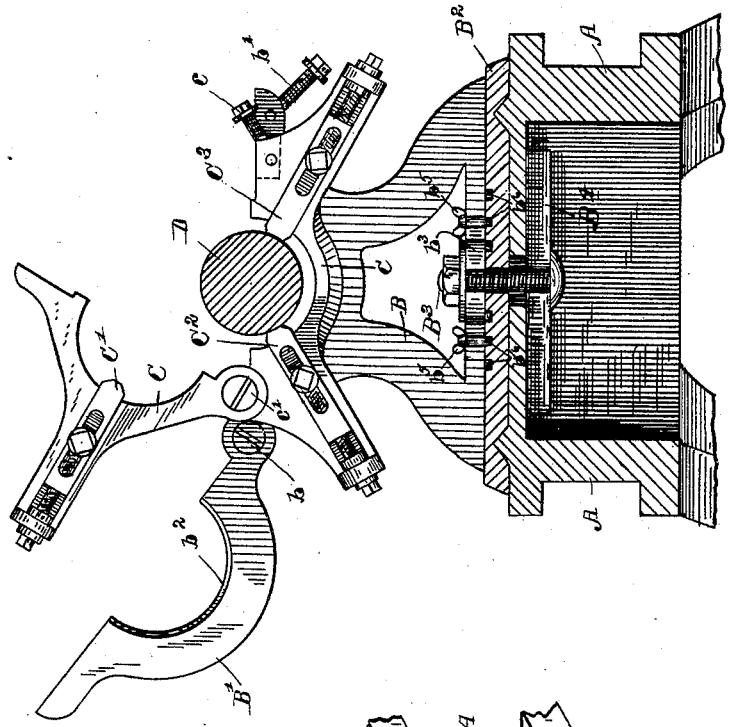
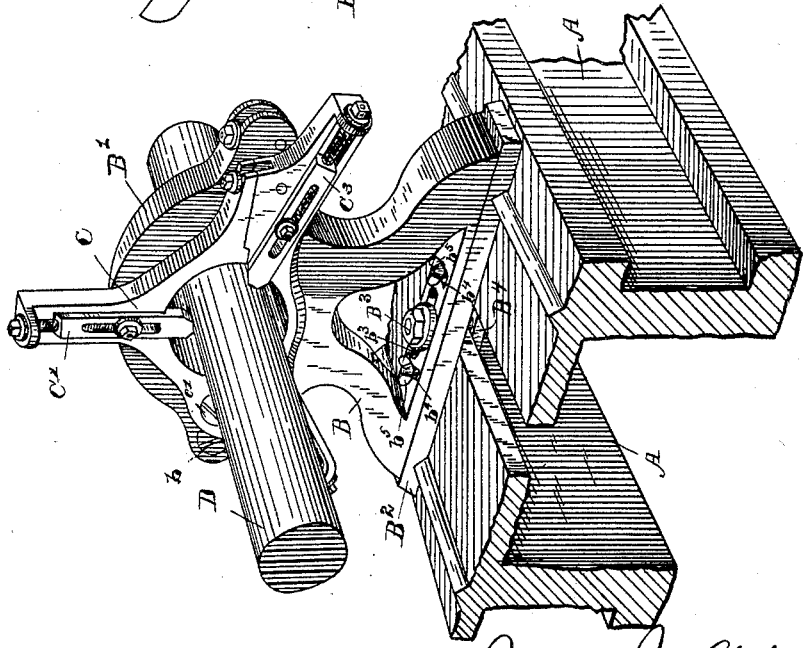


FIG. 1.



WITNESSES.

Frank A. Wood.

Frank W. Hamer.

INVENTOR.

John J. Cole,

per C. E. W. Bradford,

ATTORNEYS.

(No Model.) 2 Sheets—Sheet 2.

J. J. COLE.

LATHE REST.

No. 467,341. Patented Jan. 19, 1892.

FIG. 4.

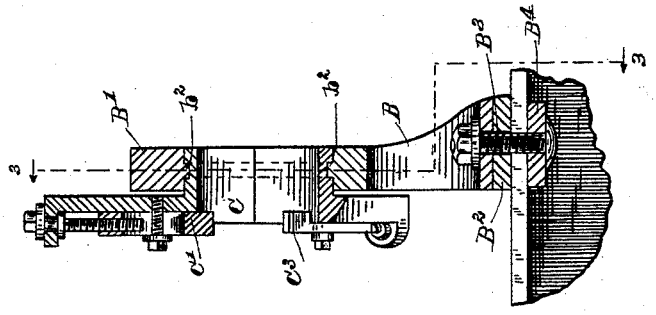
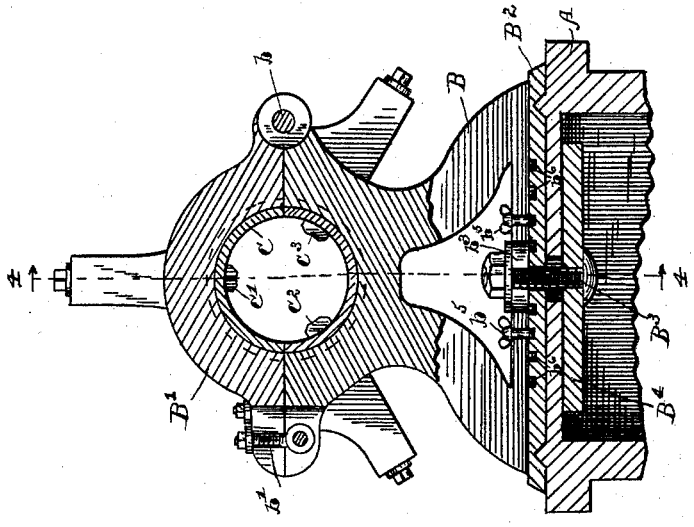


FIG. 3.



WITNESSES.

Frank W. Warner

Frank A. Hood.

INVENTOR.

John J. Cole,

by Chas. W. Bradford,

ATTORNEYS.

UNITED STATES PATENT OFFICE.

JOHN J. COLE, OF WEST INDIANAPOLIS, INDIANA, ASSIGNOR TO JOHN B. WITTY, JOHN W. MITCHELL, DANIEL F. WHITCOMB, AND JAMES E. McNAMARA, ALL OF SAME PLACE.

LATHE-REST.

SPECIFICATION forming part of Letters Patent No. 467,341, dated January 19, 1892.

Application filed April 21, 1891. Serial No. 389,770. (No model.)

To all whom it may concern:

Be it known that I, JOHN J. COLE, a citizen of the United States, residing at West Indianapolis, in the county of Marion and State of Indiana, have invented certain new and useful Improvements in Lathe-Rests, of which the following is a specification.

The object of my said invention is to provide a rest for turning-lathes by which the work may be secured readily in position to secure a true and easy movement without preliminary fitting, and which may be adjusted in whatever position or angle is required by the character of the work to be done, it being adapted for either straight or tapered work, as desired, all of which will be hereinafter more particularly described and claimed.

Referring to the accompanying drawings, which are made a part hereof, and on which similar letters of reference indicate similar parts, Figure 1 is a perspective view of my improved rest mounted on a fragment of a lathe-bed; Fig. 2, an elevation of the same, the hinged parts of the frame and of the chuck being unfastened and swung back upon their pivots; Fig. 3, a transverse vertical section through the center of the bearings which unite the chuck and its frame as seen when looking toward the left from the dotted line 3 3 in Fig. 4, and Fig. 4 a central sectional view as seen when looking toward the right from the dotted line 4 4 in Fig. 3.

In said drawings, the portions marked A represent the lathe-bed; B, the main frame of my improved lathe-rest; C, the chuck-frame; C′, C^2, and C^3, the jaws of said chuck, and D a fragment of a shaft therein in position to be operated upon.

The bed-plate A is or may be the bed-plate of a lathe of any common or desired construction and needs no special description herein, except such as is incidental to the description of the rest thereon, to which the invention alone relates.

The frame B is of a suitable form, containing a bearing in which the frame of the chuck is mounted and adapted to rotate. It is divided horizontally, the upper portion B′ being hinged to the lower portion at one side on a pintle *b*. A latch-bolt *b*′ is hinged to the opposite side of the lower portion of the frame, which is adapted to engage with said hinged portion when closed down and secure the two parts rigidly together, the outer end of said latch-bolt being provided with a nut, as shown, which may be screwed down tightly to better accomplish this result. The inner face of the bearing in said frame is provided with a circumferential rib b^2, which engages with a corresponding circumferential groove in the journal portion of the chuck, (or reversely,) for the purpose of better steadying the parts in relation to each other. The base-plate of said frame B is formed with a smooth lower face and provided with a longitudinal slot b^3. It is mounted upon a supplemental plate B^2, which plate is formed with transverse grooves in its under surface mounted upon longitudinal ribs or tracks on the lathe bed-plate. Said several parts are adjustably secured together by a bolt B^3, which extends up through a washer B^4 on the under side of the bed-plate, a longitudinal slot in said bed-plate, a perforation in said plate B^2, and the slot b^3 in the base-plate of said frame. By this arrangement the rest is not only permitted to be adjusted longitudinally and transversely of the lathe bed-plate, but is also permitted to be turned on the bolt B^3, which serves as a pivot for this purpose, to whatever angle may be desired for the purpose of turning tapered work, being thus adapted to hold such work so that its motion will be even and true without any wabble or strain upon the chuck, as will be readily understood. I have also shown curved transverse slots b^4 in the base-plate of the frame B on each side of the central longitudinal slot b^3 with thumb-screws b^5 mounted therein, which are adapted to screw into screw-threaded perforations b^6 (arranged in series to permit of the transverse adjustment) in the top surface of the plate B^2. For some work it may be found necessary to use these extra fastening devices, while in other work the central bolt B^3 will be found sufficient by itself.

The chuck-frame C is preferably divided similarly to the frame B, the two parts being united by the pivot *c*′, and a latch bolt *c* being

provided for securing them together in a similar manner. A hub-like portion extends out from one side to form a journal and fit within the bearing in the frame B, and has a groove adapted to receive the circumferential rib b^2, as before stated. In operation, the parts being accurately fitted and adjusted to the requirements of the character of work to be done, the chuck will revolve in its bearing in the frame B, being driven by the work, which is thus turned true and accurate. The jaws C', C^2, and C^3 are or may be of any ordinary or desired construction, being mounted on suitable projections or arms of the chuck-frame and adapted to clamp and hold the work in proper position in the rest, as shown, the fragment of shaft D being illustrated therein, for the purpose of showing the manner of their use.

Having thus fully described my said invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination, with a lathe, of a rest consisting of a frame carrying a chuck mounted upon a separate plate, which plate is mounted to slide upon the bed-plate of the lathe, said frame being secured to said plate by means of a bolt passing through a slot in the base of said frame, a perforation in said plate, and a longitudinal slot in the bed-plate of said lathe and engaging with the under side of said bed-plate by means of a washer or other suitable part, substantially as set forth.

2. The combination, with a lathe, of a rest therefor, consisting of the plate B^2, secured to be longitudinally adjusted on the bed-plate of the lathe, and the rest-frame B, secured by a central bolt to turn on said plate B^2, said bolt passing through a slot in the base of said rest-frame, whereby said rest may also be adjusted transversely of the lathe, substantially as set forth.

In witness whereof I have hereunto set my hand and seal, at Indianapolis, Indiana, this 16th day of April, A. D. 1891.

JOHN J. COLE. [L. S.]

Witnesses:
E. W. BRADFORD,
FRANK W. WOOD.