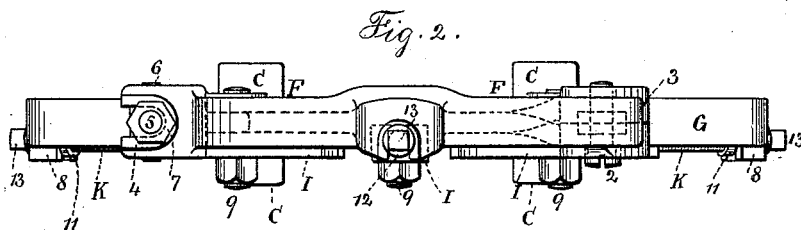
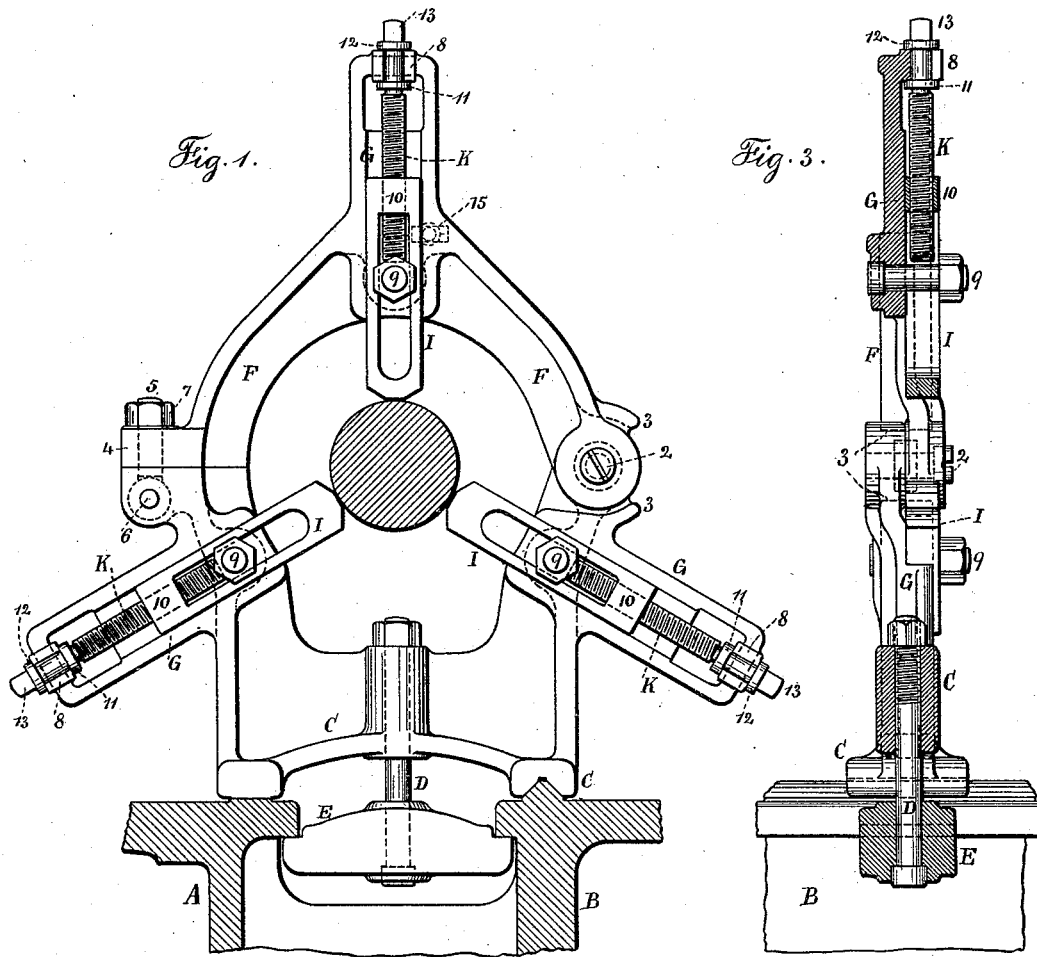


(No Model.)

J. L. BOGERT.  
STEADY REST FOR LATHES.

No. 429,880.

Patented June 10, 1890.



Witnesses:  
J. Stail  
Chas. H. Smith

Inventor:  
John L. Bogert  
per Samuel W. Swell atty

# UNITED STATES PATENT OFFICE.

JOHN L. BOGERT, OF FLUSHING, NEW YORK.

## STEADY-REST FOR LATHES.

SPECIFICATION forming part of Letters Patent No. 429,880, dated June 10, 1890.

Application filed March 3, 1890. Serial No. 342,455. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN L. BOGERT, a citizen of the United States, residing in Flushing, in the county of Queens and State of New York, have invented an Improvement in Steady-Rests for Lathes, of which the following is a specification.

In turning or operating upon shafts and comparatively flexible articles in lathes or other machine-tools it is important to steady such article adjacent to the tool during the cutting-operation, and there are some articles that cannot be supported to advantage by the center in the tail-stock of the lathe while being turned, and for supporting such articles a center or steady rest has been made use of, provided with one or more adjustable fingers or supports bearing against the article that is being turned. Usually one of these steady-fingers has been vertical and the other two at thirty degrees inclination from a horizontal plane, but difficulty has been experienced in the use of these steady-rests, because the adjusting-screws that act upon the ends of these fingers often project so far as to interfere with the movement of the carriage and parts supporting the turning-tool.

The object of my invention is to obtain as large an opening as possible for the article to be operated upon, and to make use of screws that remain in a fixed position. Hence such screws do not project any farther when the fingers are acting against a large article than they do when acting upon a small one; and I prefer that the fingers should be slotted longitudinally, so as to receive through the slots clamping-bolts; and the nuts for adjusting-screws are at the ends of the fingers, so that the adjusting-screws do not interfere with the clamping-screws; and the steady-fingers can be moved in and out as required with great facility, and held securely and reliably support the article that is being turned centrally to the axis of the lathe.

In the drawings, Figure 1 is a cross-section of the bed of a lathe and an elevation of the improved steady-rest. Fig. 2 is a plan edge-wise of the steady-rest, and Fig. 3 is a vertical section of the same.

The side frames A B of the lathe are of ordinary character, and the table or top portion is usually provided with guides or V's, upon

which is the base C of the steady-rest, the upper portion of which base branches toward the front and back of the lathe, and the center of the base is provided with an anchor-bolt D, passing through such base and through the anchor E, which is below the inner edges of the side frames of the lathe-bed, so that by this anchor-bolt and anchor the steady-rest can be clamped securely in place in any desired position.

The upper half or arch F of the steady-rest is hinged at 2 to one arm of the base, so that the arch can be swung back upon the bolt or hinge 2, and there are stops 3 to limit the movement, and at the swinging end of the arch there is a jaw 4, and upon the other arm of the base is a bolt 5, upon a pivot-pin 6, and the nut 7 is to be swung above the jaw 4, when the arch is closed down to place and the nut is tightened to hold the arch; but this nut can be loosened and the bolt swung down when the arch is swung back for an article to be entered or removed from the lathe.

Upon the arch and at opposite edges of the base there are slideways G, each of which terminates in a jaw 8, and through such slideways are holes for the bolts 9, and in each slideway is a finger I, that may be slotted longitudinally for the passage of the bolt 9, and such finger fits closely within the slideway G, but it is free to be moved endwise therein. The portion 10 of the finger forms a nut, through which passes the adjusting-screw  $\frac{1}{2}$ , upon which are collars 11 12 to come at opposite edges of the jaw 8, and the end 13 of the adjusting-screw is made square for a wrench, and this adjusting-screw K extends almost to the bolt 9, hence the nut portion 10 of the finger I can be moved along to any desired point between the bolt 9 and the collar 11, and the adjusting-finger is thereby drawn outwardly or pressed toward the axis of the lathe, as desired, and the adjusting-screw K remains in a fixed position during the adjustment of the finger, so that it does not project at any time beyond its normal position, and usually the three fingers, each made as before described, steady the article that may be centered between them, and by tightening up the bolts 9, after the fingers have been adjusted, the parts are clamped so firmly that risk of vibration is prevented and the article

that is being turned in the lathe is steadied in the most reliable and efficient manner.

It is not necessary to have the clamping-screw pass through the slotted finger, because  
 5 if a wedge-bolt or T-headed bolt is introduced at one side of the finger, as shown by dotted lines at 15, the slot in the finger may be dispensed with. The slideways may be either square or undercut for the reception of the  
 10 fingers.

I claim as my invention—

1. The combination, with a frame having slideways G, with open jaws at their outer ends, of adjusting-screws having collars at opposite edges of the open jaws and slide-fingers  
 15 within the slideways, and clamping mechanism for binding the fingers, substantially as specified.

2. The steady-rest frame for a machine-tool, composed of a base-piece and an arch-  
 20 piece hinged to the base-piece and a pivotal bolt and nut, in combination with an anchor-bolt passing through the base-piece, an anchor-bolt below the top edge of the bed of the machine-  
 25 tool, and into which anchor the bolt passes, three steady-fingers, their clamping-bolts, adjusting-screws, and the slideways upon the frame of the steady-rest, substantially as set forth.

Signed by me this 21st day of February, 30  
 1890.

JOHN L. BOGERT.

Witnesses:

GEO. T. PINCKNEY,  
 WILLIAM G. MOTT.