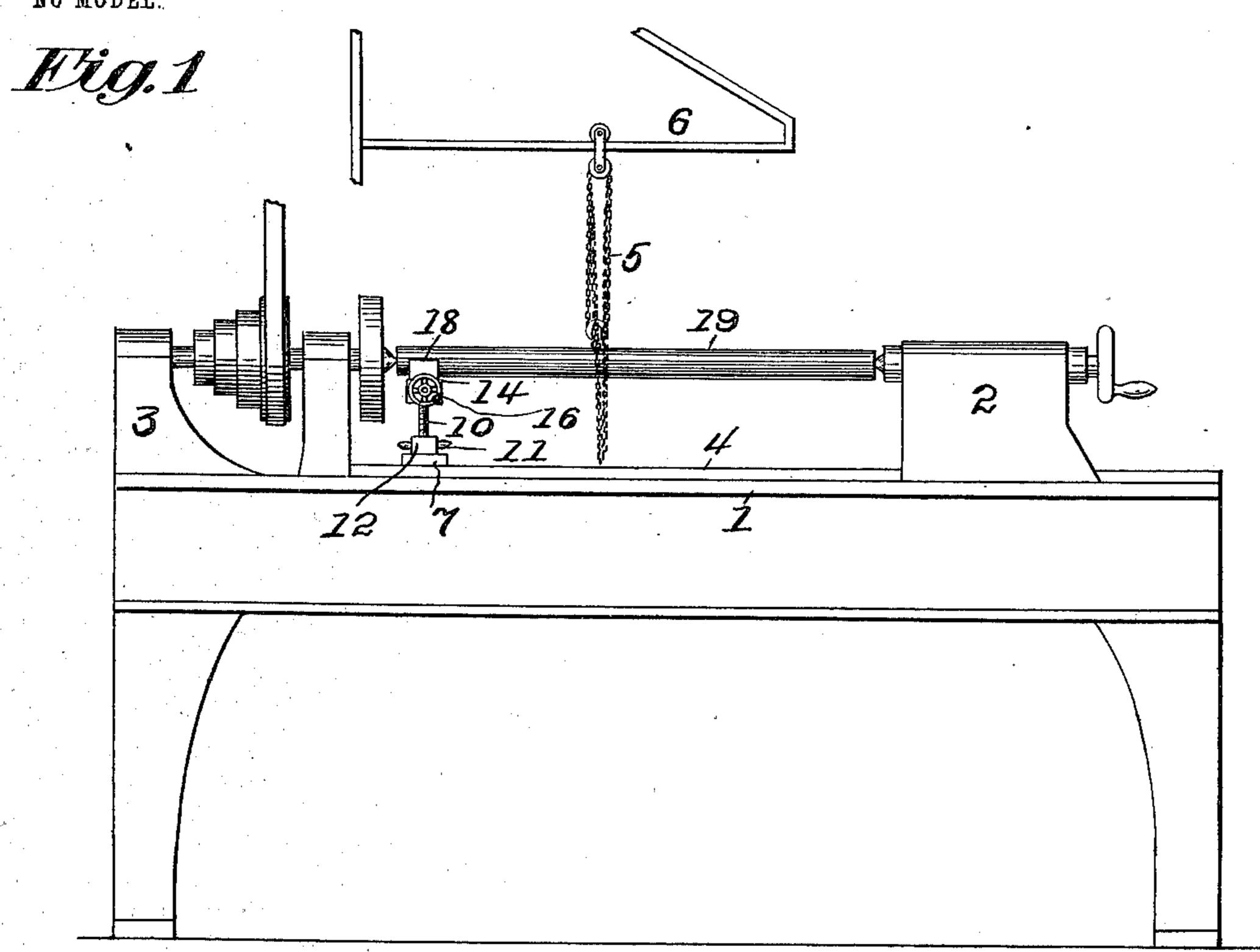
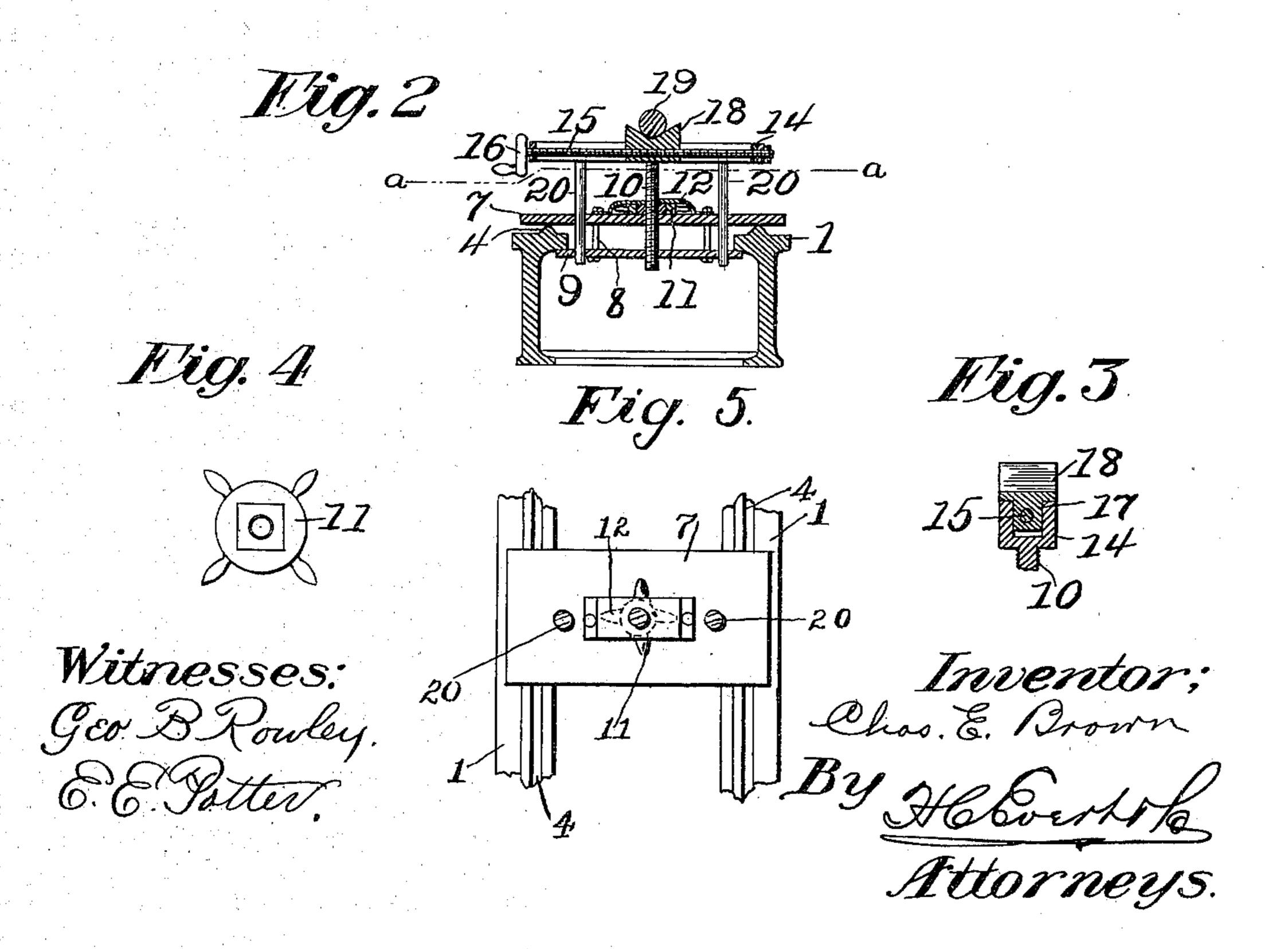
C. E. BROWN. LATHE ATTACHMENT. APPLICATION FILED JAN. 23, 1903.

NO MODEL.





United States Patent Office.

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LATHE ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 734,808, dated July 28, 1903.

Application filed January 23, 1903. Serial No. 140,219. (No model.)

To all whom it may concern:

Be it known that I, CHARLES E. BROWN, a citizen of the United States of America, residing at Allegheny, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Lathe Attachments, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to certain new and useful improvements in attachments for lathes, and relates more particularly to a centering device adapted to be attached to the lathe-bed for the holding of a shaft or other piece of material to be placed in the lathe.

In the centering of heavy shafts or other pieces of material in a lathe it is necessary for the lathe man or attendant to have a helper to hold one end of the shaft or piece approximately centered, while the lathe man or attendant centers the opposite end of the shaft or piece. When the lathe man or attendant has centered the one end of the shaft or piece, he then goes to the end which is held supported by the helper and centers this end. This method, it will be observed, requires the assistance of a helper when heavy shafts or other pieces are being placed in the lathe.

The primary object of my invention is to dispense with the necessity of the helper and provide means for supporting one end of the shaft or other piece approximately centered, while the lathe man or attendant centers the opposite or forward end, after which he can center the other or rear end of the shaft.

Briefly described, the invention comprises a rest adapted to be placed upon the regular V-ways provided on the bed of lathes of the ordinary construction. This rest has an adjustable pillow-block to receive the shaft or other piece to be supported. Means is provided for adjusting this pillow-block laterally, and means is also provided for adjusting the rest vertically all of which constructions.

45 ing the rest vertically, all of which construction will be hereinafter more specifically described and then particularly pointed out in the appended claims.

In describing the invention in detail refso erence will be had to the accompanying drawings, forming a part of this application, and wherein like numerals of reference will be employed for designating like parts throughout the different views of the drawings, in which—

Figure 1 is a side elevation of an ordinary lathe, showing my improved attachment applied thereto. Fig. 2 is a transverse vertical sectional view through the lathe bed and attachment. Fig. 3 is a transverse vertical sectional view through the pillow-block and its support, and Fig. 4 is a detail plan view, detached, of the adjusting nut or wheel on the vertical adjusting-shaft. Fig. 5 is an enlarged view in cross-section, taken on line a a 65 of Fig. 2.

To illustrate my invention, I have shown the same applied to an ordinary lathe, 1 indicating the bed, 2 the tail-stock, 3 the headstock, and 4 the V's provided on the bed for 70 the adjustment thereon of the carriage. (Not shown.) Where heavy shafts or other pieces are being placed in a lathe for turning, it is customary to employ a chain 5 for supporting the shaft or piece, which chain is suspended 75 from any suitable overhead crane 6. As stated, the object of my invention is to support the piece at one approximately centered, whereby the lathe man or attendant may without the assistance of a helper properly place 80 the shaft or piece in the lathe. To this end I employ a cross-bar 7, which rests upon the V's 44 and is clamped by bolts 8 or other suitable means to a clamp-bar 9, which engages underneath the bed-rails, as seen in Fig. 2. Operat- 85 ing through the cross-bar 7 and clamp-bar 9 is a vertical screw 10, which is actuated to move the same vertically by means of a hand-wheel or nut 11, engaged on the screw and lying on the cross-bar 7 within a housing 12, through 90 which the screw also passes. A channeled supporting-bar 14 is carried on the upper end of the screw-shaft 10, being provided with closed ends to receive an adjusting-screw 15, that is provided on one end with a suitable 95 operating-wheel 16. This screw 15 passes through a nut 17, which operates in the channel of the supporting-bar and is formed integral with a pillow-block 18, that slides on the channeled bar 14 and has a suitable seat in its 100 upper face to receive and hold the shaft or other piece 19. Guide-rods 20 are employed to prevent rotating of the supporting-bar, these guide-rods being connected to the channeled

supporting bar 14 and operating through apertures the cross-bar 7 and clamp-bar 9.

In operation the shaft or piece is engaged and swung into approximate position by the crane in the usual manner. The lathe man or attendant then places the end of the piece adjacent the head-stock on the pillow-block 18, and by the adjustment of the screws 10 15 approximately centers the piece at this end.

10 He can then go to the other end of the piece and center this end, the end being held by the pillow-block being prevented from swinging around out of the way, and after the end of the piece adjacent to the tail-stock has been centered the end adjacent the head-stock may be centered and the support lowered out of the way.

In the present illustration I have shown the attachment applied adjacent to the headstock of the lathe, yet it will be evident that the same could be applied as well to the lathebed at a point adjacent to the tail-stock, and while I have herein shown and described in detail a form of my invention illustrating how the same is practiced by me, yet it is to be noted that various changes may be made in the details of construction without departing from the general spirit of the invention.

Having fully described my invention, what 30 I claim as new, and desire to secure by Letters

Patent, is—

1. A lathe attachment comprising a cross-bar adapted to rest on the lathe-bed, a clamp-bar for securing the same thereon, an adjusting-screw operating vertically through the cross-bar and clamp-bar, a supporting-bar adapted to be raised and lowered by move-

ment of said adjusting-screw, a pillow-block carried by the supporting-bar, and means mounted on the said bar for moving the pillow- 40 block transversely the lathe-bed, substantially as described.

2. A lathe attachment comprising a cross-bar adapted to rest on the lathe-bed, an adjusting-screw carried by the said bar and operating vertically therethrough, supporting means carried by said screw, a pillow-block longitudinally movable in said means transversely the lathe-bed, and means for moving said block, substantially as described.

3. A device of the type set forth comprising in combination with a cross-bar a vertically-movable adjusting means, a supporting-bar mounted on the adjusting-screw, a pillow-block longitudinally movable on said bar 55 transversely the lathe-bed, and means for moving said block, substantially as described.

4. In combination with a lathe-bed, a cross-bar mounted thereon, an adjusting-screw operating through said cross-bar, a hand-wheel 60 threaded on said adjusting-screw above the cross-bar, a supporting-bar carried by the adjusting-screw, guides carried by the supporting-bar and operating through the cross-bar, a pillow-block mounted on the supporting-bar, 65 and an adjusting-screw for moving said pillow-block longitudinally of the supporting-bar, substantially as described.

In testimony whereof I affix my signature

in the presence of two witnesses.

CHARLES E. BROWN.

Witnesses:

A. M. WILSON, E. E. POTTER.