A. E. WHITING.

LATHE ATTACHMENT.

APPLICATION FILED JULY 25, 1907.

900,457. Patented Oct. 6, 1908.

Fig. 1.

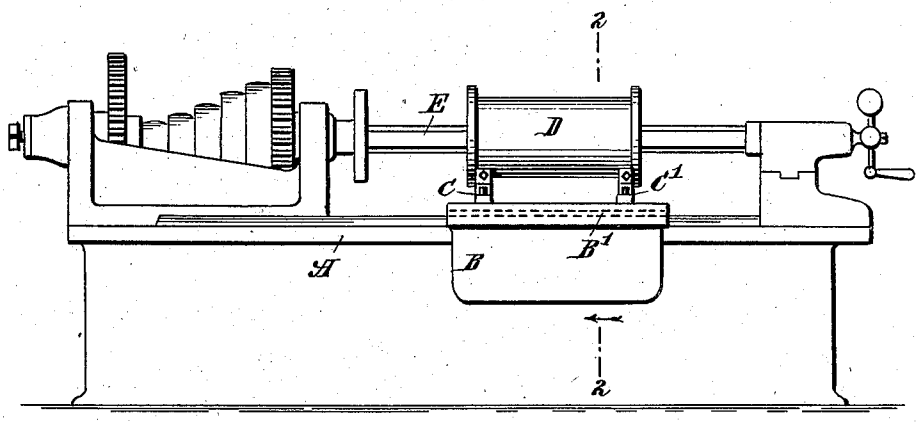


Fig. 2.

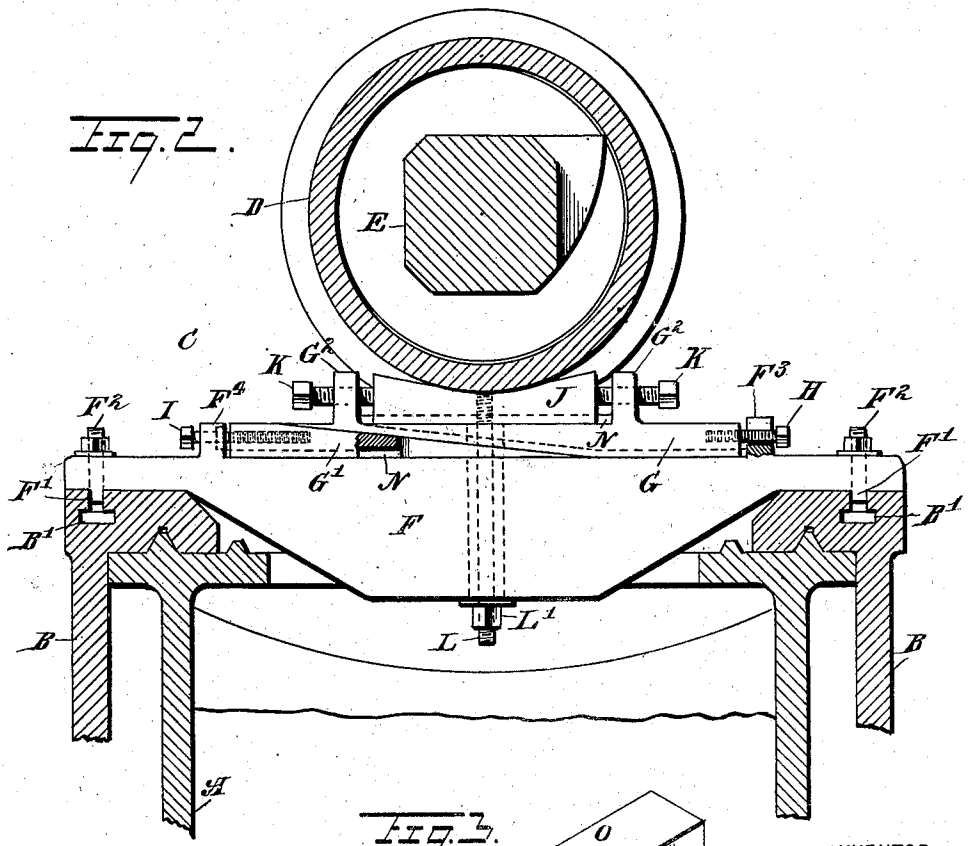
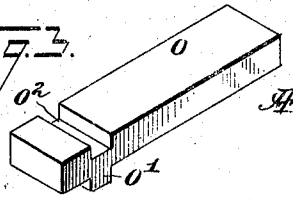


Fig. 3.



WITNESSES

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LATHE ATTACHMENT.

No. 900,457. Specification of Letters Patent. Patented Oct. 6, 1908.

Application filed July 25, 1907. Serial No. 385,466.

To all whom it may concern:

Be it known that I, ARCHIE E. WHITING, a citizen of the United States, and a resident of Weston, in the county of Lewis and State of West Virginia, have invented a new and Improved Lathe Attachment, of which the following is a full, clear, and exact description.

The invention relates to boring engine cylinders and other tubular work, and its object is to provide a new and improved lathe attachment, more especially designed for quickly and accurately centering the work, to bring the latter in axial alinement with the lathe.

The invention consists of novel features and parts and combinations of the same, which will be more fully described hereinafter and then pointed out in the claim.

A practical embodiment of the invention is represented in the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a side elevation of the improvement as applied; Fig. 2 is an enlarged transverse section of the same, on the line 2—2 of Fig. 1, and Fig. 3 is a perspective view of one of the liners.

On the body A of the lathe is mounted to travel longitudinally the usual carriage B, on which are mounted the spaced supporting devices C and C′ for supporting the cylinder or other work D, to be bored by the usual boring tool E, extending centrally through the work D. Each of the devices C and C′ is adjustable, to raise or lower either or both ends of the work D or to shift either or both ends of the work in a transverse direction, so as to bring the work D accurately into axial alinement with the lathe. The supporting devices C and C′ are alike in construction and each is arranged as follows: A support F is removably secured to the carriage B, and is for this purpose provided with tongues F′ fitting the longitudinally extending T-slots B′ arranged on the front and rear ends of the carriage B, as plainly illustrated in Fig. 2, and the said T-slots B′ are engaged by clamping bolts F^2 extending through the front and rear ends of the support F, to fasten the latter in position on top of the carriage B. On the top of the support F are mounted the transversely extending wedges G and G′, of which the wedge G is engaged at its under side by the top of the wedge G′, so that when the latter is moved transversely the wedge G is raised or lowered according to the direction in which the wedge G′ is moved. The wedge G after having been raised to the desired position is fastened in place by a bolt H, extending through an elongated slot in a lug F^3 and screwing in the rear end of the wedge G. In the wedge G′ screws a transversely-extending screw rod I mounted to turn in a lug F^4 formed near the front end of the support F, to permit the operator to move the wedge G′ transversely in a rearward or a forward direction, according to the direction in which the screw rod I is turned. On top of the wedge G is arranged a rest J having a V-shaped top for the cylinder or other work D to rest on, and the said rest J is adapted to be shifted in a transverse direction by set screws K screwing in lugs G^2 formed on top of the wedge G. Now by the arrangement described the wedge G can be raised or lowered, and with it the rest J, to raise or lower the corresponding end of the work D, and by the operator adjusting the set screws K, the rest J can be shifted transversely, to shift the corresponding end of the work D in a like direction.

In order to securely hold the several parts of each supporting device C, C′ in position after the desired adjustment is made, a clamping bolt L is provided, disposed vertically and secured at its upper end in the rest J, the bolt extending through elongated slots in the wedges G, G′ and the support F, the under side of which is engaged by a nut L′ of the bolt L, to clamp the rest J on the wedge G, and the latter on the wedge G′ and the latter down on the support F, to securely hold the several parts in place. Suitable keys N, fitting suitable key-ways, are provided for the wedges G, G′ and the rest J to slide on, as indicated in Fig. 2.

When it is required to raise each supporting device C, C′ more than the vertical adjustment permitted by the wedge G, then liners O are employed and interposed between the front and rear ends of the support F and the top of the carriage B. Each of the liners O is provided at its under side with a lug O′ for engagement with the T-slot B′, and on the top of the liners O is arranged a groove O^2, for receiving the corresponding lug F′ of the support F. Sets

of liners of different thicknesses may be provided to raise the support F the desired distance on the carriage B.

It is understood that by the arrangement described minute adjustment of the supporting devices C and C′ may be had to bring the work D into accurate axial alinement with the lathe.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:

A lathe attachment comprising a support for attachment to the lathe carriage, wedges arranged transversely of the support and slidable on each other, a rest on the uppermost wedge, means for moving one of said wedges whereby to raise and lower the rest, the uppermost wedge being provided with spaced lugs between which the rest is arranged, and bolts threaded through the lugs and engaging the rest whereby to adjust said rest longitudinally of the wedge, and transversely of the support.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ARCHIE E. WHITING.

Witnesses:

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L. K. DUNHAM.