(No Model.)

E. A. ANTHONY.

ADJUSTABLE LATHE DOG.

No. 589,889. Patented Sept. 14, 1897.

Fig. 1.

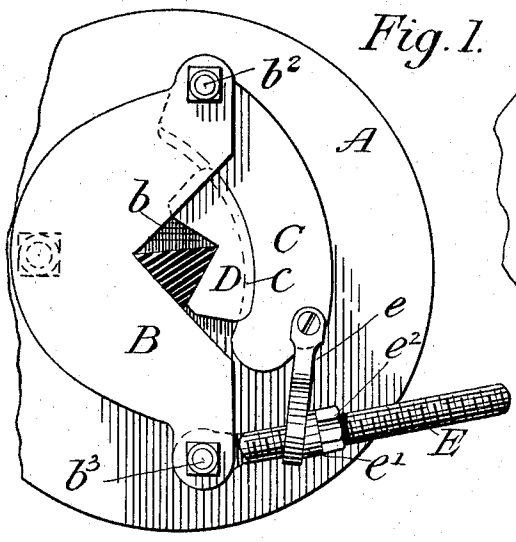


Fig. 2.

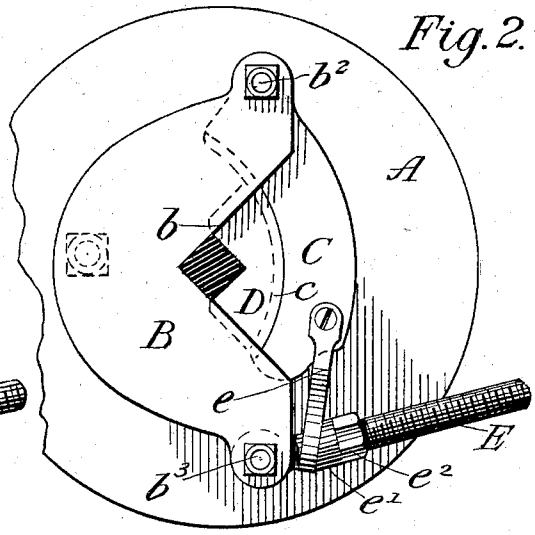


Fig. 3.

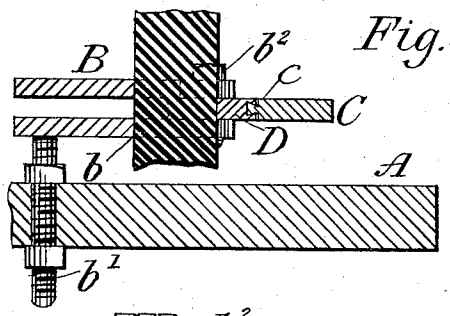


Fig. 4.

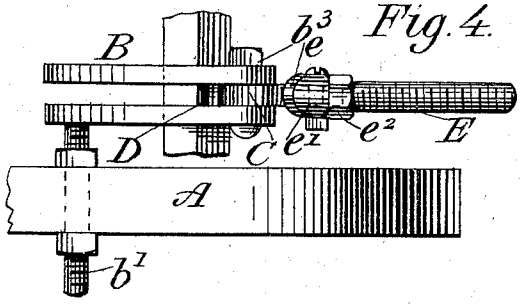


Fig. 5.

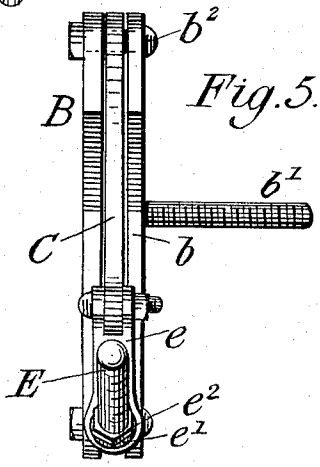


Fig. 6.

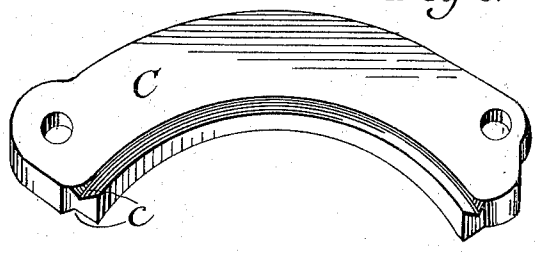
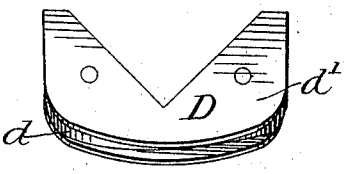


Fig. 7.



WITNESSES

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UNITED STATES PATENT OFFICE.

EDWIN A. ANTHONY, OF DIGHTON, MASSACHUSETTS.

ADJUSTABLE LATHE-DOG.

SPECIFICATION forming part of Letters Patent No. 589,889, dated September 14, 1897.

Application filed January 14, 1897. Serial No. 619,138. (No model.)

To all whom it may concern:

Be it known that I, EDWIN A. ANTHONY, a citizen of the United States, residing at North Dighton, in the county of Bristol and State of Massachusetts, have invented certain new and useful Improvements in Adjustable Dogs; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in lathe attachments, and has more particular relation to lathe-chucks.

The invention consists of certain novel constructions, combinations, and arrangements of parts, all of which will be hereinafter more particularly set forth and claimed.

In the accompanying drawings, forming part of this specification, Figure 1 represents a front elevation of the face-plate of the lathe provided with my invention, a triangular piece of metal being supported by the same. Fig. 2 represents a similar view, a rectangular piece of metal being supported by the chuck. Fig. 3 represents a central horizontal section through the same. Fig. 4 represents a top plan view of said attachment. Fig. 5 represents an end elevation of my said improvement. Fig. 6 represents an enlarged detail perspective view of the pivoted jaw, and Fig. 7 represents an enlarged perspective view of the auxiliary angular jaw adapted to be secured to the pivoted jaw.

A in the drawings represents the face-plate of the lathe; B, the spaced attaching-plate of my improved chuck; C, the pivoted jaw; D, the auxiliary jaw, and E the adjusting bolt or screw. The said plates B are approximately U-shaped in formation and are each provided with a V-shaped notch *b*. One of said plates is provided with a screw-threaded bolt or shank *b'*, adapted to be passed through a suitable aperture cut in the face-plate of the lathe and secured in position by a suitable nut. The lower end of the jaw C, which is preferably segmental in shape, is pivotally secured between the lower ends of the spaced plates by a bolt b^2. The inner segmental edge of said jaw C is provided upon each side with an inclined groove *c*. The said grooves together form a dovetailed projection along the edge of said jaw. This projection is adapted to enter a dovetailed groove formed in the auxiliary groove D, so that said jaw may be adjustably mounted upon said dovetailed edge of the jaw C. The said jaw D comprises a segmental block *d* and side metallic plates *d'*, the latter projecting over the periphery of said block *d* and incline toward each other, so as to form a dovetailed groove for the reception of the dovetailed flange of the jaw C. Both the block *d* and the plates *d'* are provided with V-shaped notches adapted to correspond with V-shaped notches in the spaced plates.

It will be observed from the foregoing description that by sliding the jaw D along the dovetailed flange of the jaw C the opening between the said jaw *d* and the spaced plates may be adjusted to varying angles, so as to fit tools of varying shapes. The said jaw D is pulled firmly toward the spaced plates to clamp the tool or metal between it and said plates by the screw-bolt E. This bolt has one end pivotally mounted between the upper ends of the spaced plates by a bolt b^3 and the opposite end passed through a link or toggle *e*, pivotally connected to the upper end of the jaw C. A wedge-shaped washer *e'* is applied over said bolt E, so as to be forced forward into contact with the same by a nut e^2, mounted on said bolt. The office of this washer *e'* is to present a flat bearing-surface to the nut e^2 and an inclined bearing-surface to the toggle E, which is caused to assume an inclined position by being forced forward.

It will be observed from the foregoing description that when the nut e^2 is turned forward on the bolt E the jaws C and D will be forced toward the spaced plates and thus clamp the tool or other metal beneath the jaw D and said plates.

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

1. In a lathe attachment, the combination with two spaced plates rigidly secured to the face-plate of the lathe, of a jaw having one end pivoted between said plates so that it may be passed between them when adjusted, and adjusting means connected to said jaw and having one end mounted between said plates for drawing said jaw and plates together to clamp

an article between them, substantially as described.

2. In a lathe attachment, the combination with spaced plates rigidly secured to the face-plate of a lathe, of a jaw having one end pivoted between said plates so that it may pass between them when adjusted, an auxiliary jaw movably mounted upon said pivoted jaw and the spaced plates whereby the auxiliary jaw may be drawn forward to clamp an article between it and the spaced plates, substantially as described.

3. In a lathe attachment, the combination with spaced plates adapted to be secured to the face-plate of the lathe, of a segmental pivoted jaw mounted between said spaced plates, a notched segmental auxiliary jaw adjustably mounted on said pivoted jaw and means connecting the pivoted jaw and the spaced plates whereby the two are drawn together to clamp an article between the auxiliary jaw and said plates, substantially as described.

4. In a lathe attachment, the combination with spaced plates adapted for attachment to the face-plate of the lathe and provided in one edge with V-shaped notches, of a jaw pivotally mounted between said plates, an auxiliary jaw adjustably mounted on said pivoted jaw and provided with V-shaped notches and means for drawing the spaced plates and pivoted jaw together whereby an article may be clamped between the auxiliary jaw and said spaced plates, substantially as described.

5. In a lathe attachment, the combination with spaced plates adapted to be secured to the face-plate of the lathe, of a pivoted jaw mounted between said plates, a screw-bolt also pivotally mounted between said plates, an apertured toggle pivotally connected to said pivoted jaw and adapted to receive the screw-bolt and an adjusting-nut mounted on said screw-bolt so as to engage the toggle-joint and force the same forward to clamp an article between the pivoted jaw and the spaced plates, substantially as described.

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

EDWIN A. ANTHONY.

Witnesses:
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SAMUEL N. CODDING.