No. 680,775. Patented Aug. 20, 1901.

K. G. HOLST.

LATHE DOG.

(Application filed May 11, 1901.)

(No Model.)

Fig. 1.

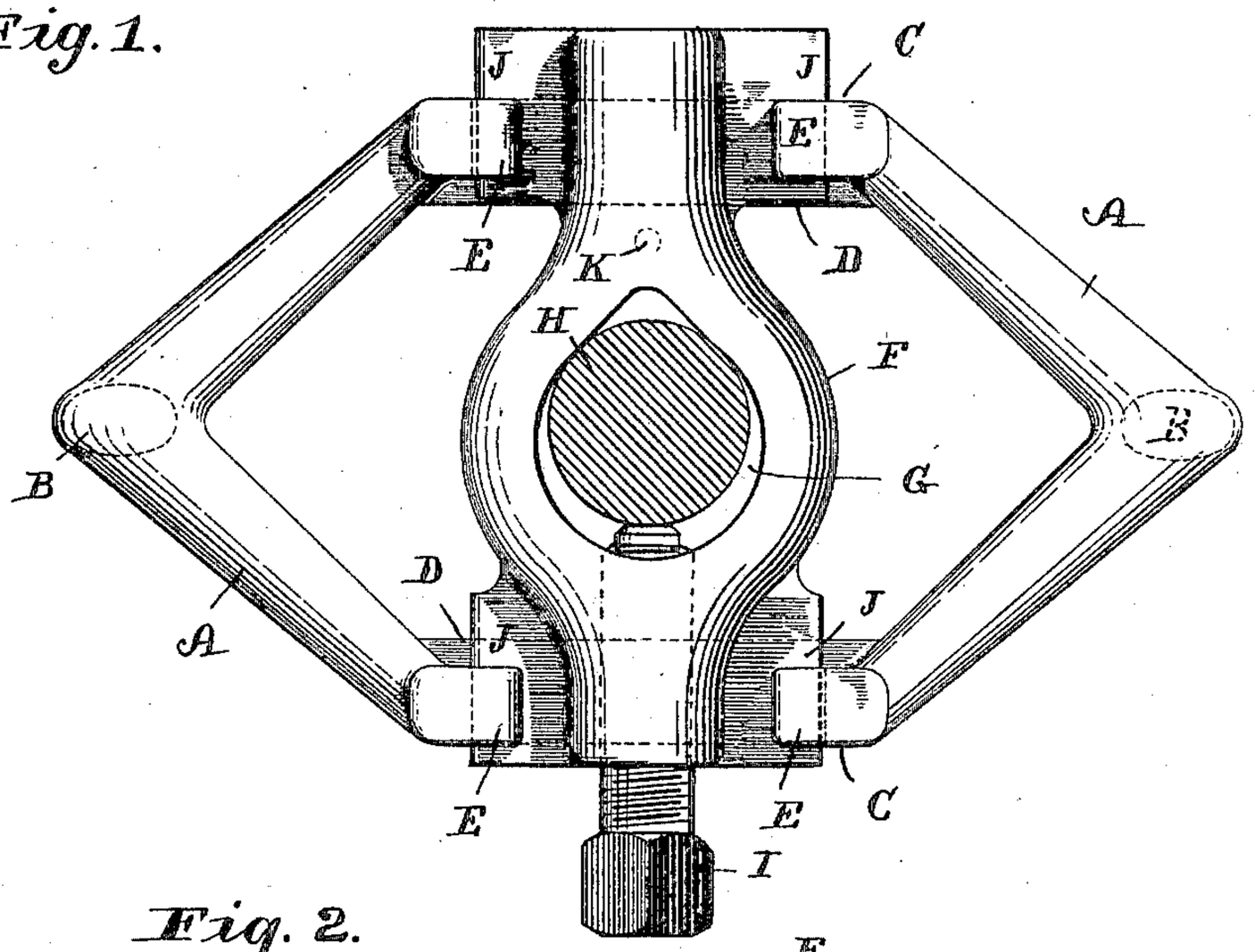
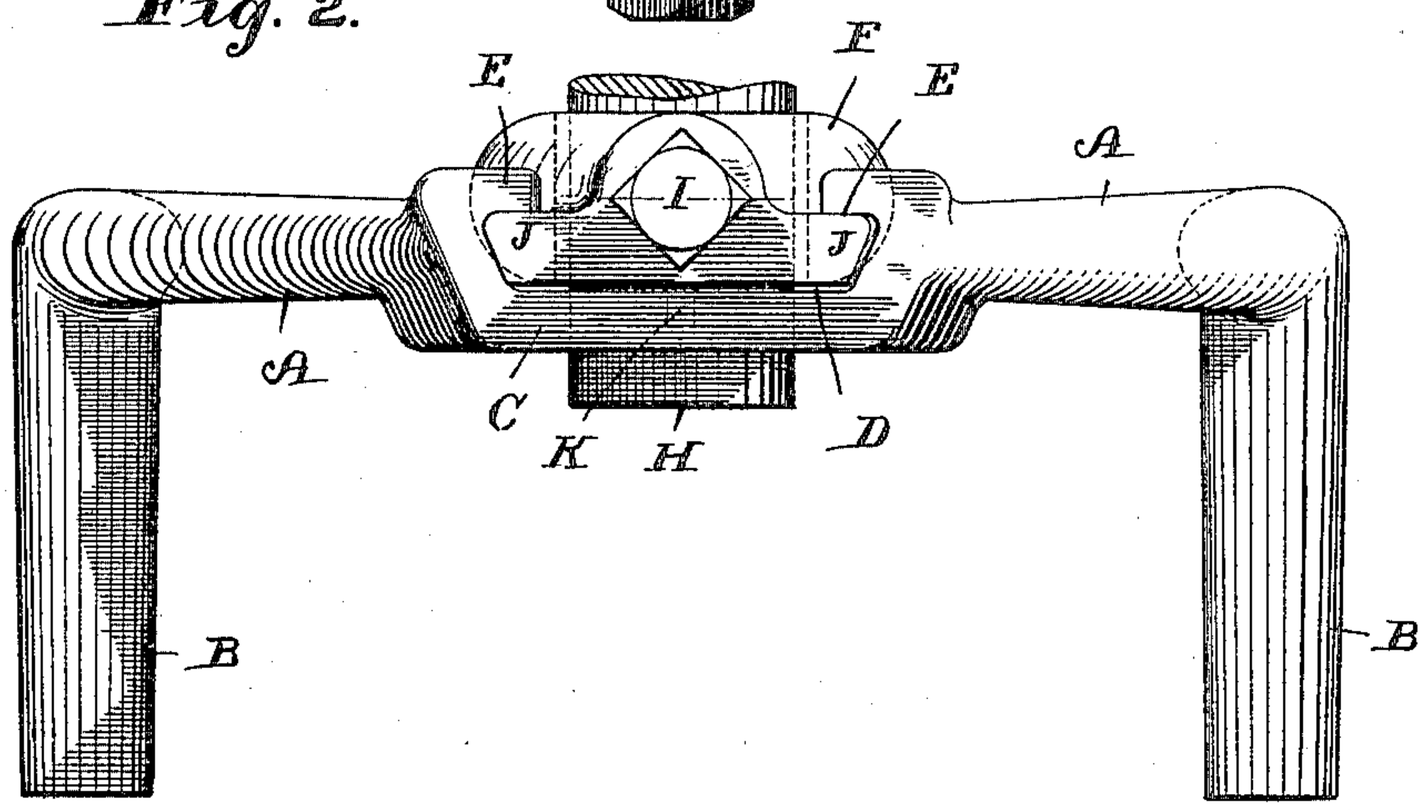


Fig. 2.



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UNITED STATES PATENT OFFICE.

KARL G. HOLST, OF WATERBURY, CONNECTICUT.

LATHE-DOG.

SPECIFICATION forming part of Letters Patent No. 680,775, dated August 20, 1901.

Application filed May 11, 1901. Serial No. 59,825. (No model.)

To all whom it may concern:

Be it known that I, KARL G. HOLST, a citizen of the United States, and a resident of Waterbury, in the county of New Haven and State of Connecticut, have invented certain new and useful Improvements in Lathe-Dogs, of which the following is a specification.

This invention relates to new and useful improvements in lathe-dogs such as are employed upon lathes or similar machines for driving work that is held on centers.

It is the object of my invention to improve upon devices of the above class by providing an equalizing or self-adjusting lathe-dog, by the employment of which truer work can be secured than is possible with the dogs now in common use; furthermore, to produce a simple and inexpensive device both to manufacture and use.

With the above objects in view my invention resides and consists in the novel construction and combination of parts shown upon the accompanying sheet of drawings, forming a part of this specification, upon which similar letters of reference denote like or corresponding parts throughout both figures, and of which—

Figure 1 shows a front elevation of my device complete and with a round bar of stock clamped therein. Fig. 2 is a side or edge view of Fig. 1.

As will be observed from the accompanying illustrations, my device is made of two parts, one being a "slidable" member and the other a "fixed" member, so to speak, which latter is clamped on the stock to be operated upon, while the slidable member engages with the slots in the face-plate of the lathe. (Not shown.)

Referring in detail to the letters of reference marked upon the drawings, A represents the slidable part of my dog, which is provided with the two rearwardly-disposed driving-arms B B, rigidly connected with a suitable central transverse slide formed by the lugs E, and the two connecting-pieces C C, as I clearly show by the drawings. This slide is mounted on suitable ways J, attached to the fixed member F, which is shaped like the main part of an ordinary lathe-dog, the stock H being secured centrally in the aperture G by means of a single adjustable set-screw I, as shown. This arrangement, as will be apparent, affords a sidewise adjustment of member A on the fixed member F, while the distances of each of the driving-arms B B from the center line of the said member F remain equal and unchanged. The fixed member F of this dog is on its rear side provided with a pin K, which by coming in contact with the inner edge of the side portion C of member A limits its movement on F and prevents the members from coming apart when the dog is not in use. In practice this pin is inserted after the parts are assembled.

In the application of my device the dog is fastened in the usual manner to one end of the piece to be turned, so that when the work is placed on the lathe-centers the driving-arms B B will enter the two slots in the face-plate. (Not shown.) When the lathe is started, the member A slides along on ways J until both of the driving-arms B B come in contact with the sides of the slots in the face-plate. The force necessary to drive the work then becomes equally divided on each of the arms B B, and as their position is symmetrical with respect to the center line of the lathe the driving forces applied to them have no deflecting influence on the head-stock center or the work to be turned, which is the case when only one driving-arm is used. Hence my dog will produce truer work.

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

1. A lathe-dog comprising a bifurcated frame having two inwardly-disposed engaging arms, transverse dovetail guides in the face of said frame and a transverse adjustable holding member mounted in said dovetail guides with means for clamping the stock in said holder, substantially as dscribed.

2. The combination in a lathe-dog of the class described, the same comprising a suitable frame with a central opening therethrough and forwardly-disposed arms located at the opposite extremities of said frame, guides located in the face of said frame, a movable member bearing web-like ways adjustably mounted in said guides with a screw for clamping the stock in said member.

3. The combination in a lathe-dog, of a frame having a central opening therethrough,

parallel sides and forwardly-disposed arms deflected from the opposite extremities of said frame, inwardly-disposed lugs situated in said parallel side portions forming guides, and a transverse stock-clamping member bearing lateral ways adjustably mounted in the guides of said frame, substantially as described.

Signed at Waterbury, in the county of New Haven and State of Connecticut, this 26th day of April, A. D. 1901.

KARL G. HOLST.

Witnesses:
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