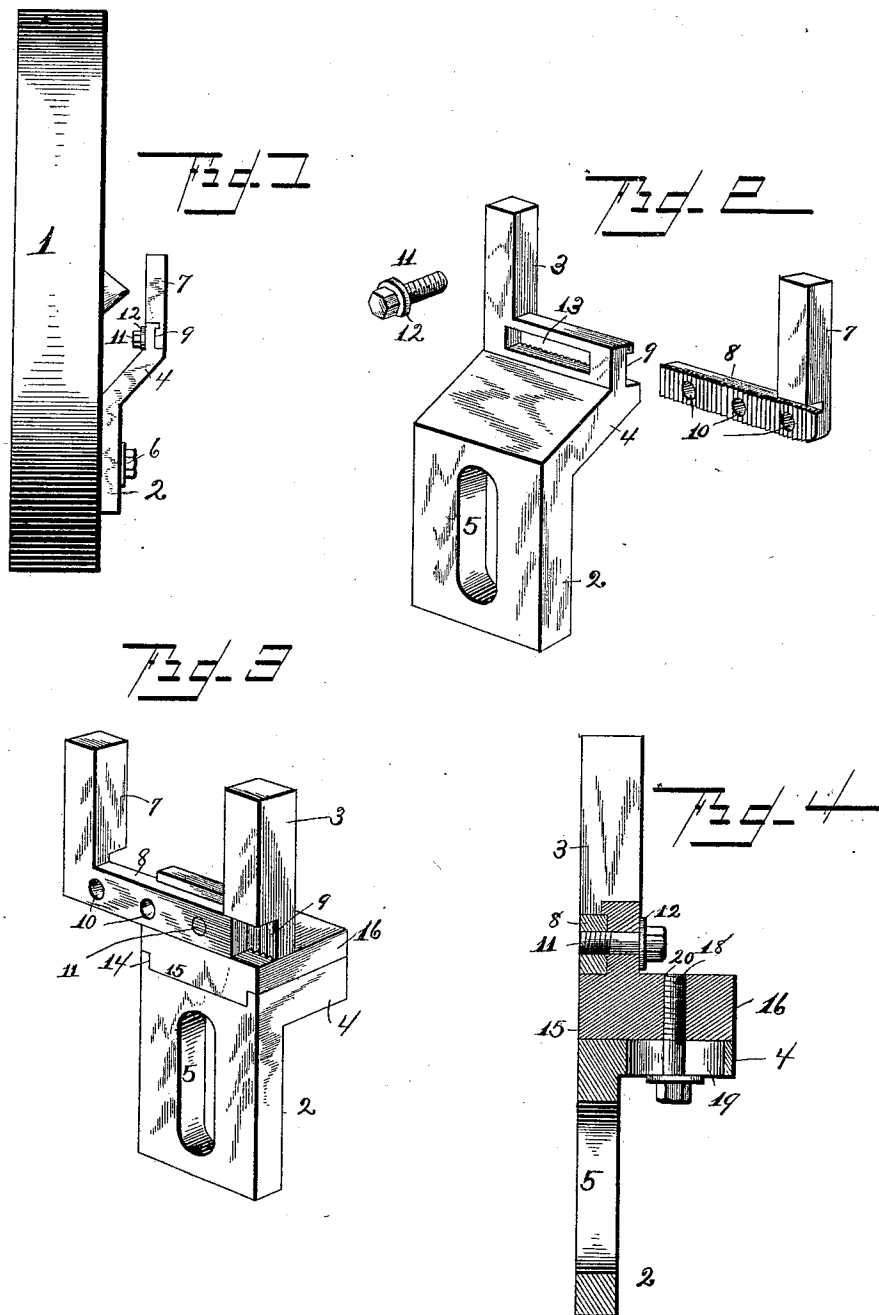


(No Model.)

J. F. WENTZ.
LATHE DOG.

No. 512,997.

Patented Jan. 16, 1894.



Witnesses
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UNITED STATES PATENT OFFICE.

JACOB FREDERICK WENTZ, OF SANDUSKY, OHIO.

LATHE-DOG.

SPECIFICATION forming part of Letters Patent No. 512,997, dated January 16, 1894.

Application filed December 9, 1892; Serial No. 454,576. (No model.)

To all whom it may concern:

Be it known that I, JACOB FREDERICK WENTZ, of Sandusky, county of Erie, and State of Ohio, have invented certain new and useful Improvements in Lathe-Dogs, of which the following is a specification, reference being had to the accompanying drawings.

The object of my invention is to produce a lathe dog adapted to be used upon the face plate of a lathe, and to positively grip work of different thicknesses, and of different lengths of center.

In the accompanying drawings, Figure 1 is a side elevation of my dog applied to a lathe plate. Fig. 2 is a view of the dog detached, showing the movable arm separated. Fig. 3 is a side elevation of a modified form of my invention, showing what I call center adjustment. Fig. 4 is a central longitudinal section of the device shown in Fig. 3.

Referring to the figures on the drawings, 1 indicates a lathe face plate.

2 indicates the base-plate of a dog, which is connected with a fixed arm 3 by an intermediate plate 4, which, in the simpler form shown in Figs. 1, 2, and 3 of the drawings, is preferably inclined, as illustrated.

5 indicates a longitudinal slot in the base-plate of the dog, through which a bolt 6 is passed for adjustably securing it to the face-plate.

7 indicates a movable arm provided with a right angular extension 8, which is adapted to fit closely and slide within a transverse groove 9 above the end of the intermediate plate. The angular extension of the arm is preferably provided with a plurality of screw-threaded holes 10, into which a tap-bolt 11 is entered. This tap-bolt preferably sets upon a straight sided washer 12, and passes through a transverse slot 13 corresponding in direction to the groove 9. The purpose of the plurality of holes in the extension of the movable arm is to afford different maximum and minimum limits for the adjustment of the dog; while that of the slot is to afford all degrees of adjustment within those limits. For example if the tap bolt were set in the hole next to the movable arm the adjustment would be from zero to three-fourths of an inch, if in

the next hole it would be from three-fourths of an inch to an inch and a half, and so on. For securing a closer and firmer union of the movable arm in any fixed position I prefer to employ correlative corrugations in the bottom of the groove, and upon the angular extension of the movable arm, substantially as illustrated. The movable and fixed arms with their intermediate adjustment mechanism constitute a preferable form of clamp; but my invention broadly consists in this particular in a lathe dog having any suitable form of clamp carried in a different plane from the base-plate, and preferably parallel therewith.

In Figs. 3 and 4 of the drawings I have illustrated what I prefer to call a center adjustment; that is, an adjustment for taking hold of the work at different distances from the face-plate center. For this purpose I prefer to set the intermediate plate at right angles to the base-plate, and provide in the face of the former a groove or channel 14, into which is adapted to fit the projecting face of an intermediate adjustment plate 16. The intermediate plate and the intermediate adjustment plate are adjustably united by a tap-bolt 18 passing through a slot 19, and entering a hole 20 in the intermediate adjustment plate.

It is obvious that the relative arrangement of slots and bolt-holes in the matter of adjustment is purely arbitrary, and may be changed or reversed at will.

In practice my device is preferably made entirely of steel, the base-plate, intermediate plate, and fixed arm being preferably formed integral in the construction shown in Figs. 1 to 3 inclusive of the drawings.

In Figs. 3 and 4 the intermediate plate is, as it were, divided to form the intermediate adjustment plate, and admit of the center adjustment. In other respects the relations of the parts are unchanged.

What I claim is—

1. In a lathe dog, the combination with a base plate, intermediate plate and vertical extension provided with a longitudinal groove, and transverse slot, and a fixed arm, of a movable arm and angular extension thereof, said angular extension being provided with

bolt holes, and a tap bolt adapted to pass through the transverse slot and to enter a hole in the angular extension of the movable arm, substantially as and for the purpose
5 specified.

2. In a lathe dog, the combination with a base plate and an intermediate plate, of an intermediate adjustment plate and clamp, ad-

justable thereon, substantially as and for the purpose specified. 10

In testimony of all which I have hereunto subscribed my name.

JACOB FREDERICK WENTZ.

Witnesses:

J. FEIX,

J. ERCKENER.