

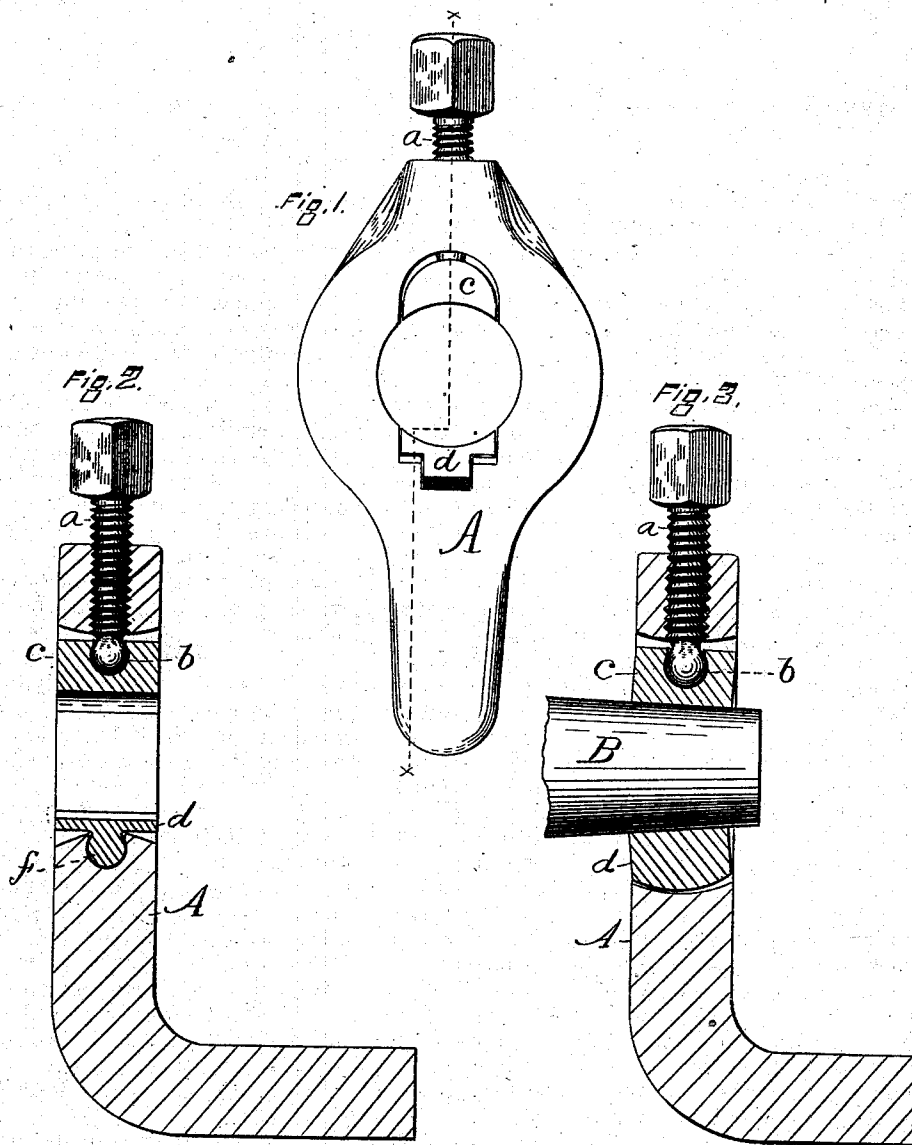
(No Model.)

J. WINSLOW, Jr., & R. ATKINS.

LATHE DOG.

No. 293,293.

Patented Feb. 12, 1884.



Witnesses.  
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# UNITED STATES PATENT OFFICE.

JOHN WINSLOW, JR., AND ROSWELL ATKINS, OF BRISTOL, CONNECTICUT.

## LATHE-DOG.

SPECIFICATION forming part of Letters Patent No. 293,293, dated February 12, 1884.

Application filed May 12, 1883. (No model.)

*To all whom it may concern:*

Be it known that we, JOHN WINSLOW, Jr., and ROSWELL ATKINS, citizens of the United States, residing at Bristol, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Lathe-Dogs, of which the following is a specification.

Our invention relates to an improvement in lathe-dogs; and the object of our invention is to enable a tapering piece to be grasped firmly, and at the same time to have the dog, when applied to such tapering piece, stand at right angle to its axis. We attain this object by the simple mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of our improved lathe-dog. Fig. 2 is a section thereof, partly in elevation, upon the two planes represented by the line *xx* of Fig. 1; and Fig. 3 is a section, partly in elevation, through the middle of the dog.

A represents the body of the dog, the general form of which may be the same as that of any lathe-dog in ordinary use, and it is provided with the set-screw *a*. Instead, however, of having the end of this set-screw *a* impinge directly upon the work to be held in the dog, we form the ball *b* at its lower end, which enters the corresponding socket in the rocking piece *c*, said piece being attached to end of the screw by its ball-and-socket joint, so as to remain permanently thereon. The body *A* of the dog is recessed to make room for this rocking piece *c*, and the inner face of the rocking piece *c* constitutes the surface which will be bound upon the work.

Directly opposite the rocking piece *c* we secure the rocking block *d*. This block has formed upon it, on two sides, ears or trunnions *f*, which rest in the correspondingly-shaped sockets in the body of the dog, and upon which the block *d* can rock freely. The sides of the socket into which the trunnions *f* are received are closed together sufficiently to prevent the accidental withdrawal of the rocking piece *d*, whereby said piece is permanently secured to the body of the dog. When a cylindrical rod or shaft is dogged, the inner face of pieces *c* and *d* will be parallel to each

other, as shown in Fig. 2, and the dog will hold the work substantially the same as any ordinary lathe-dog, excepting that the set-screw does not impinge directly upon the work.

B designates a tapering piece of work as held within the dog, and represented in Fig. 3, in which view it will be seen that the pieces *c* and *d* rock or tip to conform to the taper of the work, while the body of the dog stands at right angles to the axis of the shaft B, precisely the same as it would if a piece with cylindrical or straight sides were dogged. To enable the tapering piece to be thus dogged is a convenience which will be readily appreciated by all machinists.

We are aware that prior patents show a lathe-dog as made with a box at the end of the screw substantially like the box for the bearing in a lathe, but without any rocking capacity, said block being guided in a defined course by means of ways or guides; also, one in which the end of the set-screw is steadied and guided in its path by means of a cross-bar sliding in ways or guides, but without any rocking movement, and with the end of the screw projecting through the bar; also, that other patents show what is known as "clamp-dogs," composed of two bars and two screws, with rocking pieces upon the confronting faces of the two bars and between the screws. All of this prior art is hereby disclaimed.

We claim as our invention—

1. The lathe-dog herein described, having the rocking piece *c* permanently secured to the inner end of its set-screw and free to rock thereon, substantially as described, and for the purpose specified.

2. The combination of the lathe-dog, the set-screw *a*, the rocking piece *c*, mounted upon the inner end of said set-screw, so as to rock freely, and the rocking block *d*, permanently secured to the lathe-dog body at a point directly opposite the set-screw and its rocking piece *c*, substantially as described, and for the purpose specified.

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