

(Model.)

S. N. SILVER.

LATHE DOG.

No. 301,632.

Patented July 8, 1884.

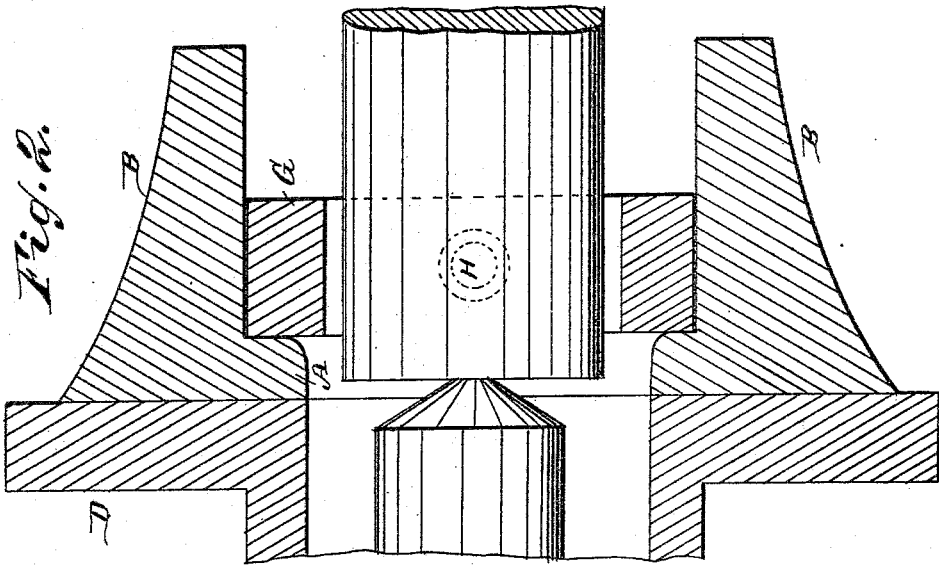


Fig. 2.

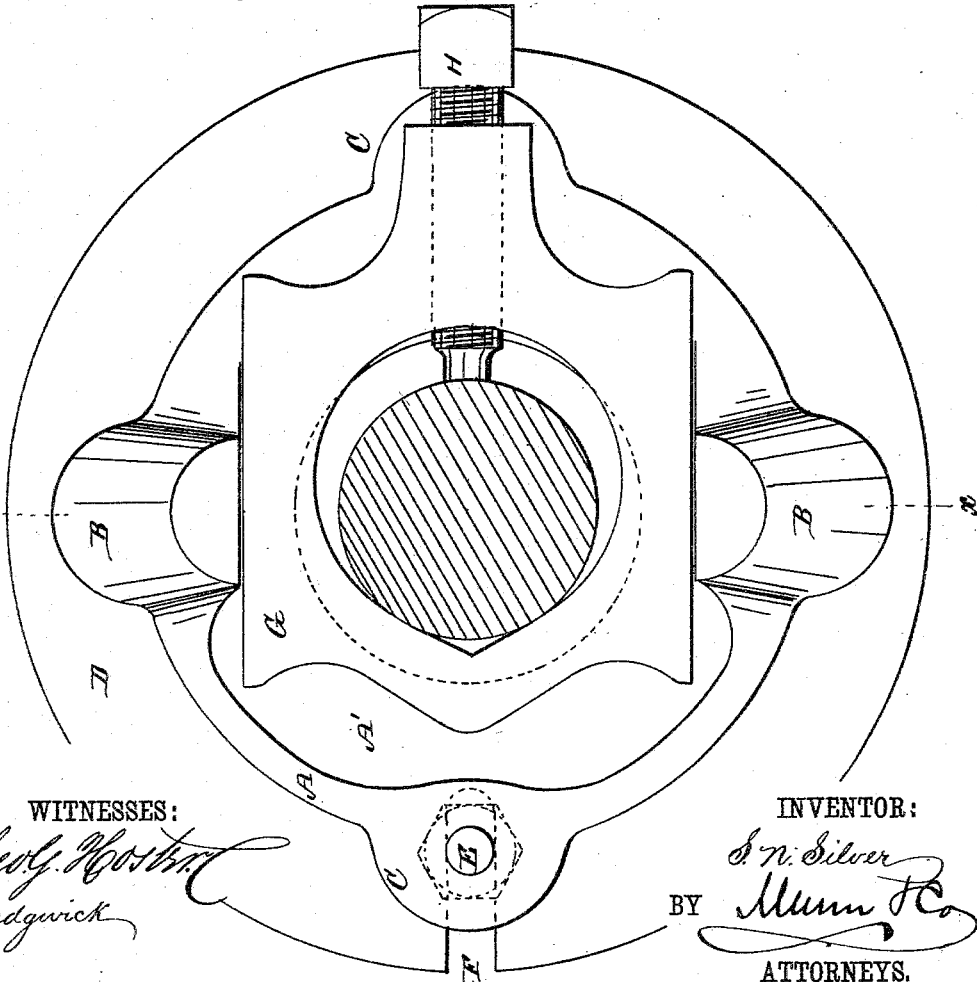


Fig. 1.

WITNESSES:

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# UNITED STATES PATENT OFFICE.

SAMUEL NORMAN SILVER, OF AUBURN, MAINE.

## LATHE-DOG.

SPECIFICATION forming part of Letters Patent No. 301,632, dated July 8, 1884.

Application filed September 1, 1883. (Model.)

*To all whom it may concern:*

Be it known that I, SAMUEL N. SILVER, of Auburn, Androscoggin county, Maine, have invented a new and Improved Automatic Lathe-Dog, of which the following is a full, clear, and exact description.

The object of my invention is to provide a new and improved automatic equalizing lathe-dog which equalizes the strain on the opposite sides of the work and lathe-center, so as to prevent the springing of the shaft by being wedged on one side of the lathe-center.

The invention consists of the combination, with the face-plate of a lathe, of a casting or plate provided with jaws and receiving a set-screw from said face-plate, between which jaws an apertured plate is held, while said set-screw serves as a pivot for said apertured plate; and the invention consists of several other combinations and arrangements of parts, substantially as hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in both figures.

Figure 1 is a face view of my improved lathe-dog; and Fig. 2 is a cross-sectional view of the same on the line *x x*, Fig. 1.

A plate or casting, A, is provided with two diametrically-opposite strong jaws, B, and with two diametrically-opposite lugs, C, formed on the edge, the axis of the lugs C being at right angles to the axis of the jaws B. The plate A is held to the face-plate D of the lathe by a screw, E, passed from the inner side of the face-plate D through a slot, F, in the face-plate into one of the lugs C. The casting or plate A is provided with a central aperture corresponding with the aperture in the face-plate. A plate, G, provided with a central aperture, fits closely between the jaws B and rests in a recess, A', of the plate A, and the said plate G is provided with a set-screw, H, which is held in that part of the plate G farthest from the screw E, so as to balance the plate G. The screw E is not drawn up very

tightly, so as to allow the plate or casting A to be moved slightly, the said screw serving as a fulcrum. The plate or casting need not move very freely and but a short distance—that is, just enough to make up the distance the dog is thrown out of the center on account of any unevenness of the bar or rod that is held by it. The plate G is placed on the shaft to be turned, and when the shaft is on the center the plate or piece G is placed between the jaws B of the piece A. The set-screw H is then drawn up tightly. The lathe is then started and turns the face-plate D, which turns the plate or casting A, and this casting adjusts itself instantly and automatically, as it is pivoted by the screw E, so that each jaw B presses equally on the parallel sides of the plate G, whereby an equal strain on the opposite sides of the lathe is obtained and springing of the shaft is prevented.

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

1. A lathe-dog consisting of an apertured plate for holding the shaft to be turned, said apertured plate being held loosely between two jaws of a plate or casting pivotally connected to the face-plate of the lathe, substantially as and for the purpose set forth.

2. The combination, with a face-plate of a lathe, of a plate or casting provided with two opposite jaws, and held on the face-plate to have a slight movement on the same, and of apertured plate provided with a set-screw and held loosely between the above-mentioned jaws, substantially as herein shown and described.

3. The combination, with the lathe face-plate D, having slots F, of the casting or plate A, provided with jaws B, and of the plate G, held loosely between the jaws B, and provided with a set-screw, H, substantially as herein shown and described.

SAMUEL NORMAN SILVER.

Witnesses:

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