

No. 630,778.

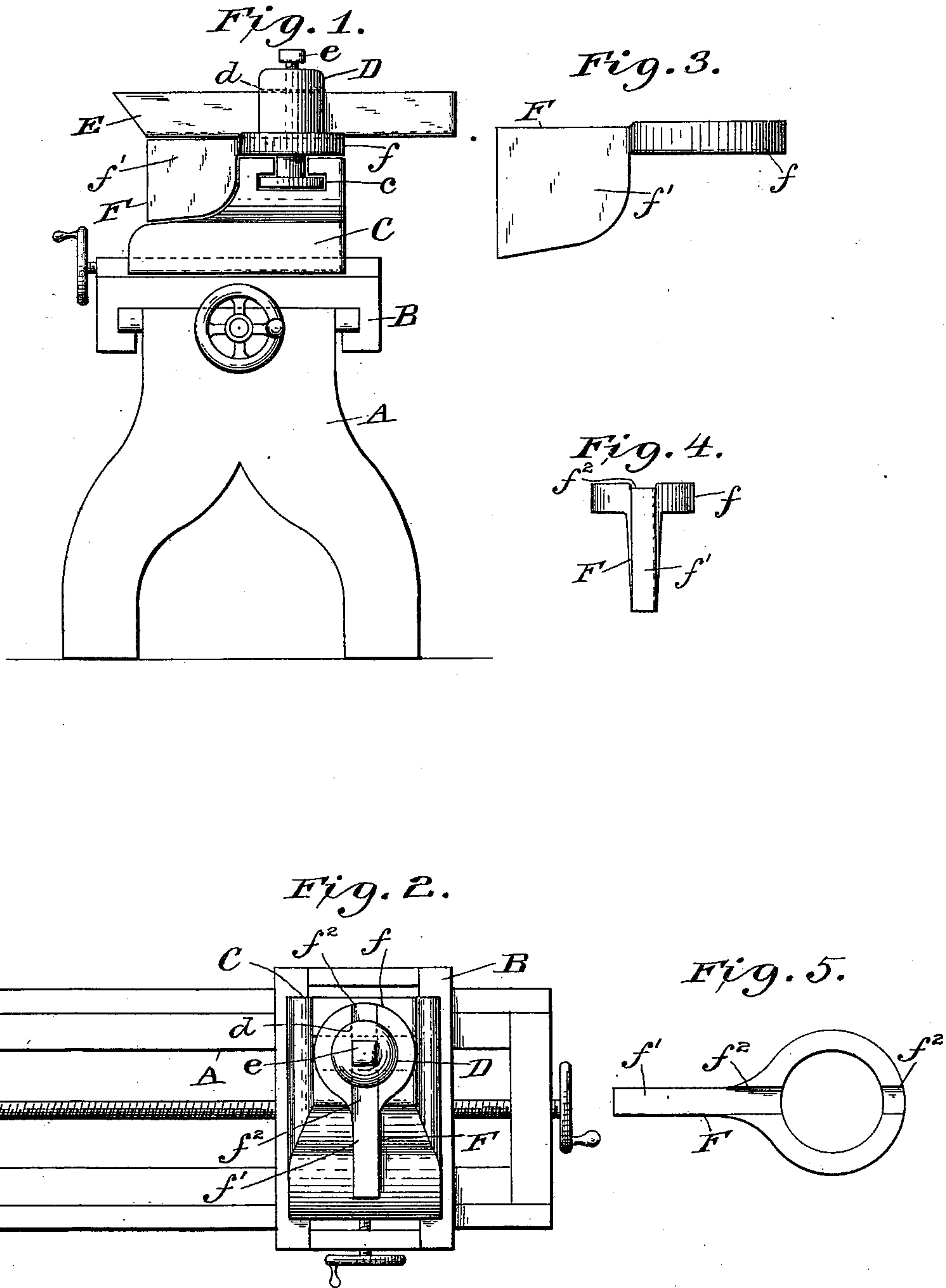
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W. L. GUISE.

TOOL SUPPORT FOR METAL TURNING LATHES.

(Application filed Oct. 19, 1898.)

(No Model.)



Witnesses
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UNITED STATES PATENT OFFICE.

WILLIAM L. GUISE, OF DOVER, NEW JERSEY, ASSIGNOR OF TWO-THIRDS
TO ROBERT F. BOPP AND EUGENE J. COOPER, OF SAME PLACE.

TOOL-SUPPORT FOR METAL-TURNING LATHES.

SPECIFICATION forming part of Letters Patent No. 630,778, dated August 8, 1899.

Application filed October 19, 1898. Serial No. 694,046. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM L. GUISE, a citizen of the United States, residing at Dover, in the county of Morris and State of New Jersey, have invented certain new and useful Improvements in Metal-Turning Lathes, of which the following is a specification.

My invention relates to metal-turning lathes, and especially to the tool-supports in such lathes, and has for its object to provide a support for the cutting-tool which will always sustain the point of such tool and prevent its bending or breaking. This object I accomplish in the manner and by the means hereinafter more fully described in detail, and particularly pointed out in the claims, reference being had to the accompanying drawings, in which like reference-letters indicate like parts in all the figures.

Figure 1 is a side elevation of my invention in an operative position. Fig. 2 is a top plan view of same with the cutting-tool removed. Figs. 3, 4, and 5, are respectively side, end, and top plan views of my invention.

A represents the main frame of the lathe, and B and C the usual cross-sliding blocks, which may be operated and controlled by hand-levers or any of the usual modes. The sliding block C is provided with a T-shaped slot *c*. The tool-post D has a foot adapted to move and turn in the T-shaped slot *c*, a slot *d*, in which the cutting-tool E is placed, and is provided with a screw *e* for securing said tool E in place.

My invention consists of a tool-support F, which is formed of a ring *f*, through which the tool-post D passes and which rests on top the sliding block C and the body *f'*, made integral with said ring *f* and extending outwardly from said ring *f*. The said body *f'* is of the same or nearly the same thickness as the tool E. The top of said body *f'* is slightly lower than the top of said ring *f* and extends from said ring *f* horizontally. The bottom of said body *f'* is shaped to fit the upper surface of the sliding block C. Two notches *f*² are cut in the top of the ring *f* in line with the top of the body *f'*, in depth equal to the

distance from the top of said ring *f* to the top of said body *f'*.

The operation of my invention is as follows: The various parts of the lathe A, sliding blocks B and C, tool-post D, &c., being in place and the ring *f* placed over the tool-post D and resting on the sliding block C, the tool E is placed in the slot *d* in tool-post D and the tool-support adjusted so that the tool E will rest in the notches *f*² and on the top of the body *f'* of the support F. The tool E is now secured in place by screw *e*. The body *f'* of the tool-support F will enter the cut with the tool E and continue to support the tool E as long as it will cut.

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

1. In a metal-turning lathe, a tool-support adapted to follow the tool into the cut and support it while cutting, said tool-support made integral with a ring surrounding the tool-post, substantially as shown and described.

2. In a metal-turning lathe, a tool-support provided with a ring to receive the tool-post and with a body of the thickness of the tool extending from said ring and integral therewith out under said tool, the bottom of said body resting firmly on the sliding block, substantially as shown and described.

3. In a metal-turning lathe, a tool-support consisting of a body part of the thickness of the tool and having its lower edge complementary to the upper surface of the sliding block and its upper edge complementary to the bottom of the tool and of a ring made integral with said body but rising a little above it, said ring adapted to receive the tool-post and provided with notches in line with said body, said notches adapted to receive the lower part of the tool, substantially as shown and described.

In testimony whereof I hereto affix my signature in the presence of two witnesses.

WILLIAM L. GUISE.

Witnesses:

EUGENE J. COOPER,
ROBERT F. BOPP.