(No Model.)

# C. E. HALL.

## TOOL HOLDER FOR LATHES.

No. 358,607. Patented Mar. 1, 1887.

Fig. 1.

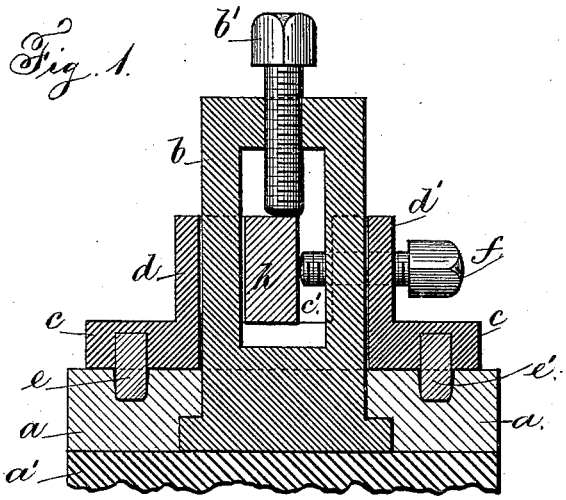
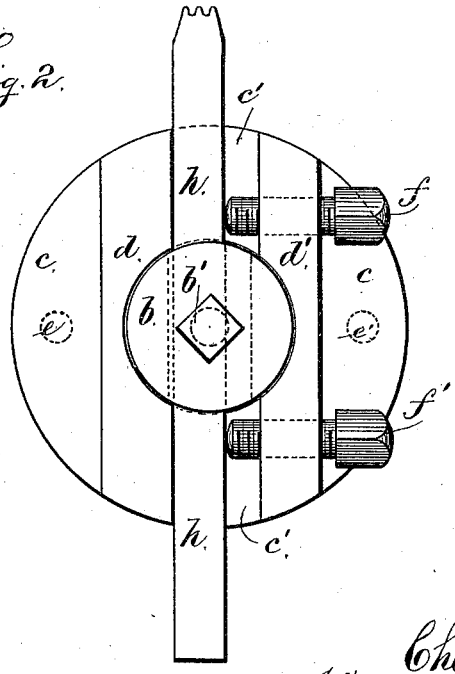



Fig. 2.




Witnesses
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# UNITED STATES PATENT OFFICE.

CHARLES E. HALL, OF BRICK CHURCH, NEW JERSEY.

## TOOL-HOLDER FOR LATHES.

SPECIFICATION forming part of Letters Patent No. 358,607, dated March 1, 1887.

Application filed December 1, 1886. Serial No. 220,363. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES E. HALL, of Brick Church, in the county of Essex and State of New Jersey, have invented a new and useful Improvement in Tool-Holders for Lathes; and the following is declared to be a description of the same.

Posts and holders for tools upon the slide-rest and movable carriages of lathes are usually formed of a pillar, which passes up through the rest and is slotted to receive the tool, and in which said tool is clamped by a set-screw passing perpendicularly through the pillar and forcing the tool down upon the slide-rest.

It is very difficult to replace the tool accurately after it has been removed for sharpening, and this is especially the case with chasers and tools for screw-thread cutting. If the tool happens to slip or shift the slightest amount the work is spoiled.

My invention relates to a tool-holder for the slide-rests and carriages of lathes; and the same consists in combining with the usual carriage, slide-rest, and slotted pillar or post a collar surrounding the slotted pillar and provided with pins which enter holes in the slide-rest to keep the collar from turning, and there are flanges upon the collar, the space between the flanges forming a groove into which the tool or chaser is received and supported, and there are clamping-screws passing through one of the flanges, and said tool or chaser is held securely in a lateral direction by these clamping-screws upon one side and by the flange on the other side, against which the screws clamp the tool. The tool or chaser is held down to place vertically by the clamping screw, that passes down vertically through the slotted pillar.

In the drawings, Figure 1 is a vertical section, and Fig. 2 is a plan view, of the tool-holder, slotted pillar, and part of the slide-rest.

*a* represents a portion of the slide-rest above the lathe-carriage *a'*, and *b* the slotted tool holder or post, passing through said rest in the usual manner, and there is a clamping-screw, *b'*, passing vertically through the top of the same.

The tool-holder consists of the collar *c* and its flanges *d d'*, the collar surrounding the slotted pillar *b* loosely. The pins *e e'* are fast in the collar *c*, and there are holes in the slide-rest *a* to receive these pins *e e'*, and said pins prevent the collar turning upon the slide-rest. Between the flanges *d d'* is a slot or groove, *c'*, and the base of said groove is above the base of the slot in the slotted pillar *b*, and the tool or chaser *h* passes through the slotted pillar, but does not touch it, and such tool lies in the slot or groove *c'*, and one side of said tool *h* bears against the side of the flange *d*, and there are clamping-screws *f f'* passing through the flange *d'*, which hold the tool *h* against the side of the flange *d*, the clamping-screw *b'* being brought to bear on the upper side of the tool to hold it down vertically. The tool or chaser is thus held rigidly to its work, and there is no possibility of its slipping, and the construction of the parts is such that the tool or chaser can readily and accurately be replaced after it has been removed for sharpening or any other purpose.

My improved tool-holder is especially adapted, in connection with screw-cutting machines, for holding chasers for cutting threads for taps and dies; but it may be used in any lathe for metal-working, and one of the advantages of my improved tool is that it prevents the cutting of one-sided threads, that would prevent the threads of the nut and bolt from coinciding, and all threads cut are accurate.

I claim as my invention—

1. The combination, with the slide-rest and slotted pillar or post in a lathe, of a collar surrounding said pillar, flanges upon said collar, pins to prevent said collar turning, and clamping-screws to hold the tool firmly in place, substantially as specified.

2. The combination, with the slide-rest *a*, slotted pillar or post *b*, and clamping-screw *b'*, of the collar *c*, flanges *d d'*, tool or chaser *h*, clamping-screws *f f'*, and pins *e e'*, substantially as specified.

Signed by me this 29th day of November, A. D. 1886.

CHARLES E. HALL.

Witnesses:

GEO. T. PINCKNEY,

HAROLD SERRELL.