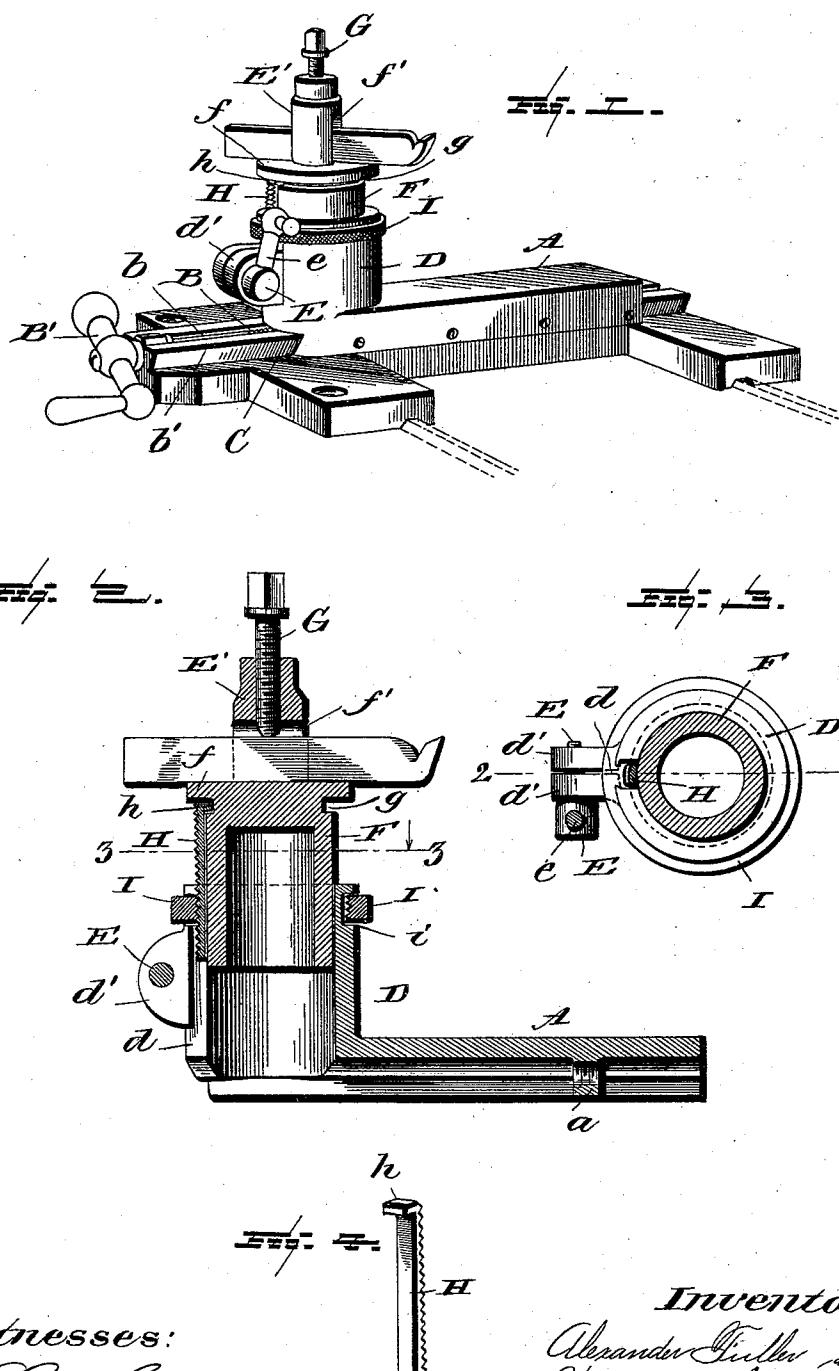


(No Model.)

A. FULLER & W. B. HOHNSHELL.
TOOL HOLDER FOR LATHES.

No. 488,554.

Patented Dec. 27, 1892.



Witnesses:
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UNITED STATES PATENT OFFICE.

ALEXANDER FULLER AND WALTER B. HOHENSHELL, OF STREATOR,
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TOOL-HOLDER FOR LATHES.

SPECIFICATION forming part of Letters Patent No. 488,554, dated December 27, 1892.

Application filed July 2, 1892. Serial No. 438,735. (No model.)

To all whom it may concern:

Be it known that we, ALEXANDER FULLER and WALTER B. HOHENSHELL, citizens of the United States, residing at Streator, in the 5 county of La Salle and State of Illinois, have invented certain new and useful Improvements in Tool-Holders for Lathes; and we do hereby declare the following to be a full, clear, and exact description of the invention, such 10 as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to certain new and useful improvements in tool holders for lathes, and it has for its objects among others to provide 15 a simple, cheap, durable holder by which the tool will be held to its work and not give, and which can be set quickly and easily.

We provide a base piece which is designed to be adjustably affixed in position upon the 20 lathe bed and which is formed with a vertical split socket within which the tool post is slidingly arranged, the socket being provided with suitable means for clamping the tool post in its adjusted position and novel means 25 being provided for adjustment of the said post. This novel means comprises a threaded strip fitted in a longitudinal groove in the tool post and engaged by a threaded ring by which it is raised or lowered. By this construction we avoid threading the entire post; this strip is detachably held to the post and can be readily removed when desired.

Other objects and advantages of the invention will hereinafter appear and the novel 35 features thereof will be specifically defined by the appended claims.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part 40 of this specification, and in which

Figure 1 is a perspective view showing the improvement in operative position. Fig. 2 is a vertical section on the line 2 2 of Fig. 3. Fig. 3 is a horizontal section on the line 3 3 45 of Fig. 2 looking in the direction of the arrows. Fig. 4 is a perspective view of the threaded strip removed.

Like letters of reference indicate like parts throughout the several views in which they 50 appear.

Referring now to the details of the draw-

ings by letter, A designates the base or bed piece or plate which is formed with a dovetail slot upon its underside and with a threaded nut *a* or any other suitable means to be engaged by the screw *B* working in a channel *b* of the plate or bed *C* which has a dovetail guide *b'* for the base *A* as seen in Fig. 1, the said screw being provided with a suitable handle *B'* by which it may be turned to adjust the base as desired. 55

The bed piece *A* is formed with a vertical cylindrical portion *D* which is split longitudinally as seen at *d* and provided with the ears *d'* in which is supported the screw rod *E* provided with a suitable handle *e* and the turning of which draws the vertical portion *D* together to clamp the tool post in its position. This tool post *F* is fitted to move easily within the portion *D* and has a flat collar or portion *f* for the support of the tool which is designed to be inserted in a horizontal hole *f'* in the reduced portion *E'* above said collar and through which reduced portion passes vertically a set screw *G* as shown in Figs. 1 75 and 2. The tool post is provided just below its collar with a surrounding channel or groove *g* in which is designed to be held the horizontal flange *h* on the upper end of the threaded strip *H* which lies in close contact 80 with the post and works in a vertical channel in the part *D* opposite the split therein. The upper end of the part *D* has a surrounding groove or channel *i* in which is arranged a ring or washer *I* internally threaded and engaging the threads of the strip *H*. 85

The operation will be readily understood from the foregoing description when taken in connection with the annexed drawings, and, briefly stated, is substantially as follows;— 90 the tool is placed in its opening and rests upon the collar of the tool post, being securely held therein by tightening the set screw. The tool post is firmly held in its adjusted positions by turning the screw rod *E*. When it 95 is desired to raise or lower the tool post or to adjust it horizontally the screw rod *E* is turned to unclamp the post and then by turning the ring *I* which engages the threaded strip the post is quickly turned in the desired direction, being quickly clamped in its adjusted position by the turning of the screw rod *E*. 100

It will be seen that we thus provide a very simple and cheap construction, avoid threading all parts except the small strip and the ring and are enabled to get all the adjustments desired by one and the same means. 5 We may dispense with the ring and strip and adjust the post within its socket, holding the same in its adjusted position by the screw rod clamping the socket around the post, but 10 prefer to employ the said ring and strip.

Modifications in detail may be resorted to without departing from the spirit of the invention or sacrificing any of its advantages.

What is claimed as new is;—

- 15 1. The combination with the socket and the tool post, of a threaded strip independent of the socket and post, and a ring embracing the post and strip for engaging the strip to adjust the post, as set forth.
- 20 2. The combination with the post having surrounding groove, of the detachable threaded strip having a flange moving in said groove, as set forth.
- 25 3. The combination with the socket having surrounding groove, of the post having surrounding groove, the ring in the groove of the socket and the threaded strip held in the groove of the post and engaged by the threads of the ring, as and for the purpose specified.

4. The combination with the split socket 30 and its screw rod, of the tool post fitted with in the socket, the detachable threaded strip, and the threaded ring engaging said strip, substantially as specified.

5. The combination with the socket, of the 35 detachable tool post, the detachable threaded strip carried by the post, and a threaded ring encircling the post and strip and engaging said strip, substantially as specified.

6. The combination with a grooved tool 40 post, of a detachable threaded strip having a flange held in the groove of the post, and a ring embracing the post and fitted in a groove in the post-support and engaging said strip, as shown and described.

7. A tool holder comprising a bed piece 45 with split socket, screw rod, tool post fitted in the socket, and provided with an opening, collar and set screw, threaded strip, and threaded ring, all arranged and operating as set forth.

In testimony whereof we affix our signatures in presence of two witnesses.

ALEXANDER FULLER.

WALTER B. HOHENHELL.

Witnesses:

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