

J. M. STONE.  
Lathe Fastening.

No. 47,876.

Patented May 23, 1865.

Fig 1

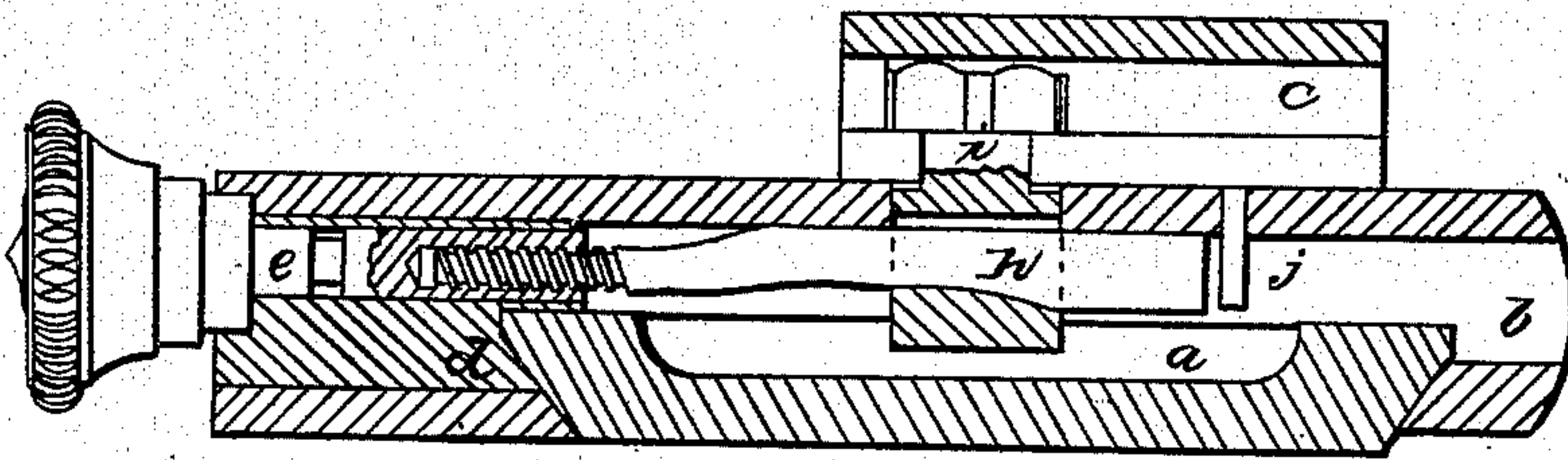
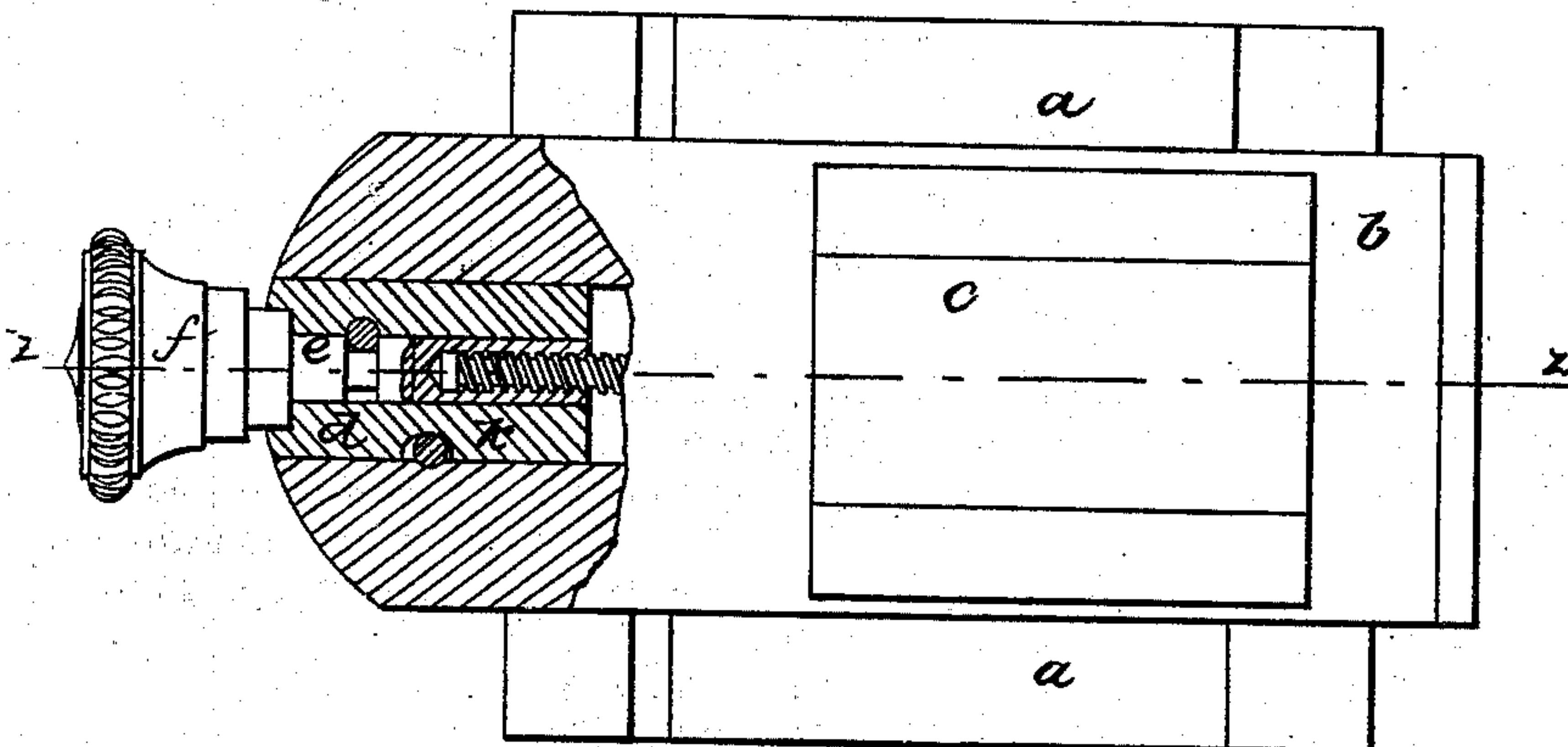


Fig 2



Witnesses  
Francis Gould  
W. B. Gleason

Inventor  
J. M. Stone  
by his Atty  
W. B. Crosby

# UNITED STATES PATENT OFFICE.

J. M. STONE, OF NORTH ANDOVER, MASSACHUSETTS, ASSIGNOR TO HIMSELF, GEORGE L. DAVIS, AND JOHN A. WILEY, OF SAME PLACE.

## IMPROVED LATHE-FASTENING.

Specification forming part of Letters Patent No. 47,876, dated May 23, 1865.

*To all whom it may concern:*

Be it known that I, J. M. STONE, of North Andover, in the county of Essex and State of Massachusetts, have invented a new and Improved Lathe-Fastening; and I do hereby declare that the following, taken in connection with the drawings, which accompany and form part of this specification, is a description of my invention sufficient to enable those skilled in the art to practice it.

This invention relates to means for securing in place by one manipulation two sliding and connected parts of a lathe—such as are found in the tool-carriage and also in the tail-stock.

The particular embodiment of the invention is shown by the drawings as applied to the tool-holding carriage of a lathe, Figure 1 being a longitudinal vertical section taken in the plane of the line  $z z$ , (seen in Fig. 2,) which shows the invention in plan, except where broken and shown in section for the better illustration of the construction.

The bed of the lathe is represented by the piece  $a$ , the piece which is made to move along the length of the bed by  $b$ , and the piece to which the tool-holder is secured by  $c$ .

Within the slide  $b$  is the clamp-block  $d$ , in which the spindle  $e$  is arranged, so that it can be turned by handle  $f$ , endwise movement of the spindle being prevented by the pin  $g$ , which is made fast in the clamp-block  $d$ , and enters a score or groove in the spindle. The end of this spindle  $e$  is bored into and is tapped out to fit the screw-threads formed on one end of the wedge-bar  $h$ , so that it will be obvious that as the clamp-block is permitted only very slight longitudinal movement by means herein-after to be referred to, rotation of  $f$  will cause the wedge-bar  $h$  to be moved toward or from  $f$ , according to the direction in which the handle  $f$  is rotated.

In the piece  $c$  is a T-formed groove, from which, into the piece  $b$ , hangs the connection  $i$ , the upper part of which has a head, as seen, and in the lower part of which is a mortise, made with an incline to match the incline on the wedge-bar  $h$ .

It will be obvious that when the wedge-bar is drawn toward the handle  $f$  the said two inclines will come into contact and will clamp the pieces  $c$  and  $b$  together by drawing the head of piece  $i$  down upon the shoulder in  $c$ . It will also be obvious that the rotation of  $f$ , which draws  $h$  forward, will cause the clamp-block  $d$  to approach the connection  $i$ , and that by such approach the pieces  $b$  and  $a$  are firmly bound together. Reverse rotation of  $f$  causes separation of the aforesaid two inclines and releases the grip of the block  $d$  on the lathe-bed  $a$ . The pin  $j$  is fixed in the piece  $b$  at the rear of  $h$ , to prevent disengagement of the screw on  $h$  from its nut by accidental turning of  $f$ . The pin  $k$  is made fast in piece  $b$ , and prevents accidental removal of the clamp-block  $d$ , the opening in which for the pin being slotted to permit all necessary movement of  $d$ . The piece  $b$  might carry upon it the tail-stock in place of the piece  $c$ , and thus the tail-stock could be set by one adjustment both longitudinally and laterally with respect to the head-spindle.

I claim—

Clamping the piece  $c$  to the piece  $b$  and this to the way or frame  $a$  by one adjustment, the construction and operation being substantially as described.

In witness whereof I have hereunto set my hand this 7th day of March, A. D. 1865.

J. M. STONE.

Witnesses:

J. B. CROSBY,  
FRANCIS GOULD,