J. W. Haskell.

Boring-Tool Holder.

No. 79,974. Patented Jul. 14, 1868.

Fig: 1.

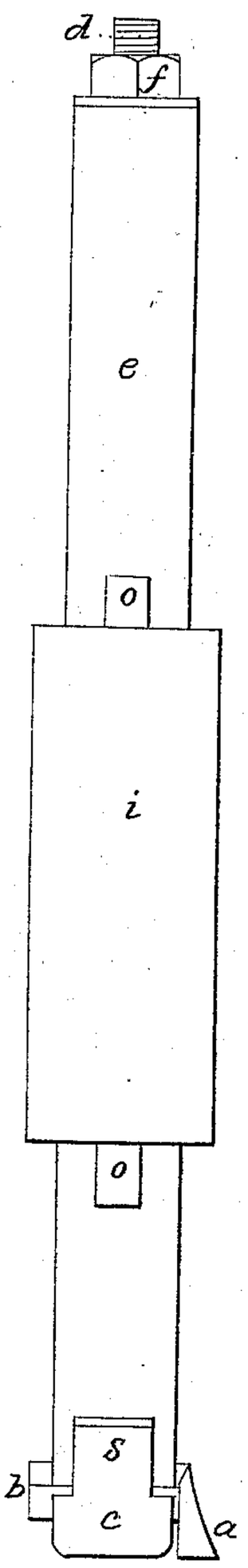
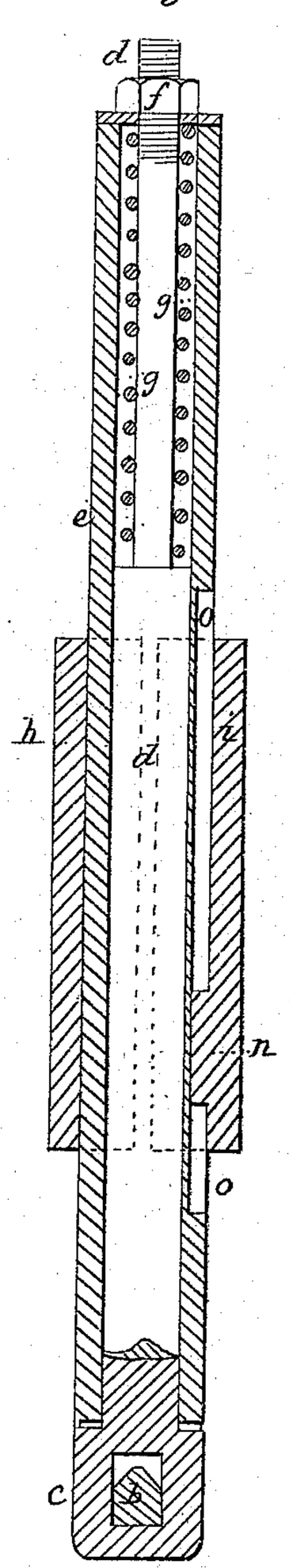


Fig: 2.



Witnesses:

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JACOB W. HASKELL, OF BOSTON, MASSACHUSETTS.

Letters Patent No. 79,974, *dated July* 14, 1868.

IMPROVEMENT IN TOOL-HOLDER.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, JACOB W. HASKELL, of Boston, in the county of Suffolk, and State of Massachusetts, have invented a new and improved Holder for such Tools as are employed in Boring; and I do hereby declare that the following is a full and exact description of my invention, reference being had to the accompanying drawings.

This invention relates to a peculiarly-constructed and arranged device, which is intended to hold short bits or cutters of proper form, and at the location required in boring in lathes.

Figure 1 of the drawings shows my improved holder in plan, and

Figure 2 shows the same in longitudinal section.

This holder is designed to be used in the rectangular holes found in the posts which are attached to the slides of lathes. The cutting-tool is marked *a*, and is of the form shown in the drawing, or in any other form adapted to the purpose. This tool has a shank, *b*, by which it is clamped by being encompassed by the slotted head *c* of the clamp-bolt *d*, which works in the bore of the tube *e*, and by the nut *f* on the bolt *d*, draws and clamps the tool-shank against the end of the tube, and holds the tool firmly with respect to the tube. The bolt *d* is made small enough at the nut-end to admit of the application of a coiled spring, *g*, as shown in fig. 2, which is compressed in the act of clamping the tool to the tube *e*, and expands when the nut *f* is turned in the reverse direction, and by its expansion separates the head *c* of the bolt *d* from the tube *e*.

To secure the device described, which may be termed the boring-arbor, boxes *h i* are made to fit upon the tube *e*, these boxes being of rectangular outline, and of such size as will fill the rectangular hole in the post on the lathe-slide, so that, when the set-screw in said post is brought down upon the upper box, the boring-arbor is firmly clamped in place. To prevent the tube *e* from turning in the boxes *h i*, when stress is brought upon the tool *a*, a spline, *o*, is cut in the tube, and a feather, *n*, is fixed in one of the boxes, as shown, so as to fit the spline *o*.

The boring-arbor can be set with the cutting-tool projecting as far from the post on the lathe-slide as may be needed to enable the cutter *a* to reach the distance required in boring, and the traverse of the tool can be effected by allowing the lathe-slide to move, or, if desirable, under some circumstances, the screw holding the boxes may be slackened slightly, and, by pressure applied at the rear, either against the bolt *d* or tube *e*, the tube *e* may be advanced through the boxes *h i*, thus carrying the cutter *a* to its work. The head *c* is mortised into the end of tube *e*, as shown at *s*, in fig. 1, to prevent turning of the head *c* with relation to the tube *e*.

I claim the combination of the tube *e*, bearing the mortise-headed bolt *d*, with half boxes *h i*, when the tube and boxes are connected with a feather and spline, and are otherwise arranged, substantially as and for the purpose set forth.

JACOB W. HASKELL.

Witnesses:

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