

No. 709,953.

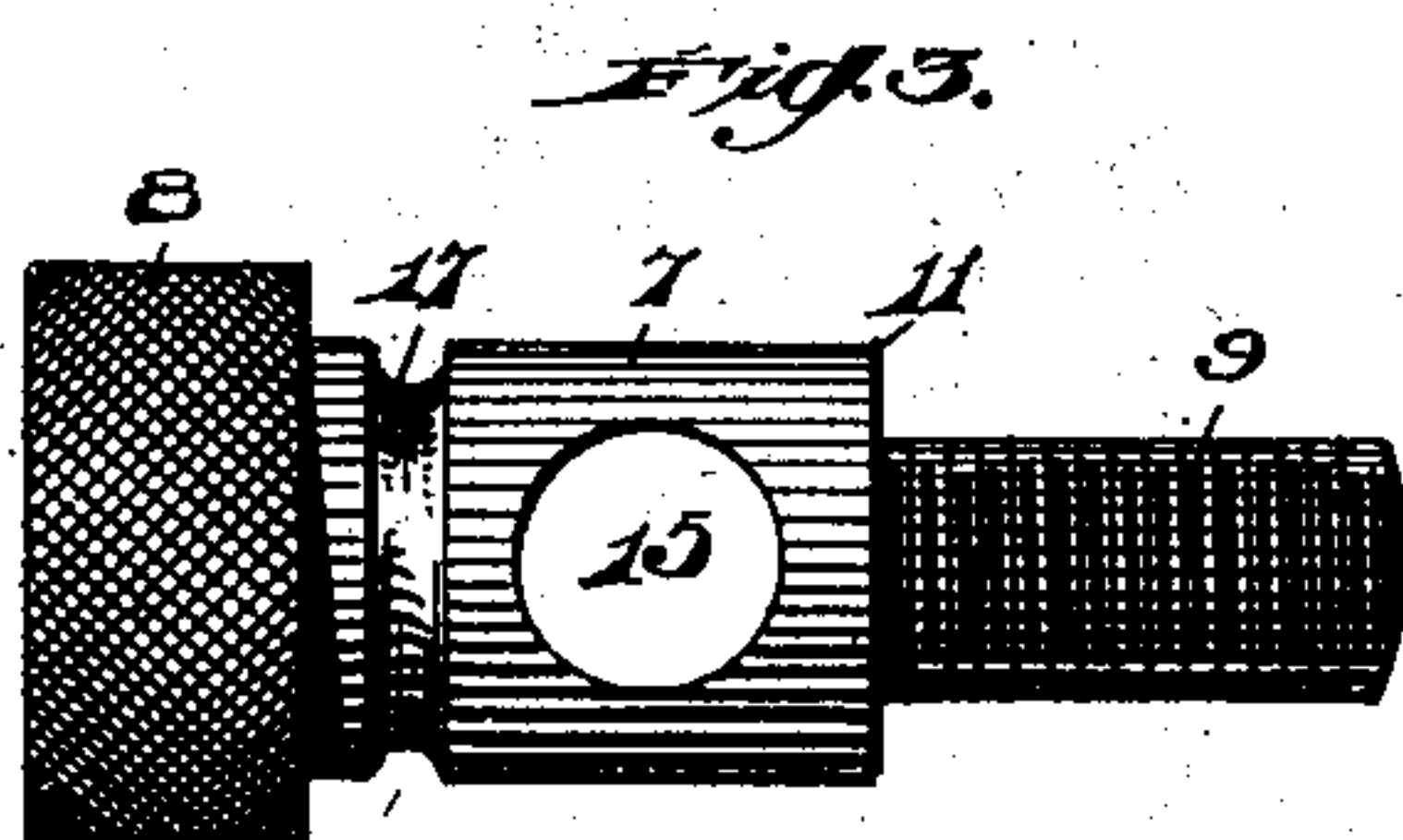
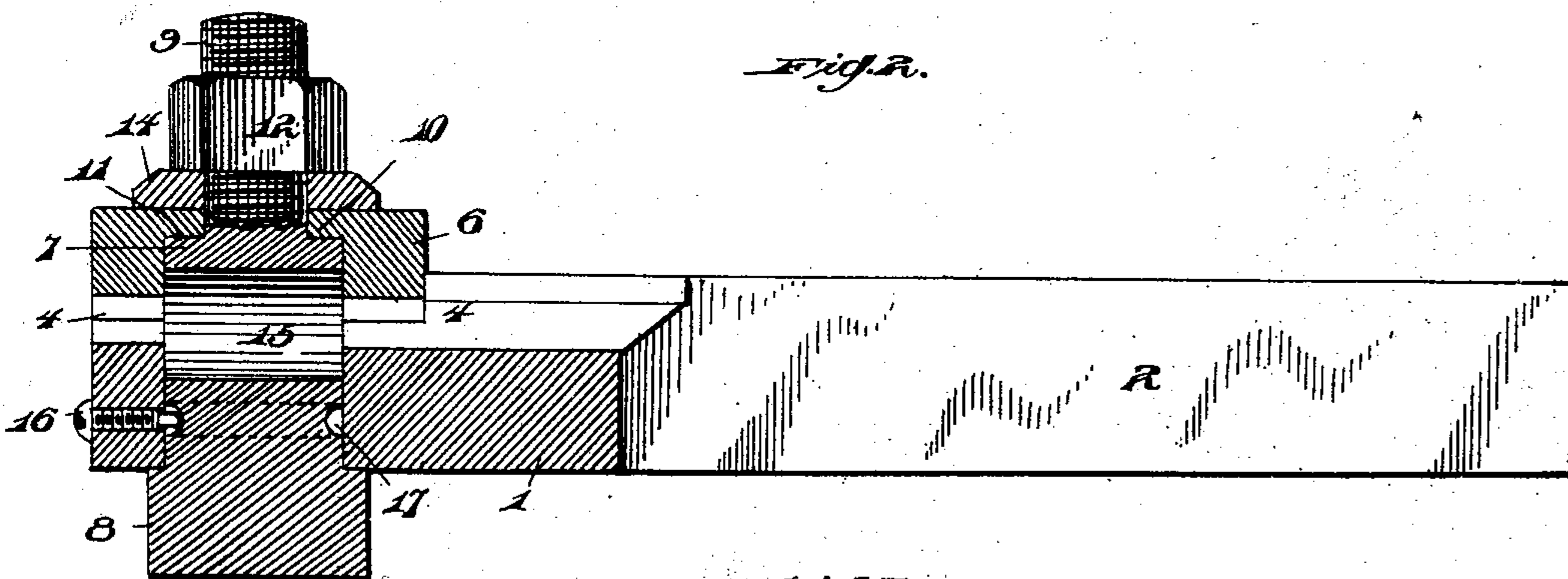
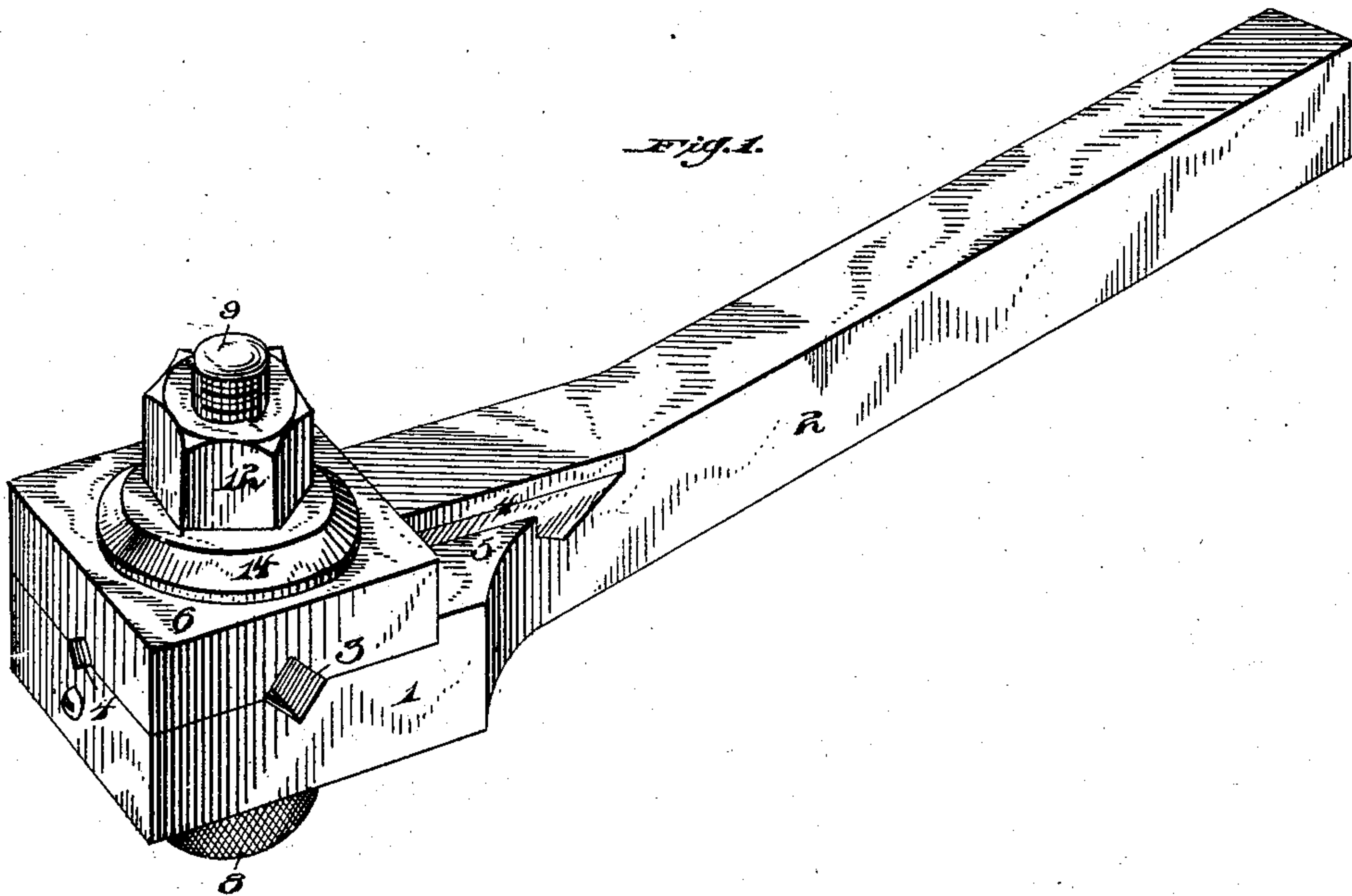
Patented Sept. 30, 1902.

J. F. BACHMANN.

TOOL HOLDER.

(Application filed Feb. 15, 1902.)

(No Model.)



Witnesses:

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# UNITED STATES PATENT OFFICE.

JOHN F. BACHMANN, OF GREENSBURG, PENNSYLVANIA.

## TOOL-HOLDER.

SPECIFICATION forming part of Letters Patent No. 709,953, dated September 30, 1902.

Application filed February 15, 1902. Serial No. 94,149. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN F. BACHMANN, a citizen of the United States, residing at Greensburg, in the county of Westmoreland and State of Pennsylvania, have invented a new and useful Improvement in Tool-Holders, of which the following is a specification.

This invention relates to certain new and useful improvements in tool-holders, such as are employed in lathes, chucks, and the like, and has for its main object to construct a holder of this type in which the tool may be held projecting from different sides of the holder. To accomplish this, I construct a holder the holding-shank of which projects at an angle to the holder proper, the latter being constructed with a projection the upper face of which is grooved, registering with the tool-receiving groove in the upper face of the holder. The holder has a bolt journaled therein. This bolt while being capable of rotation in the holder may be locked in a desired position by the nut. The bolt is provided with an opening extending transversely there-through and of a size sufficient to receive the shank of the tool being held. The holder has a movable nut which is bound in position by the nut on the bolt and the portion of the holder that is integral with the shank, and the movable nut of the holder is provided with registering grooves adapted to receive various-sized tools. This construction will be hereinafter more specifically described and then particularly pointed out in the claim, and in describing the invention in detail reference will be had to the accompanying drawings, forming a part of this specification, and wherein like numerals of reference will be employed for designating like parts throughout the several views, in which—

Figure 1 is a detail perspective view of my improved tool-holder. Fig. 2 is a longitudinal sectional view thereof. Fig. 3 is a detail side elevation of the clamp-bolt removed from the holder.

In the accompanying drawings, 1 indicates the head of the tool-holder, which is formed integral with the shank 2, the latter projecting from the head at a slight angle and being adapted to be suitably secured in the chuck. This head is recessed on its upper face, and this recessed portion is provided with grooves

3 4, extending transversely and longitudinally of the head. The head curves off gradually on the one side to the shank, and in this extension 5 the groove 4 extends, so as to form a bearing for the shank of the tool being held.

Fitted on the upper face of the head 1 is a clamp-nut 6, the underneath face of which is provided with grooves extending across the same in both directions and registering with the grooves 3 4, these grooves in the clamp-nut and in the head being V shape in cross-section and when the clamp-nut is flush against the head are substantially square. The head 1 is apertured to receive the clamp-bolt 7, having a head 8 and a reduced threaded end 9. The rounded shank of this bolt fits in the head and in the clamp-nut, the aperture in the latter being of differential diameters, so as to form an integral washer 10, which fits on the shoulder 11 of the clamp-bolt. The clamp-nut is tightened upon the head 1, so as to bind the tool in position between the two by means of a nut 12 on the threaded end of the bolt, a washer 14 being preferably placed on top of the clamp-nut 6. The rounded portion of the clamp-bolt is provided with an aperture 15, which is adapted to be brought into alinement with the grooves in the head and clamp-nut, and the bolt is prevented from dropping when the nut 12 is loosened by a small screw 16, carried by the head and operating in a groove 17 in the head of the tool-holder. The bolt, it will be observed, may readily be turned so as to register with either the grooves 3 or 4 by loosening the nut 12.

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

A tool-holder comprising a head carrying an integral shank with grooves formed in the upper face of the head, a clamp-nut carried by the head and having grooves upon its under side registering with said grooves of the head, an extension formed integral with the shank and head and having a groove formed on its upper side registering with one of the grooves on the said head for receiving the shank of the tool, a clamp-nut carried by the head and having grooves on its under side and registering with the grooves of the head, a bolt for clamping the clamp-nut to the head

comprising a rounded apertured shank engaging the head and clamp-nut and having an enlarged milled head on its lower end forming a shoulder for engagement with the  
5 under side of the first-named head, a reduced threaded upper end on said bolt forming a shoulder, the clamp-nut being recessed to form a washer on its under side adapted for engagement with said last-named shoulder of  
10 the bolt, a nut upon the said threaded end of the bolt, the shank of the bolt being periph-

erally grooved, and a screw operating through the head and engaging in said groove of the bolt-shank, substantially as described.

In testimony whereof I have hereunto 15 signed my name in the presence of two subscribing witnesses.

JOHN F. BACHMANN.

In presence of—

LOUIS MOESER,  
M. HUNTER.