

W. H. MUEHLER.
TOOL HOLDER.
APPLICATION FILED JAN. 15, 1910.

963,921.

Patented July 12, 1910.

2 SHEETS—SHEET 1.

Fig. 1.

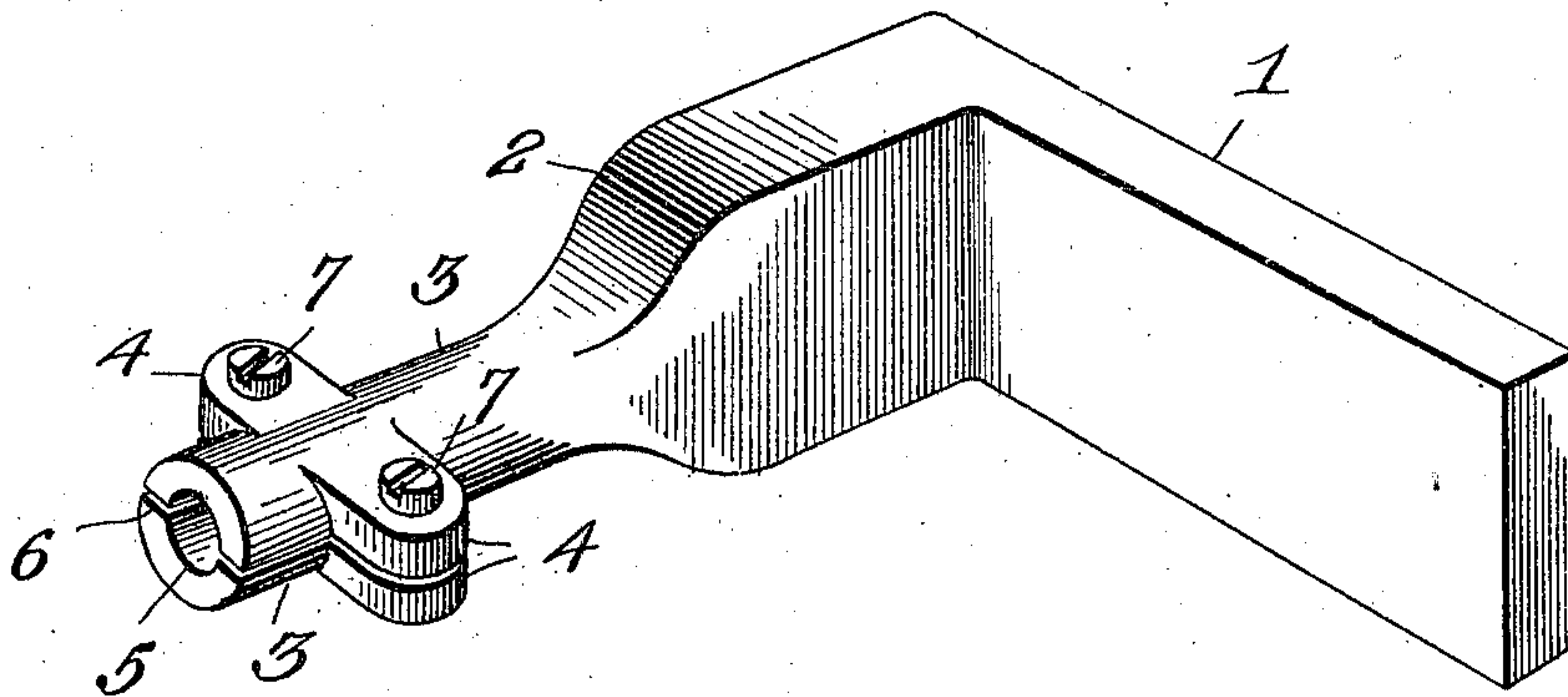


Fig. 2.

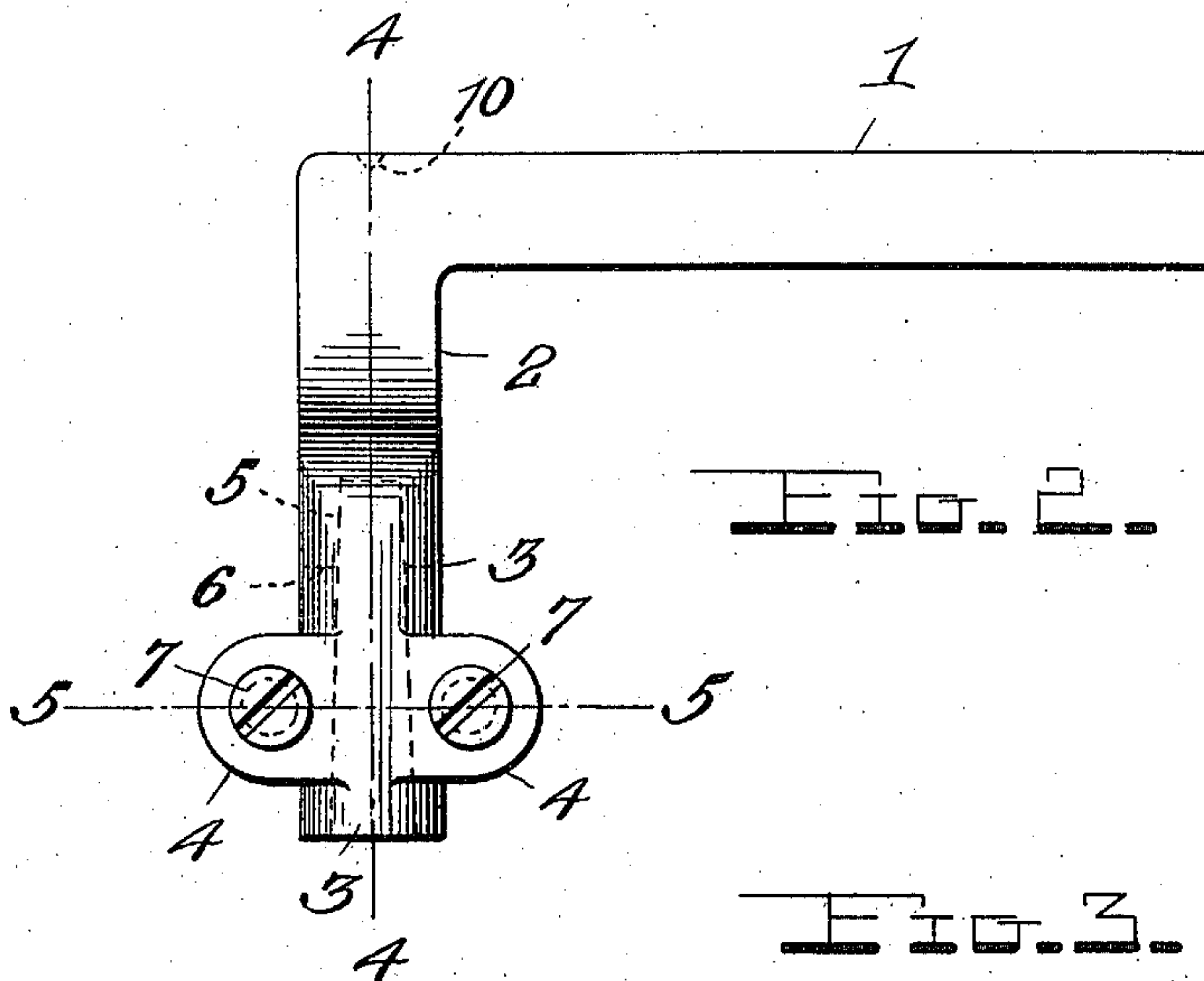
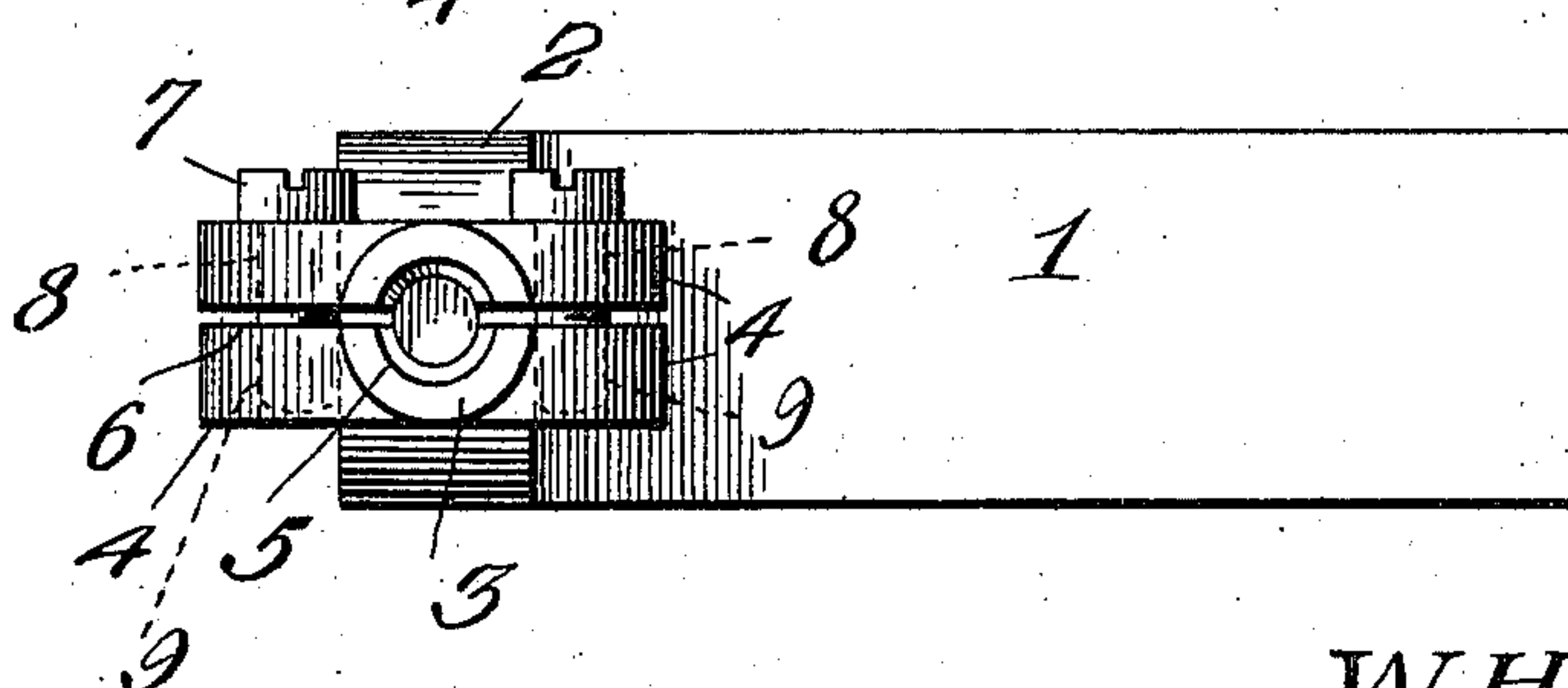


Fig. 3.



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Witnesses

Chas. R. Griebauer.
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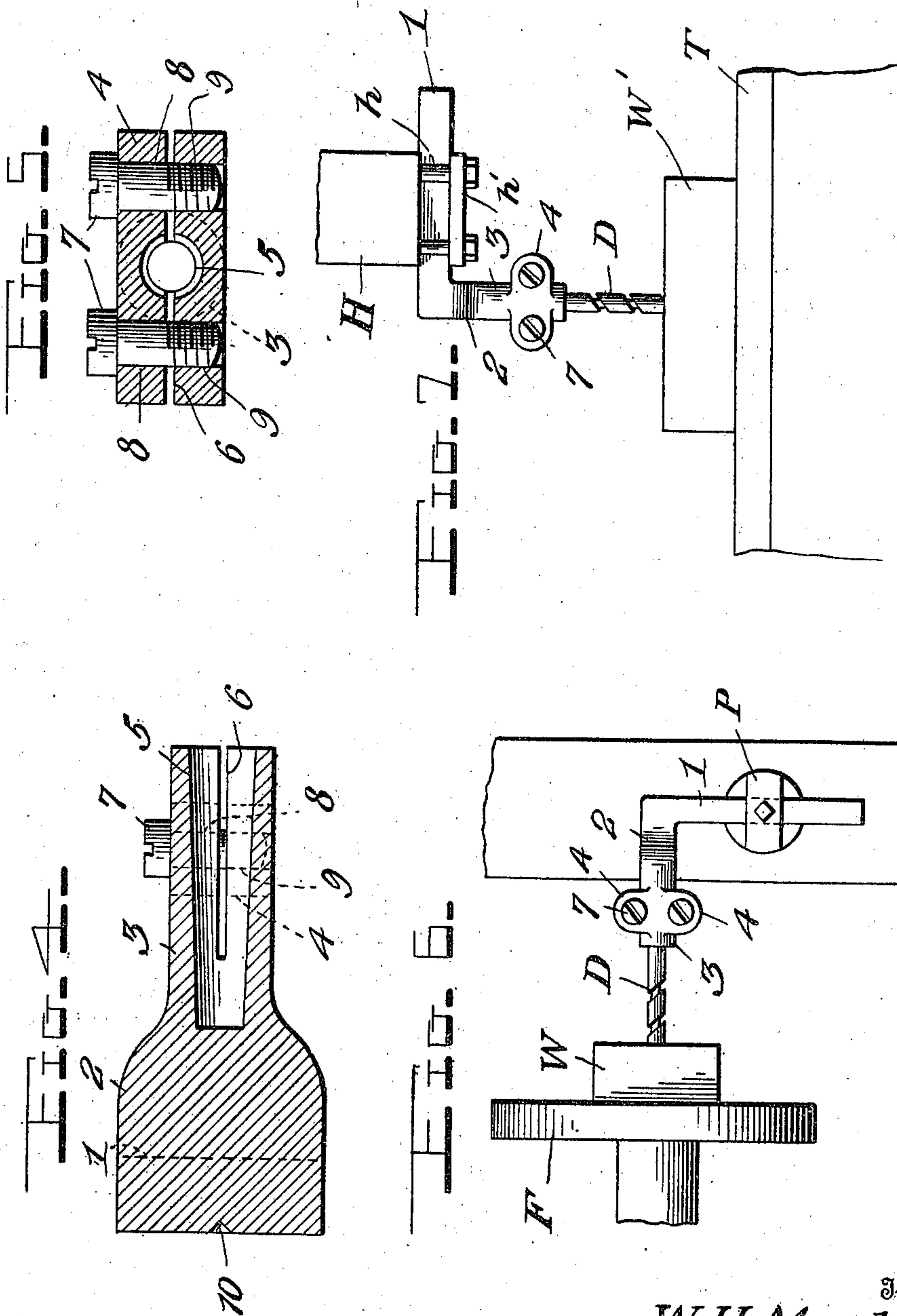
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2 SHEETS—SHEET 2.



Witnesses

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UNITED STATES PATENT OFFICE

WILLIAM HENRY MUEHLER, OF DENVER, COLORADO.

TOOL-HOLDER.

963,921.

Specification of Letters Patent.

Patented July 12, 1910.

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To all whom it may concern:

Be it known that I, WILLIAM H. MUEHLER, a citizen of the United States, residing at Denver, in the county of Denver and State of Colorado, have invented certain new and useful Improvements in Tool-Holders, of which the following is a specification, reference being had to the accompanying drawings.

My invention relates to improvements in tool holders for use on lathes, boring mills and other machines in which the cutting or boring tool is held stationary and the work moved.

The object of the invention is to provide a simple and inexpensive holder of this character adapted to securely grip a drill or other tool and so constructed that it may be readily applied to and adjusted in the tool post of a lathe or the tool feeding member of a boring mill or other machine.

With the above and other objects in view, the invention consists of the novel features of construction and the combination and arrangement of parts hereinafter fully described and claimed, and illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of my improved tool holder; Fig. 2 is an edge view; Fig. 3 is an end view; Figs. 4 and 5 are sectional views taken, respectively, on the planes indicated by the lines 4—4 and 5—5 in Fig. 2; Fig. 6 is a diagrammatic view illustrating the use of the invention in a lathe; and Fig. 7 is a diagrammatic view illustrating the use of the invention in a boring mill.

My improved tool holder is formed from a single piece of suitable metal and preferably from a rectangular bar which is bent adjacent its center to provide right angularly projecting members or arms 1, 2. The arm 1 is of rectangular shape so that it may be secured and adjusted in the tool post of a lathe or the tool carrying and feeding member of a boring mill or other machine. The arm 2 has its outer portion 3 reduced in width and shaped into substantially cylindrical form. This cylindrical end 3 is formed at opposite points with laterally projecting lugs 4 and it is also formed with a longitudinal bore 5 and a longitudinal slot 6, which latter extends through the lugs 4, as

shown. The bore 5 is adapted to receive a drill D or other tool and it is preferably tapered longitudinally, as shown, its large end being at the extremity of the cylindrical portion 3. The slit 6 extends from the outer extremity of said portion 3 inwardly to a point adjacent the bottom or inner end of the bore 5 and divides said tubular cylindrical portion 3 into similar half-sections adapted to be sprung together to securely clamp the drill or tool in said bore. The slit 6 divides the lugs 4 into similar half-sections which are drawn together by cap screws 7 each of which passes through an opening 8 in one half of one of said lugs and into a screw threaded opening 9 in the other half of such lug, as shown more clearly in Fig. 5.

10 denotes a center recess adapted to receive the tail center of a lathe. This center recess or seat is arranged at the inner extremity of the arm 2 and in alinement with the longitudinal axis of said arms.

In Fig. 6 of the drawings I have illustrated the application of the invention in holding a drill D in a lathe, the latter being conventionally shown and including the ordinary shiftable tool post P and the rotary face plate F carrying the work W.

In Fig. 7 of the drawings I have illustrated the use of the invention in a boring mill, the latter being conventionally illustrated and including a rotary table T for the work W' and a shiftable tool feeding head H to which latter the tool holder is clamped. As illustrated, the arm 5 of the tool holder is arranged between pairs of stud bolts h depending from the head H and is clamped by a plate h' arranged on said stud bolts.

While I have just described two uses of my improved tool holder, it will be understood that it may be used in other ways and on other machines than those mentioned.

Having thus described the invention what is claimed is:

The herein described tool holder comprising a right angular member having one of its arms of rectangular shape, whereby said arm may be clamped to a machine, and its other arm formed with a reduced longitudinally extending cylindrical tool socket formed with a tapered longitudinal bore and

provided with a transverse slit extending inwardly from its outer end, said slit dividing the socket into two sections, the latter being formed at opposite points with later-
5 ally projecting lugs containing screw openings, certain of said openings being threaded, and headed clamping screws arranged in the openings in said lugs to draw the latter

together and clamp the two sections of the tool socket on a tool inserted in its bore. 10

In testimony whereof I hereunto affix my signature in the presence of two witnesses.

WILLIAM HENRY MUEHLER.

Witnesses:

HENRY PHILIP DORSCH,
ARTHUR L. HIGBEE.