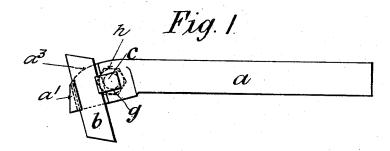
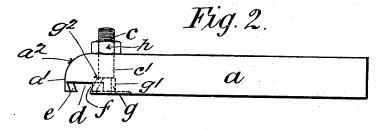
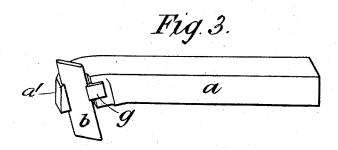
E. FERRY, TOOL HOLDER.

(Application filed May 29, 1899.)

(No Model.)







Witnesses

Maddan

Inventor
Ernest Ferry
by his Attorney RHUNDAM

UNITED STATES PATENT OFFICE.

ERNEST FERRY, OF NEWCASTLE-UPON-TYNE, ENGLAND.

TOOL-HOLDER.

SPECIFICATION forming part of Letters Patent No. 646,967, dated April 10, 1900.

Application filed May 29, 1899. Serial No. 718,782. (No model.)

To all whom it may concern:

Be it known that I, ERNEST FERRY, a subject of the Queen of Great Britain, and a resident of Newcastle-upon-Tyne, England, have invented certain new and useful Improvements in Tool-Holders, of which the following is a specification, reference being made to the accompanying sheet of drawings.

Figure 1 is an elevation of the improved to holder with tool therein. Fig. 2 is a plan view thereof without the tool. Fig. 3 is a perspective view of the same with the tool therein.

A prismatic bar a has its end a' made so that the lower face of the end piece a' is at 15 an obtuse angle thereto. The upper face of the end piece is rounded downwardly. In one side face of this end piece a' is a recess d, which extends across the side face of the end piece a' in a direction at right angles to the 20 general direction of said end piece—that is to say, with its axis perpendicular to the lower face. The recess d is open at its ends at the upper and lower faces of the end piece, and it is bounded toward the outer extremity of 25 end pieces by an undercut edge l and toward the bar a by a vertical edge f. The side face of the end piece opposite to that in which is the recess d is rounded, as shown in Fig. 2. A bolt c passes through the end piece a' from 30 one side to the other, a passage c^{\prime} being made in the end piece to receive it. The head g of the bolt c is prismatic and fits in a prismatic

recess g' in the end piece a', one face g^2 of the bolt-head g being undercut and project-35 ing through a cut-away portion of the vertical face f. The other end of bolt c is screwthreaded to receive a nut h, which bears against the side face of the end piece a' on the side other than that containing the recess d in order to adjust the bolt c in such a man-40 ner as to firmly hold a tool, such as b, in the recess d between the undercut faces e g^2 .

The end a' of the tool-holder may be rounded laterally, as at a^3 , Fig. 2, and downwardly, as at a^3 , Fig. 1.

Having now described my invention, I

In a tool-holder the combination of a stem a having an end piece a' having its under face at an obtuse angle to the stem a, having its 50 upper face rounded downwardly and having one side face parallel to the side face of the stem a and the other side face rounded, the said end piece also having in its flat side face a lateral recess d whose axis is perpendicular 55 to the lower face of the end piece a' open at the ends and bounded toward the outer end of the end piece by an undercut edge e and toward the stem by a vertical edge f and having a passage-way c' partly prismatic at g', 60 with a bolt c having a prismatic head g for engagement with said prismatic part g' of the passage-way and an undercut face g^2 on said head and means for moving said bolt in a direction perpendicular to the plane of the re- 65 cess for the purpose set forth.

In witness whereof I have signed this specification in the presence of two witnesses.

ERNEST FERRY.

Witnesses:

T. J. WATSON, C. S. GARDNER.