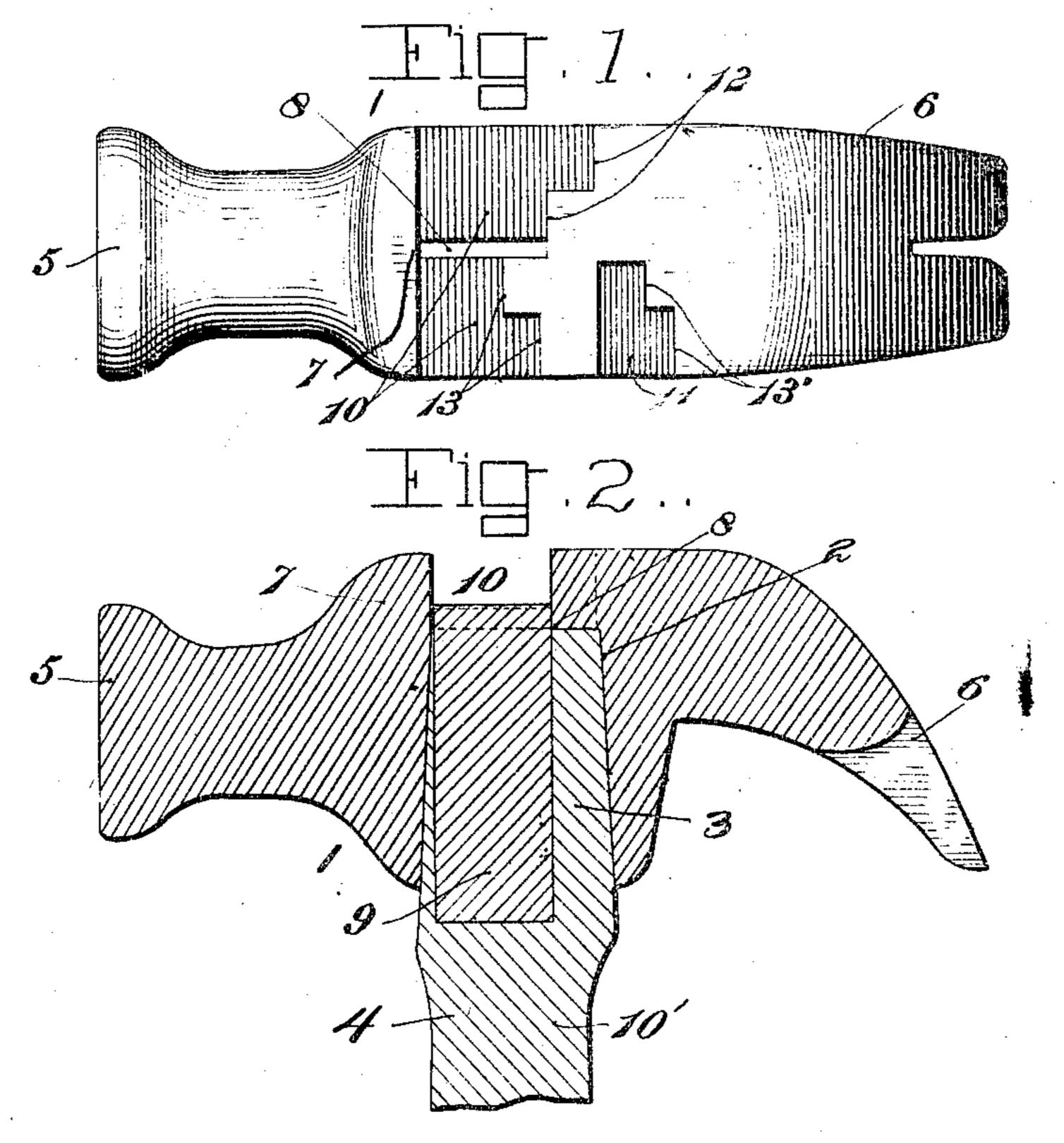
W. J. MILLER & T. N. CASS.

WRENCH.

APPLICATION FILED FEB. 10, 1910.

994,945.

Patented June 13, 1911.



William J. Miller on Thomas N. Cass. De Victor J. Evans

Witnesses

UNITED STATES PATENT OFFICE.

WILLIAM J. MILLER AND THOMAS N. CASS, OF SEMINOLE, TEXAS.

 ${f WRENCH}$

994,945.

Specification of Letters Patent. Patented June 13, 1911.

Application filed February 10, 1910. Serial No. 543,054.

To all whom it may concern:

Be it known that we, WILLIAM J. MILLER States, residing at Seminole, in the county 5 of Gaines and State of Texas, have invented new and useful Improvements in Wrenches, of which the following is a specification.

This invention relates to wrenches, and has for an object to provide an improved 10 form of handle and head, the latter having an eye therein to receive the handle, and the walls of the eye being constructed to prevent movement of the handle in the eye past a predetermined position and to provide a 15 fastening engaging the handle and securing the same in the eye.

specification and in which like numerals of reference indicate similar parts in the several 20 views:—Figure 1 is a plan view of the wrench. Fig. 2 is a vertical section therethrough.

The hammer head 1 illustrated herein constitutes the head of the wrench, and as 25 shown, the head is formed with an eye 2 which receives the helve 3 of the handle 4. At the top, the head is closed, as shown at 10, and in such portion is formed an elongated slot 8 in which the retaining wedge 9 is 30 driven and operatively associated with the helve of the handle to hold it confined in the eye of the head. The head of the wrench has its outer surface extended beyond the closed portion 10 to form therewith a nut socket 7, one wall of the said socket being formed with step-portions 12 and 13 respectively, so that the space between the

walls of the socket varies at different points so as to accommodate nuts of various sizes. and Thomas N. Cass, citizens of the United | The recess 7 just described is intended for 40 relatively large nuts, and for small nuts the head is formed adjacent to one edge and in its outer surface with a socket 11, one wall of which being stepped, as shown at 13'.

From the construction described herein, 45 it will be seen that the wrench may be manufactured at a relatively low cost and in use, it will be found most efficient. The head 1 is formed at one end to provide the usual driving face 5 and at the opposite end the 50 head is formed to provide a claw 6.

We claim:—

As a new article of manufacture, a wrench In the drawing, forming a portion of this | comprising a head having an eye formed therein, the said head having a portion clos- 55 ing the outer end of the eye and the said head being extended beyond the said closed portion so as to form therewith a nut socket, the said closed portion of the head being formed to provide a slot, a handle having a 60 helve portion fitted in the eye of the said head, and a fastening device extending through the slot and into the helve of the handle and operating to force the helve into frictional engagement with the walls of the 65 eye.

> In testimony whereof we affix our signatures in presence of two witnesses.

> > WILLIAM J. MILLER. THOMAS N. CASS.

Witnesses:

Bennett S. Jones, R. M. SMITH.