

T. H. KNOTT.

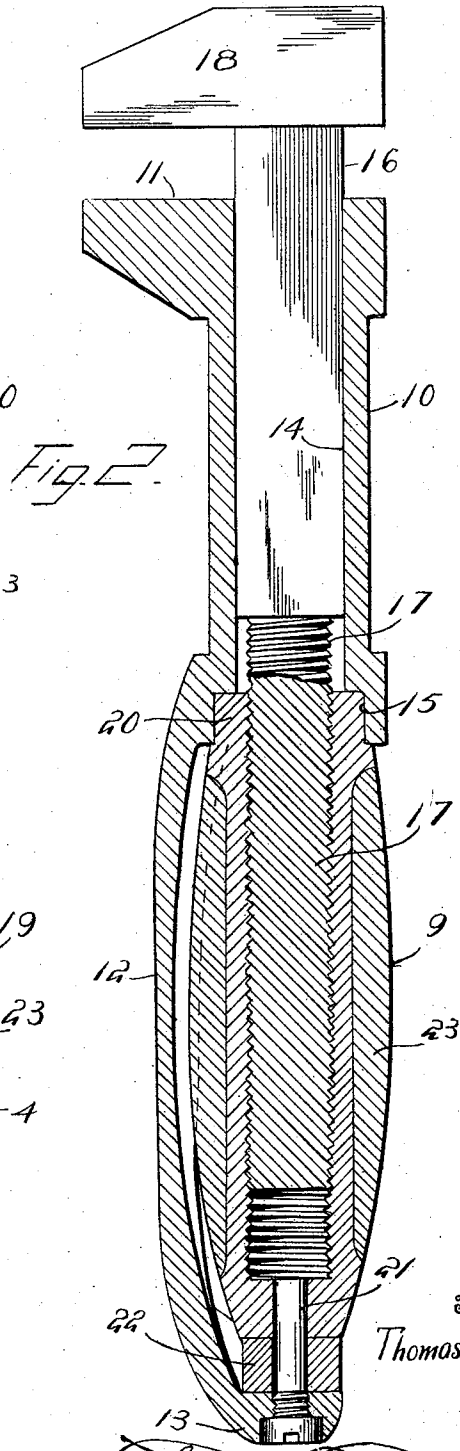
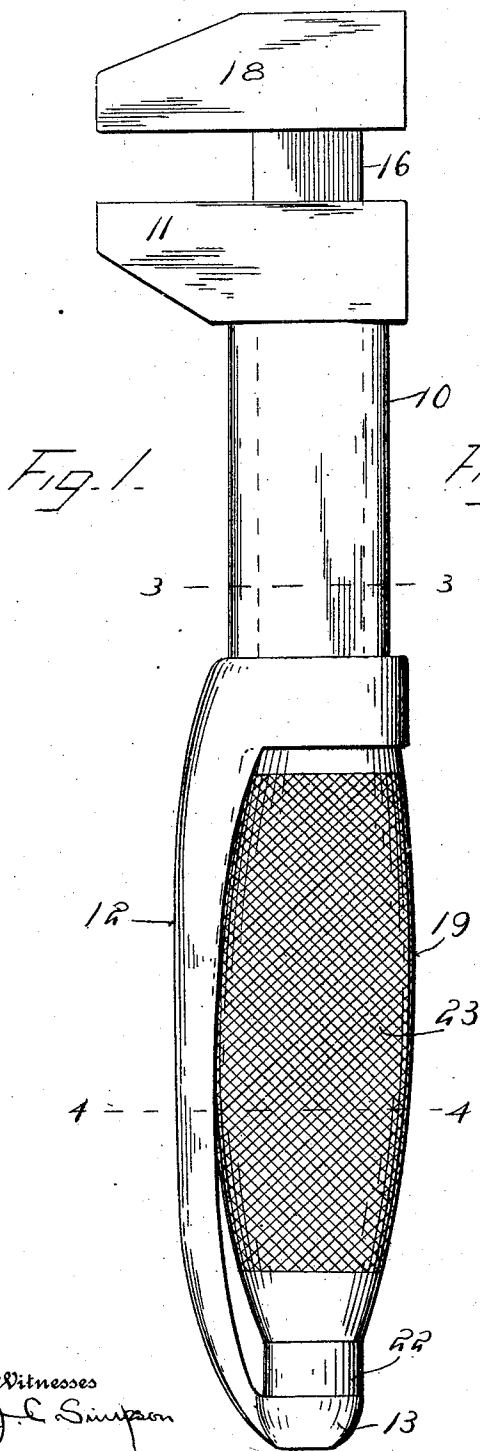
WRENCH.

APPLICATION FILED OCT. 30, 1908.

933,649.

Patented Sept. 7, 1909.

2 SHEETS—SHEET 1.



Witnesses
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2 SHEETS—SHEET 2.

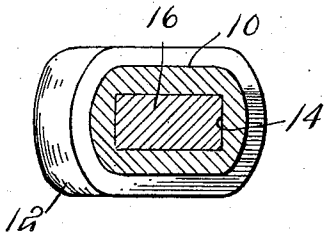


Fig. 3.

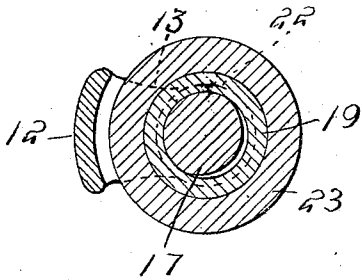


Fig. 4.

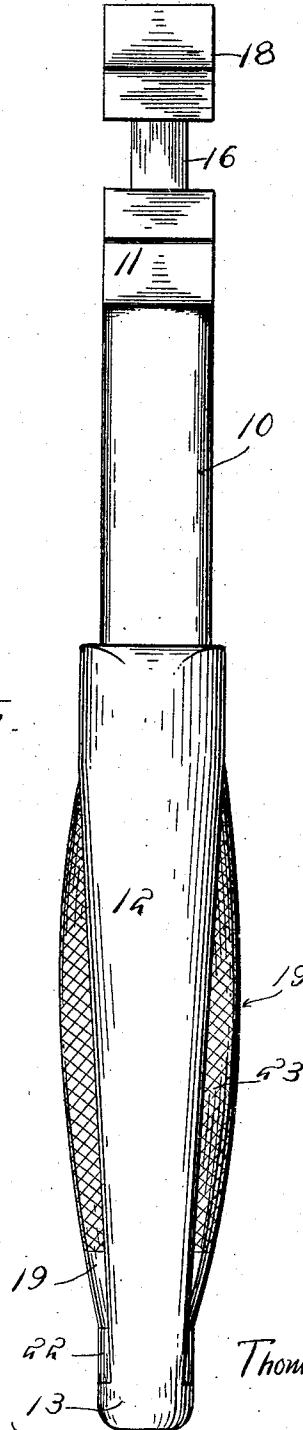


Fig. 5.

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WRENCH.

933,649.

Specification of Letters Patent.

Patented Sept. 7, 1909.

Application filed October 30, 1908. Serial No. 460,324.

To all whom it may concern:

Be it known that I, THOMAS H. KNOTT, a citizen of the United States, residing at Lebanon, in the county of Potter, State of South Dakota, have invented certain new and useful Improvements in Wrenches; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to wrenches, and has for one of its objects to improve the construction and increase the utility and efficiency of devices of this character.

Another object of the invention is to provide a wrench compact in structure, which may be inexpensively manufactured, is strong and durable, and wherein the operative parts are covered and protected.

With these and other objects in view, the invention consists in certain novel features of construction as hereafter shown and described and then specifically pointed out in the claim, and in the drawings illustrative of the preferred embodiment of the invention, Figure 1 is a side elevation of the improved wrench. Fig. 2 is a longitudinal sectional elevation. Fig. 3 is a transverse section on the line 3—3 of Fig. 1. Fig. 4 is a section on the line 4—4 of Fig. 1. Fig. 5 is a front elevation of the improved implement.

The improved device comprises a longitudinal shell 10 having a jaw 11 at one end with a guard element 12 extending from the other end, the guard element being provided with a laterally extended bearing 13 at its free end. The shell 10 is formed with an internal longitudinal guideway 14, preferably transversely oblong and provided with an annular seat 15 in the end opposite to the jaw 11.

The stock of the wrench is formed with an oblong portion 16 adapted to slidably engage in the guideway 14 and with a threaded portion 17, the stock having a jaw 18 at the end opposite to the threaded portion. By this means the two jaws 11—18 are arranged in opposing relations.

Engaging over the threaded portion 17

of the stock is an internally threaded hand grip member 19, the member 19 having a bearing 20 engaging the annular seat 15 at one end. The member 19 is thus arranged to extend partly into the guard element 12, the latter being curved to conform substantially to the curvature of the member 19 and to project partly thereover, as shown in Fig. 4.

Fitting through the bearing 13 is a clamp stud 21 threaded where it passes through the member 13 and engaging by its inner end in an aperture in the member 19. The member 19 is of less length than the distance between the seat end of the member 10 and the bearing 13 to enable it to be inserted in position, and the space otherwise left between the members 19—13 is filled by a spacer washer or block 22. Thus when the parts of the implement are to be assembled the member 19 is first inserted with its bearing 20 in the seat 15, and the spacer member 22 arranged in position and the clamp stud 21 inserted. The stock 16 is then inserted into the guideway 14 of the member 10 with its threaded portion 17 in position to enter the threaded member 19, and when the latter is rotated it is obvious that the stock will be drawn into the shell 10 until the jaws 11—18 are in contact. Then by simply rotating the member 19 the space between the jaws may be adjusted to any required extent within the range of the threaded portion of the stock. It will be noted that the operative parts of the implement are entirely concealed and protected from dust and other deleterious matter.

The handle member will preferably be formed with a sheathing of wood or like material represented at 23. The implement will be made entirely of metal except the sheathing 23, and may be manufactured in any required size.

What is claimed, is:—

A wrench comprising a stock having a jaw at one end and with a threaded stud extending from the other end, a shell inclosing said stock and slidable thereon and with a jaw at one end and an integral guard element extending from the other end, the terminal

of the guard element being directed inwardly opposite the terminal of the threaded stud, the shell being provided with an annular seat at the juncture therewith of the
5 guard element, a hand grip member internally threaded and provided with a bearing engaging in the seat of said shell, and means for coupling the hand grip member at its

other end to the inwardly directed terminal of the guard element: 10

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

THOMAS H. KNOTT.

Witnesses:

PETER SCHNEIDER,
GEO. KNOTT.