No. 737,902. PATENTED SEPT. 1, 1903.

C. E. BRATTLOF.

SOCKET WRENCH.

APPLICATION FILED JULY 1, 1902.

NO MODEL.

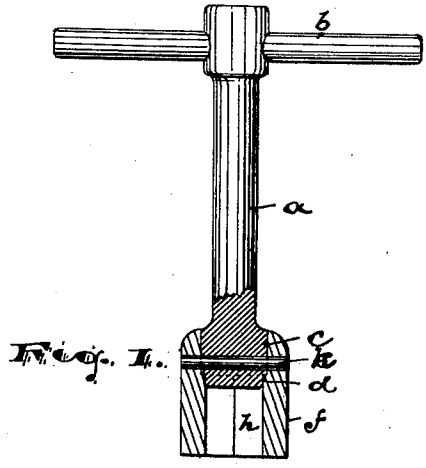


Fig. 1.

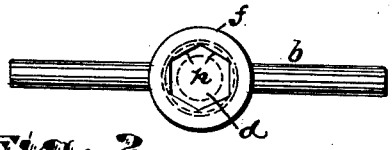


Fig. 2.

Fig. 3.

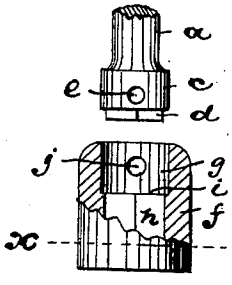


Fig. 4.



Fig. 5.

Fig. 6.

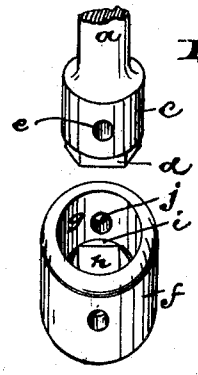


Fig. 7.

WITNESSES:

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No. 737,902. Patented September 1, 1903.

UNITED STATES PATENT OFFICE.

CARL E. BRATTLOF, OF IRVINGTON, NEW JERSEY.

SOCKET-WRENCH.

SPECIFICATION forming part of Letters Patent No. 737,902, dated September 1, 1903.

Application filed July 1, 1902. Serial No. 113,964. (No model.)

To all whom it may concern:

Be it known that I, CARL E. BRATTLOF, a citizen of the United States, residing at Irvington, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Socket-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, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

The objects of this invention are to facilitate and reduce the cost of construction and secure a socket-wrench of neater appearance cost of construction considered.

The invention consists in the improved socket-wrench and in the arrangements and combinations of parts of the same, all substantially as will be hereinafter set forth and finally embraced in the clauses of the claim.

Referring to the accompanying drawings, in which like letters of reference indicate corresponding parts in each of the several figures, Figure 1 is a side elevation of my improved wrench, the socket of which is shown in section. Fig. 2 is an end view of the same. Figs. 3 and 4 are respectively side elevations of a portion of the body and the socket, the latter being partly in section. Fig. 5 is a section taken on line *x* of Fig. 4, and Figs. 6 and 7 are perspective views of the parts shown in Figs. 3 and 4.

In said drawings, *a* indicates the body of the wrench, having a cross-bar *b* at one end to facilitate the turning of the wrench and having at or near its opposite end a round hub *c* and at the extremity an angular formation *d*. Diametrically through the hub is a pin-hole *e* to receive a fastening-pin hereinafter referred to.

The socket *f* is separable from the body and comprises a cylindrical piece, the circular part *g* of the inner wall of which closely fits the periphery of the round hub *c*, while the angular walls *h* nicely coincide with the faces of the angular formation *d* to prevent independent turning. The shoulders *i* limit the insertion of the body part into the socket. The socket is also perforated, the perforations *j* coinciding with the hole *e* to receive the pin *k*, said pin when inserted fastening the parts against longitudinal withdrawal. The pin-holes are brought quickly into coincidence by means of the angular walls and shoulders.

The construction described permits exact and neat work to be performed by means of a lathe and outside hand-dressing, so that the socket can be brought to exact size and shape and perfect finish with easy labor and automatic machine-work as will be evident. The angular walls of the socket not only prevent independent turning, but serve to receive the angular head of the bolt or device to be turned thereby, and the coinciding round walls serve to bring the parts to exact centers when being assembled.

Having thus described the invention, what I claim as new is—

1. The improved socket-wrench comprising a body having an angular extremity and pin-holes, of a separable socket, perforated clear through, one end of the perforation being adapted to receive said body and the other angular end being adapted to receive both the angular extremity of the body and the angular head of the bolt or article to be turned, and means for fastening said parts together, substantially as set forth.

2. The improved socket-wrench herein described, comprising a body portion having a handle at one end and at the opposite end having a round hub and angular extremity and a transverse pin-hole, a separable cylindrical socket having round interior walls to receive the hub and angular walls to receive the angular extremity, and a transverse pin extending through said hub and socket, substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 13th day of June, 1902.

CARL E. BRATTLOF.

Witnesses:
CHARLES H. PELL,
C. B. PITNEY.