(No Model.)

A. P. SEARLES.

SOCKET WRENCH.

No. 284,076. Patented Aug. 28, 1883.

Fig. 1.

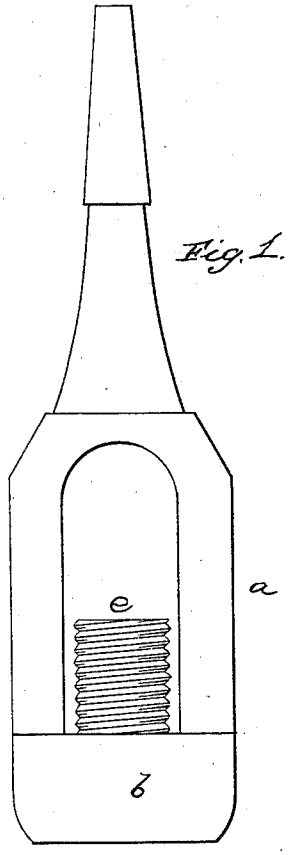


Fig. 2.

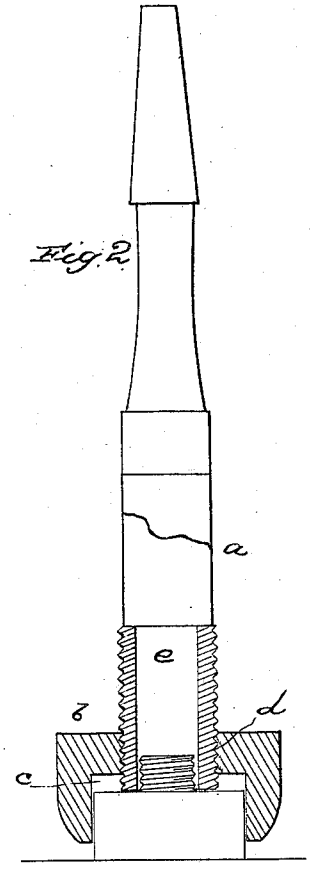
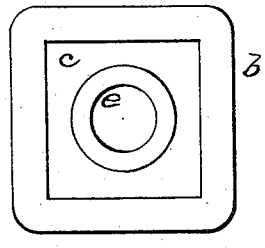


Fig. 3.



WITNESSES

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UNITED STATES PATENT OFFICE.

ALBERT P. SEARLES, OF MOUNT KISCO, NEW YORK.

SOCKET-WRENCH.

SPECIFICATION forming part of Letters Patent No. 284,076, dated August 28, 1883.

Application filed March 29, 1883. (No model.)

To all whom it may concern:

Be it known that I, ALBERT P. SEARLES, a citizen of the United States, residing at Mount Kisco, in the county of Westchester and State of New York, have invented certain new and useful Improvements in Socket-Wrenches; and I do 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 and figures of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a side view of my wrench. Fig. 2 is a vertical sectional view of the same, and Fig. 3 is a bottom view.

This invention has relation to socket-wrenches; and it consists in the construction and novel arrangement of the threaded opening in the base of the socket and the hollow cylinder externally threaded to engage said threaded opening, and forming an adjustable guard, all as hereinafter set forth, and particularly pointed out in the appended claim.

In the accompanying drawings, the letter *a* designates a wrench, having the head *b*, formed with a socket, *c*, adapted to engage a nut. Through the base of the socket is formed a circular opening, *d*, which is internally threaded. Engaging the threaded opening *d* is a hollow cylinder, *e*, externally threaded and open at both ends. This cylinder is made long enough to be easily adjusted, and its aperture is sufficient to receive the end of the bolt on which the nut is to be turned. The cylinder is designed to bear against the nut in the socket, and is adjustable, in order that it may be arranged in position according to the thickness of the nut, to serve as a guard, preventing the nut from being so deeply embedded in the socket that its face is below the rim-wall of said socket. By means of the guard the face of the nut can always be caused to project a little beyond the rim-wall, so that the latter, when the wrench is in operation, will never come in contact with a polished, painted, varnished, or otherwise finished surface to scratch or mar the same.

Having described this invention, what I claim, and desire to secure by Letters Patent, is—

A socket-wrench having a threaded opening in the base of the socket, and an adjustable hollow externally-threaded cylinder-guard engaging said opening, substantially as specified.

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

ALBERT P. SEARLES.

Witnesses:

CHARLES W. SEARLES,

ALVARO J. ADAMS.