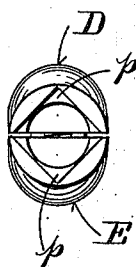
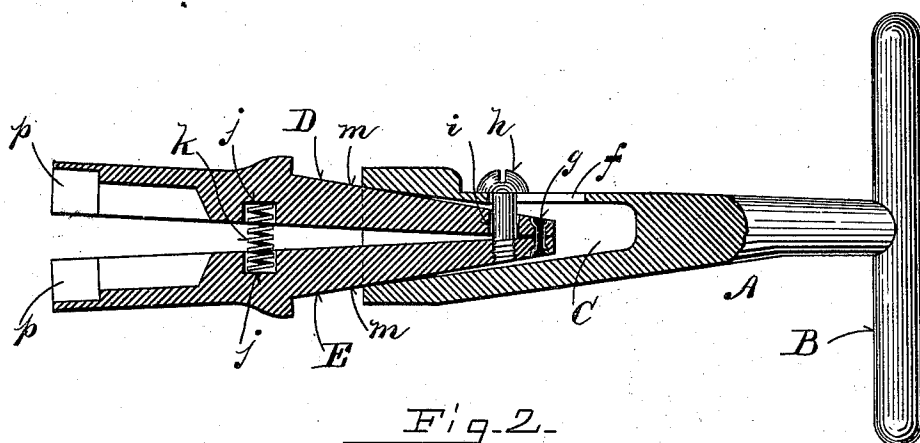
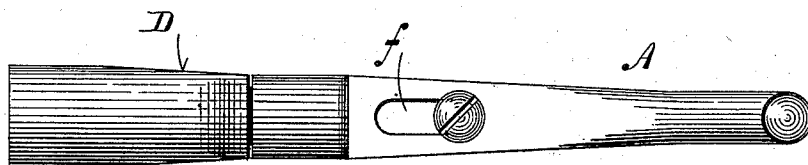


(No Model.)

M. BRASSELL.
SOCKET WRENCH.

No. 533,342.

Patented Jan. 29, 1895.



WITNESSES=
C. M. [unclear]
H. Surfer

INVENTOR =
Michael Brannell
By CA Shawles,
ATTYS.

UNITED STATES PATENT OFFICE.

MICHAEL BRASSELL, OF BOSTON, ASSIGNOR OF ONE-HALF TO PATRICK H. CROWLEY, OF READVILLE, MASSACHUSETTS.

SOCKET-WRENCH.

SPECIFICATION forming part of Letters Patent No. 533,342, dated January 29, 1895.

Application filed January 6, 1894. Serial No. 495,886. (No model.)

To all whom it may concern:

Be it known that I, MICHAEL BRASSELL, of Boston, in the county of Suffolk, State of Massachusetts, have invented certain new and useful Improvements in Socket-Wrenches, of which the following is a description sufficiently full, clear, and exact to enable any person skilled in the art or science to which said invention appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side elevation of my improved socket-wrench; Fig. 2, a vertical longitudinal section of the same; and Fig. 3 an end elevation of the same.

Like letters of reference indicate corresponding parts in the different figures of the drawings.

My invention relates to socket nut-wrenches provided with spring-pushed adjustable, flaring jaws; and it consists in certain novel features hereinafter fully set forth and claimed, the object being to produce a simple, cheap and effective device of this character.

The nature and operation of the improvement will be readily understood by all conversant with such matters from the following explanation:

In the drawings, A represents the body of the wrench which is provided with a T-handle, B, the end of the shank being chambered longitudinally at, C, the walls of said chamber converging inwardly. The upper wall of the chamber is slotted longitudinally at, f. The jaws, D E, have their ends pivoted together at, g, and a screw, h, projecting through the slot, f, is turned into the jaw, E, through a slot, i, in the jaw, D, which is arranged to permit said jaw to play vertically. The screw serves as a guide or thumb-piece to project the jaws and as a clamp to hold said jaws in an assumed position. In suitable sockets, j, on the inner face of the jaw a coiled spring, k, is disposed, said spring acting expansively to spread the jaws. The outer faces of the

jaws are beveled inwardly at, m, where they engage the upper and lower walls of the chamber, C, so that as the jaws are drawn inward into said chamber they will be closed by said walls. The free ends of the jaws are provided with angular sinks, p, arranged longitudinally so that when the jaws are closed said sinks form a square socket, as shown in Fig. 3, to receive the nut.

In the use of my improvement the jaws are forced outward as in Fig. 2, spreading their free ends a sufficient distance to receive the nut, when by driving the handle forward onto the jaws they are compressed, tightly clamping the nut in the socket, p. By rotating the handle the nut can be turned on or off in a manner which will be readily understood without a more explicit description. As soon as pressure is released on the handle the jaws are relieved permitting the spring, k, to act to disengage them from the nut.

I am aware that wrenches have been constructed with jaws held apart by a spring and do not claim such broadly when in and of itself considered.

Having thus explained my invention, what I claim is—

In a socket-wrench the combination with the body provided with the handle, B, and flaringly chambered at, C, longitudinally through its opposite end, a wall of said chamber being slotted at, f, of the jaws, D, E, pivoted together at, g, and having the beveled edges, m, and angular sinks, p; the spring, k, disposed between the free ends of said jaws and acting expansively to spread them; and the screw, h, passing through the slot, f, and turned into one of said jaws; the companion jaw being fitted to slide on said screw, all being arranged to operate substantially as described.

MICHAEL BRASSELL.

Witnesses:

K. DURFEE,
O. M. SHAW.