

C. E. BILLINGS.
Tap-Wrench.

No. 215,039.

Patented May 6, 1879.

Fig. 1.

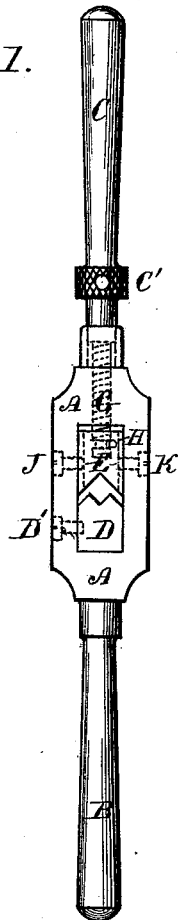
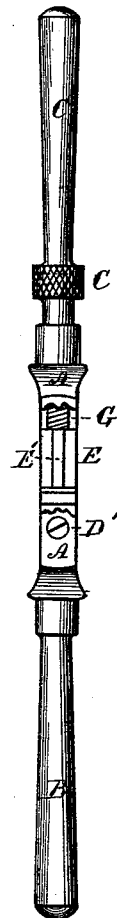


Fig. 2.



Witnesses:

Wilmot Horton
Willard Eddy.

Inventor:

Charles E. Billings
by Theo. G. Ellis,
Attorney.

UNITED STATES PATENT OFFICE.

CHARLES E. BILLINGS, OF HARTFORD, CONNECTICUT.

IMPROVEMENT IN TAP-WRENCHES.

Specification forming part of Letters Patent No. **215,039**, dated May 6, 1879; application filed January 3, 1879.

To all whom it may concern:

Be it known that I, CHARLES E. BILLINGS, of Hartford, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Tap-Wrenches; and I do hereby declare that the following is a full, clear, and exact description thereof, whereby a person skilled in the art can make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

Like letters in the figures indicate the same parts.

My invention relates to an improvement in adjustable tap-wrenches for holding and turning screw-taps of different sizes; and my invention consists in the construction and arrangement of the several parts, as will be hereinafter described.

In the accompanying drawings, Figure 1 is a side view of my improved tap-wrench, with the interior parts shown by dotted lines. Fig. 2 is an edge view of the same with part of the frame removed, so as to show the construction of the sliding jaw.

A is the frame. B is a fixed handle attached to the part A. C is a movable handle turning in a socket in the frame A. It is furnished with a milled capstan-head, C', which can be turned by hand or by a pin inserted through the hole.

D is a fixed jaw fitting into a rectangular slot through the part A, and secured in its

place by the set-screw D', as shown in the drawings. E is a sliding jaw, likewise fitting into the rectangular slot in A, and forming, with the jaw D, an opening between them of suitable shape to grasp the square head of a screw-tap. G is a screw forming part of the handle C, and passing through a nut in the part A to the sliding jaw E. Its end fits into a cylindrical socket in the jaw, and is held in by means of a feather-pin, H, which permits it to turn, but which prevents it from being withdrawn.

J and K are two screws, which pass through the edges of the part A and enter into two grooves, E', one on each side of the sliding jaw E, so that the jaw can be readily moved back and forth by means of the screw G, to adjust the opening between the two jaws for different-sized taps, the jaw E being firmly held in position by the screw G and the two screws J and K for any degree of opening.

What I claim as my invention is—

The combination of the screw G and the two side screws, J and K, with the frame A, having a rectangular opening, and the grooved sliding jaw E, fitting in said opening and flush with the face of the frame, whereby the said jaw is set in any position and held firmly, substantially as described.

CHARLES E. BILLINGS.

Witnesses:

L. H. HOLT,
THEO. G. ELLIS.