

E. P. Furlong,

Wrench.

N^o 52,155.

Patented Jan. 23, 1866.

Fig: 1.

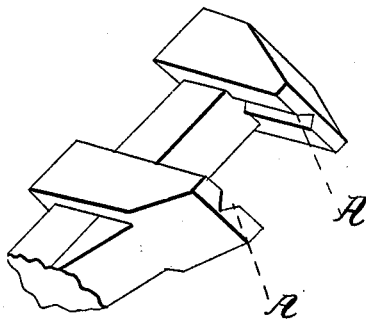
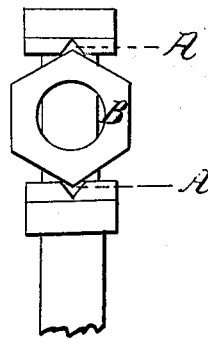


Fig: 2.



Witnesses:

William H. Clifford
John D. Hoya

Inventor:

Edward P. Furlong

UNITED STATES PATENT OFFICE.

EDWARD P. FURLONG, OF WESTBROOK, MAINE.

IMPROVEMENT IN WRENCHES.

Specification forming part of Letters Patent No. 52,155, dated January 23, 1866.

To all whom it may concern:

Be it known that I, E. P. FURLONG, of Westbrook, in the county of Cumberland and State of Maine, have invented a new and useful Improvement in Wrenches; and I hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 shows a perspective of my improvement applied to a hand-wrench; Fig. 2, an end view of the same and a nut of a screw between the jaws.

My invention consists in providing the jaws of a wrench with a groove or grooves, with the objects and for the purposes hereinafter described.

Frequent and considerable inconvenience is experienced by mechanics in the use of wrenches as at present constructed—namely, with a smooth or ungrooved face to the jaws. In many of the uses to which this tool is put it has been found impossible, especially where an exertion of some strength is requisite, to obtain a sufficiently firm and powerful grasp with the jaws except after numerous and repeated trials, depending, as the effectiveness of the tool does, upon the simple tightness with which it can be made to grasp the thing to be moved or turned. When applied to the nuts of screws the frequent slipping off of the wrench amounts to something more than an inconvenience, and works a positive injury to the nut itself. In time the edges or corners of

the nut become worn or broken off by the slipping of the wrench-jaws, thus destroying the form of the nut and rendering it more difficult at each successive trial to get a firm hold upon it with the wrench. These inconveniences are obviated by my invention. In the case of a nut the bearing of the wrench-jaws is not upon the corners or edges of the nut, but upon its sides, as illustrated at Fig. 2 of the accompanying drawings. The object grasped is by this improvement both held more firmly and without injury. Employing even a moderate tightness, it is impossible for the wrench to slip.

A represents the form of the grooves as applied by me to an ordinary hand-wrench, it being made V-shaped, and extending across the jaw longitudinally, as represented in the drawings.

I do not claim roughing the inner faces of the jaws of a wrench by numerous small grooves, so as to create a number of small edges to improve its power in holding anything to which it is applied; but

What I do claim, and desire to secure by Letters Patent, is—

Constructing a groove on the inner face of the jaws of a wrench, as and for the purposes described.

EDWARD P. FURLONG.

Witnesses:

WILLIAM H. CLIFFORD,
JOHN I. BOYD.