

T. C. Furlington,

Wrench.

No. 103653.

Patented May 31. 1870.

Fig. 1

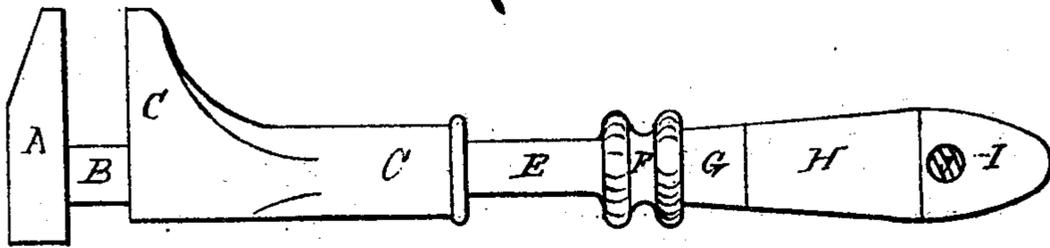


Fig. 2

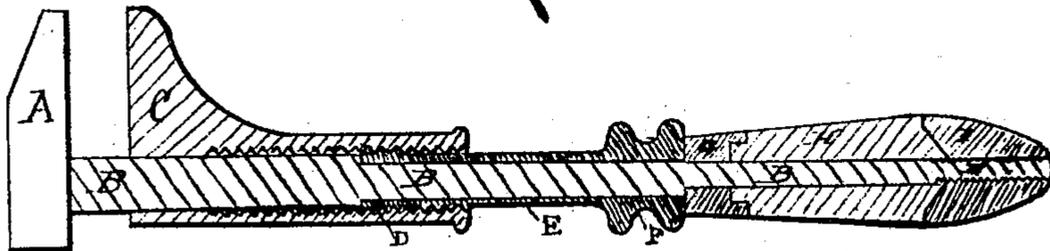
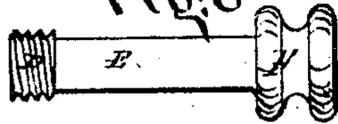


Fig. 3



**Witnesses:**

David J. Smith  
F. Perkins

**Inventor:**

T. C. Furlington  
Assignor to himself & A. Mayoux  
By G. W. Smith his atty

# United States Patent Office.

TURNER C. PURINGTON, OF LINCOLN, CALIFORNIA, ASSIGNOR TO HIMSELF AND A. MAYOUX.

Letters Patent No. 103,653, dated May 31, 1870.

## IMPROVEMENT IN WRENCH.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, TURNER C. PURINGTON, of Lincoln, Placer county, State of California, have invented an "Improved Wrench;" and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing and to the letters marked thereon.

My invention relates to improvements in that class of wrenches, and similar instruments, having a fixed and movable jaw, and consists in the combination of a male and female screw for working the movable jaw, constructed and arranged in such a manner that the threads of said screws are always concealed from sight, and consequently protected from becoming bruised or injured; and further consists of certain details of construction hereinafter described.

In the drawing—

Figure 1 is an elevation of a monkey-wrench embodying my improvements.

Figure 2 is a longitudinal section of the same.

Figure 3 is an elevation of one of the parts of wrench embodying important details.

A is a jaw fixed to the shaft B.

C is a jaw that slides upon shaft B.

D E F is a hollow cylindrical shaft, provided at one end with a short male screw, D, and at the other with a milled head, F.

G H I is the handle consisting of three parts, as shown in the drawing, the part G being mortised to receive the shaft B, and fitting against a shoulder on said shaft, and having a recess to receive the end of part H.

The other extremity of part H fits into a conical recess in part I, part I being provided with a female screw that works upon the male screw forming the extremity of the shaft B.

The part I is also provided with a hole, J, for receiving the end of small rod or lever for turning said part I.

It will be seen that part I of the handle constitutes a nut that, when screwed up firmly, secures the handle in its position on the shaft B, and forms a shoulder against which one end of the shaft D E F works, the other end of shaft D E F working against a shoulder formed on the shaft B, as shown.

The jaw C is provided with a female screw into which the screw D works, and, as the shaft D E F is prevented from having end-motion by the hereinbefore-mentioned shoulder, if said shaft be caused to revolve upon the shaft B the jaw C will be caused to advance toward or recede from the jaw A, according to the direction in which the shaft D E F is turned.

The diameter of the part E of the shaft D E F should be as nearly equal to the inside diameter of the female screw of the jaw C as possible, in order to keep out dust and dirt.

It is obvious that, in wrenches having my improvements, the screws used have their threads concealed and protected from injury, and that the peculiar construction of the handle admits of ready removal or separation of all the parts of the wrench for the cleaning or other purposes, and without injury to those parts.

The milled head F of the shaft D E F facilitates the turning of the said shaft by the fingers, but of course the form of the head F is immaterial.

The parts must be so proportioned that the screw D is always concealed by the part of the jaw C in which the female screw is formed.

When the jaws A and C are closed, the whole of the part E of the shaft D E F is exposed, and it is evident that if the said part E was provided with a thread like the part D, said thread would be superfluous and useless, and liable to become bruised and injured, and consequently cut and wear out or become set or jammed in the female screw.

But by my improvement in the construction of the shaft D E F, the objection in a large class of wrenches is overcome, and the implement can be always kept neat and free from sand in its working parts.

Having thus described my invention,

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

A wrench, constructed and arranged as herein described.

In testimony whereof I have hereunto set my hand and seal.

TURNER C. PURINGTON. [L. s.]

Witnesses:

C. W. M. SMITH,  
H. S. TIBBEY.