

G. C. Taft,

Wrench.

No. 82,702.

Patented May 4, 1869.

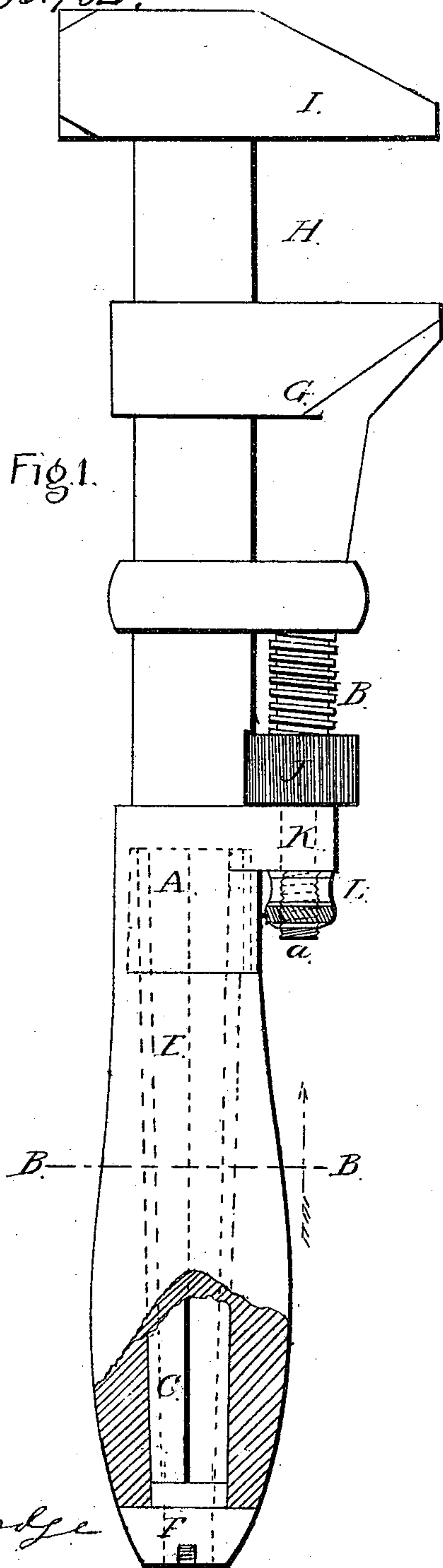
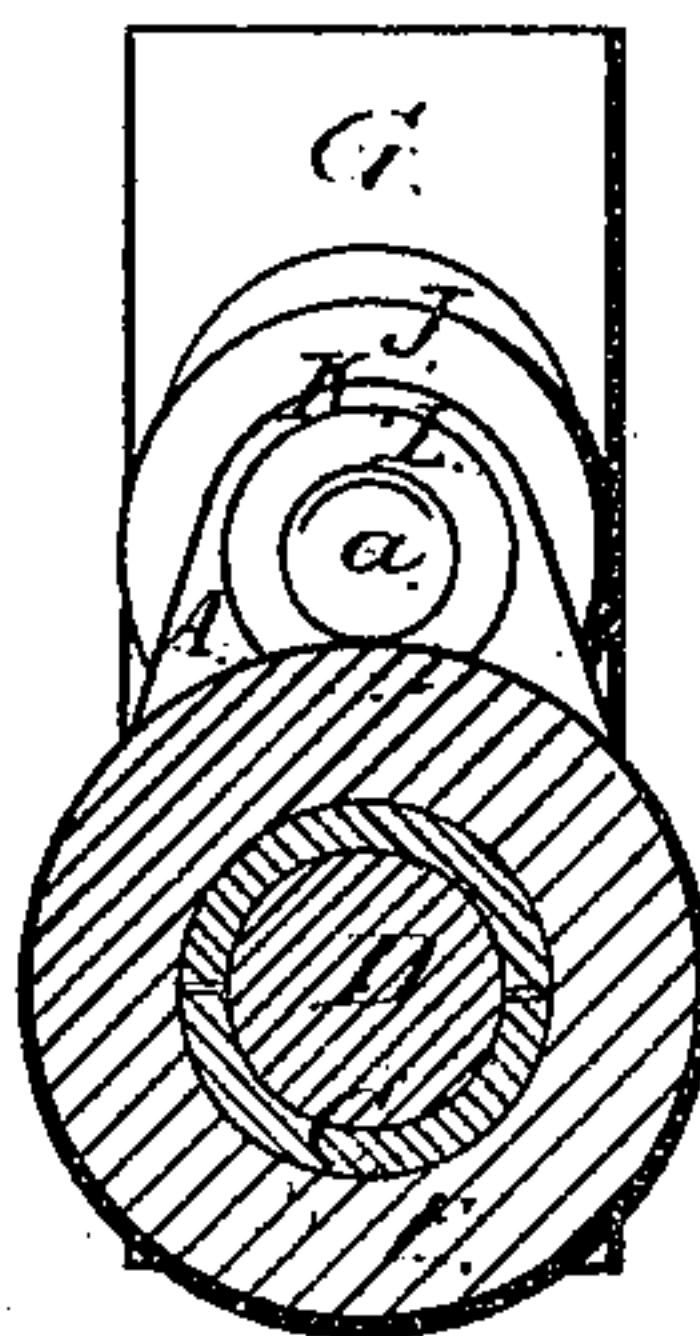


Fig. 2.



Witnesses:

Thos. H. Dodge
Chas. H. Furligh

Inventor:

Geo. C. Taft

United States Patent Office.

GEORGE C. TAFT, OF WORCESTER, MASSACHUSETTS, ASSIGNOR
TO LORING COES, OF SAME PLACE.

Letters Patent No. 89,702, dated May 4, 1869.

IMPROVEMENT IN WRENCHES.

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

Know all men by these presents:

That I, GEORGE C. TAFT, of the city and county of Worcester, and Commonwealth of Massachusetts, have invented certain new and useful Improvements in Screw-Wrenches, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 represents a side view of a screw-wrench, with my improvements applied thereto, the rear end of the handle being shown broken away, and

Figure 2 represents a section on line A B, fig. 1.

To enable those skilled in the art to which my invention belongs, to make and use the same, I will describe it more in detail.

The nature of my invention consists—

First, in the combination with the shank and ferrule of a wrench, of a divided quill, as and for the purposes hereafter explained.

Second, in the combination with the rear projecting-end of the rosette-screw, of a set or stop-nut, as and for the purposes explained.

In the drawing—

A is the ferrule, which is supported against the back strain of the rosette-screw B, when the wrench is used, by means of a divided quill, C, arranged upon the shank D, and over which the handle E is slipped, before the rear nut F is screwed upon the end of shank D.

In a previous invention for which I applied for Letters Patent, a whole quill, C, was used for a similar purpose, but practical objections are found to exist to the use of a whole quill, for the reason, that if the shank D is not always of the same size, quill C is liable to either bind, when it is slipped on, or else it goes on with a too loose fit.

These objections are obviated by the use of a divided quill, as shown in the drawings, since they can be made in sections less than half the size of shank D, and consequently will fit shanks of an under-size, as well as shanks of over-size.

In making the sections of the quill, I prefer to make the end next to the ferrule the largest, and tapering towards the rear end, to conform to the ordinary shape of the shank.

When nut F is screwed up, it forces the forward ends of the sections of the quill against the inner shoulders of the ferrule, as indicated in dotted lines, whereby the back strain on the ferrule, which is sustained, in the ordinary "Coes" wrench, by the handle E, is transferred

to quill C, and nut F, thus relieving the handle from injurious longitudinal pressure, as will be fully understood by those accustomed to using screw-wrenches. If preferred, the wrench may be made with one section of the quill, and I propose so to make the smaller sizes.

It is frequently the case, that a wrench is used on a uniform size of nuts, and, in which case, it is often a source of great annoyance if the rosette-screw B happens to be turned so as to move jaw G in either direction, thus changing the desired opening H, between the movable jaw G and stationary jaw I.

To overcome and guard against such occurrences, the rear end of the rosette-screw B is made so as to project back of the rosette J, and through projection K of ferrule A, a sufficient distance to receive a check or stop-nut L, which is provided with a screw-thread, to fit a screw-thread cut on the projecting end *a* of the rosette-screw spindle B.

The operation is as follows:

When the wrench is to be used in the ordinary manner, nut L is turned back, and the rosette-screw B can be turned freely in either direction; but when the wrench is to be used on a uniform-sized nut, the movable jaw G is adjusted by means of rosette J and screw B, after which stop or check-nut L is turned up, thereby drawing rosette J back against the projection K of ferrule A, and locking-screw B, in a fixed position.

It may be well to upset the projection *a* slightly, after nut L has been screwed on, for the purpose of preventing the accidental displacement and loss of said nut.

Having described my improvements in screw-wrenches,

What I claim therein as new, and of my invention, and desire to secure by Letters Patent, is—

1. The combination, with the shank D, ferrule A, and nut F of a wrench, of one or more sections of a supporting-quill, substantially as and for the purposes set forth.

2. A stop or check-nut L, substantially as and for the purposes set forth.

3. The combination, with the ferrule A, shank D, and rosette-screw spindle B, of a divided quill, C, and stop-nut L, substantially as and for the purposes set forth.

GEO. C. TAFT.

Witnesses:

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