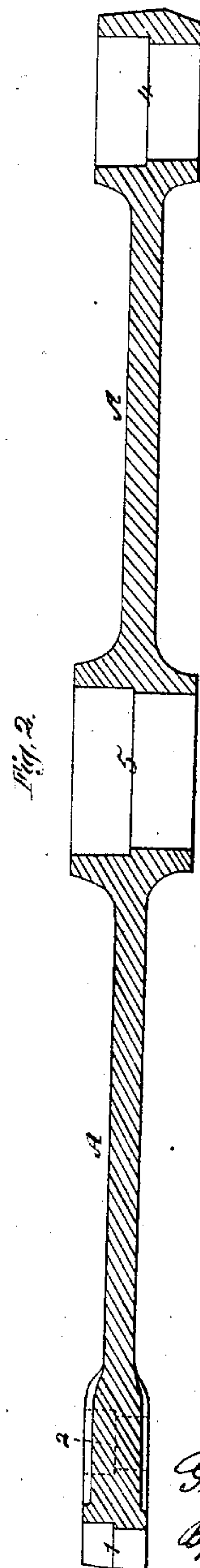
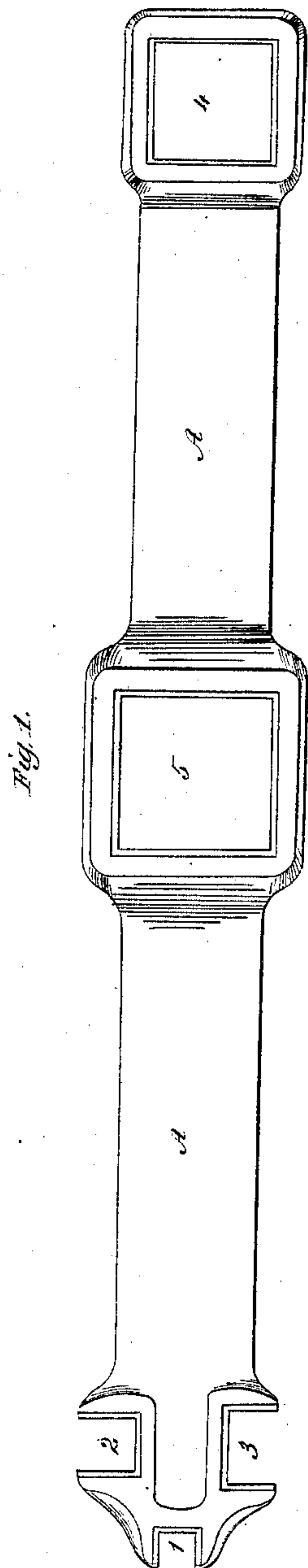


G. W. Griswold,

Wrench.

N^o 37,865.

Patented Mar. 10, 1863.



Witnesses.

*Henry W. Price
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Inventor.

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UNITED STATES PATENT OFFICE.

GEORGE W. GRISWOLD, OF LOGANSPORT, INDIANA.

IMPROVEMENT IN WRENCHES.

Specification forming part of Letters Patent No. **37,865**, dated March 10, 1863.

To all whom it may concern:

Be it known that I, GEORGE W. GRISWOLD, of Logansport, in the county of Cass and State of Indiana, have invented certain new and useful Improvements in Wrenches; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 represents one of my wrenches, and Fig. 2 represents a longitudinal section through the same.

I am aware that a bar-wrench has been made of a single piece which contained two (at least) different-sized notches; this, of course, I lay no claim to.

My invention consists in making the notches of bar-wrenches of two capacities or sizes, so that a bar-wrench of a single piece, and having several notches, may serve for every size of nut in ordinary use, each notch having two capacities or sizes, or five notches, as shown in the drawings, having ten sizes or capacities.

To enable others skilled in the art to make and use my invention, I will proceed to describe the same with reference to the drawings.

A represents the wrench, which, for the sake of cheapness, may be cast. This wrench has upon it five notches or openings, 1 2 3 4 5, of varied sizes, each notch or opening containing two sizes or capacities, as seen more distinctly at Fig. 2, in the notch 1, and in the

openings 4 5, each of which have two sizes or capacities in them. I have represented the notches or openings at several points upon the bar A, but do not restrict myself to the number or locations shown, nor to any special form of bar, as all these things may be varied.

My invention consists in doubling the capacity of the ordinary notch or opening on a wrench bar, by changing the area of the opposite sides of said notch or opening.

The making of a wrench-bar, such as is herein described, costs but little more than the value of the iron, the labor being comparatively nothing. If the wrench at the right end of the drawing be formed like that at the left end, then fourteen sizes of notches may be had upon one single piece or bar; and by properly disposing of the metal the wrench may be quite light, and yet sufficiently strong for all practical purposes.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

Making the notches or openings of a bar-wrench of two sizes or capacities, so that by turning it over it will present different areas of openings, substantially as herein represented.

G. W. GRISWOLD.

Witnesses:

A. H. BARNETT,
S. N. BARNETT.