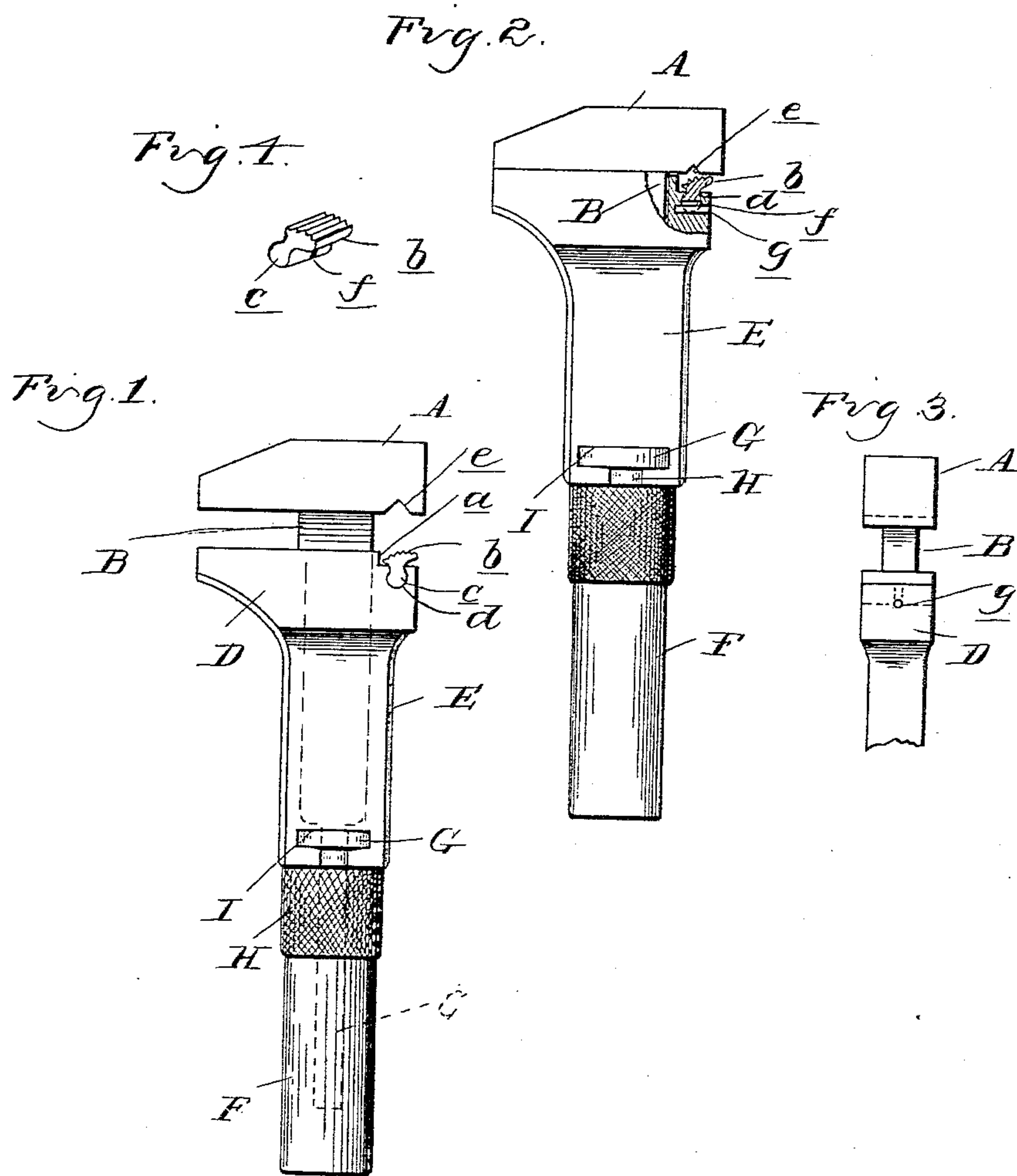


(No Model.)

P. GENDRON.
WRENCH.

No. 476,629.

Patented June 7, 1892.



Witnesses
A. C. Kobbie
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Inventor
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UNITED STATES PATENT OFFICE.

PETER GENDRON, OF TOLEDO, OHIO, ASSIGNOR TO THE GENDRON IRON WHEEL COMPANY, OF SAME PLACE.

WRENCH.

SPECIFICATION forming part of Letters Patent No. 476,629, dated June 7, 1892.

Application filed February 23, 1892. Serial No. 422,410. (No model.)

To all whom it may concern:

Be it known that I, PETER GENDRON, a citizen of the United States, residing at Toledo, in the county of Lucas and State of Ohio, have
5 invented certain new and useful Improvements in Wrenches, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to new and useful improvements in wrenches; and it consists in the peculiar construction of an attachment arranged at the rear face of the jaws especially designed for use in adjusting the spoke-nipples of bicycles.

15 The invention further consists in the peculiar construction, arrangement, and combination of the various parts, all as more fully hereinafter described.

In the drawings, Figure 1 is an elevation
20 of a wrench embodying my invention, showing the jaws separated. Fig. 2 is a similar view showing the jaws closed and partly in section. Fig. 3 is a rear elevation of the jaws thereof. Fig. 4 is a detached perspective view
25 of the rocking nipple-clamp.

A is the stationary jaw. B is the shank secured thereto, having at its lower end the reduced portion C.

30 D is a movable jaw having formed integral therewith a sleeve or socket E, which is longitudinally apertured to receive the shank B.

F is a handle having the annular head G formed at one end, which is secured to the body portion of the handle by means of the
35 neck H.

I are T-shaped bearings formed in both sides of the socket E at the lower end, in which the head and neck G H are adapted to be engaged.

40 The construction thus far is of known construction and as described in my application for patent, Serial No. 391,273, filed May 1, 1891. The movable jaw D is made to approach or recede from the stationary jaw by turning the
45 handle F.

To adapt a wrench of this kind to use for turning the nipples of spokes or other round articles, I extend the jaws A and D to the rear of the shank B and form in each rear extension clamping devices which will not interfere with the operation of the wrench for or-

dinary purposes and will enable me to clamp such nipples in place firmly and turn them in adjusting the bicycle-spokes. To this end I form a gain a notch *a* upon the movable jaw
55 D in rear of the shank, this gain being of a depth sufficient to allow the serrated eccentric head *b* to lie flush with the upper face of the stationary jaw D. This head is secured to the movable jaw by means of a cylindrical
60 extension *c*, preferably extending the entire length of the head, engaging in a corresponding shaped cylindrical recess *d*, formed in the movable jaw. The head *b* has a limited oscillating movement upon the cylindrical
65 shank *c*.

e is a notched grip formed opposite the head *b* in the rearward extension of the stationary jaw A. Any suitable means may be employed for securing the cylindrical extensions *c* in
70 the recess *d*. The means which I preferably employ consist in forming a notch *f* in the cylindrical extension *c* and forcing the end of the pin *g* therein.

To use the wrench, the handle C is rotated
75 to move the jaw D until the spindle is gripped between the jaws *e* and the head *b*, when by moving the handle to the right the eccentric serrated face of the head will tend to tightly
80 clamp the spindle between the jaws and turn the same, while movement in the opposite direction will rock the head *b* in the opposite direction and allow the jaws to slip in returning the wrench to a position whereby a new hold
85 may be taken to again turn up the spindle.

In case the wrench is desired to be used in the ordinary manner, employing the usual jaws, the fact that the head *b* is below or on a plane with the upper surface of the stationary jaw permits two of the jaws to be tightly
90 clamped together, or could clamp the smallest article between them.

The jaw A extends beyond the plane of the head D, so that it may readily be used as a hammer without damaging the nipple-clamp.
95 The head of the nipple-clamp is also preferably of just sufficient size to be held against movement when the two jaws are closed, so that in hammering it cannot be moved and thus be broken. By making the head *b* the
100 width of the gain, or nearly so, it works more positively, and by connecting the cylindrical

extension immediately to the head I obtain a rocking movement on the arc of a very small circle, which gives me a quick grip and a quick release.

5 What I claim as my invention is—

A wrench consisting of a shank having a stationary jaw thereon, a movable jaw on the shank, both jaws having rearward extensions forming jaws, the movable jaw formed with
10 a gain and a cylindrical transverse recess in its upper face and the under face of the rear of the stationary jaw having a gripping-notch

formed therein, and a serrated head *b*, having the cylindrical extension *c* fitted in the said recess, the combined width of the head and
15 extension being less than the width of the recess or gain, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

PETER GENDRON.

Witnesses:

M. B. O'DOGHERTY,
N. L. LINDOP.