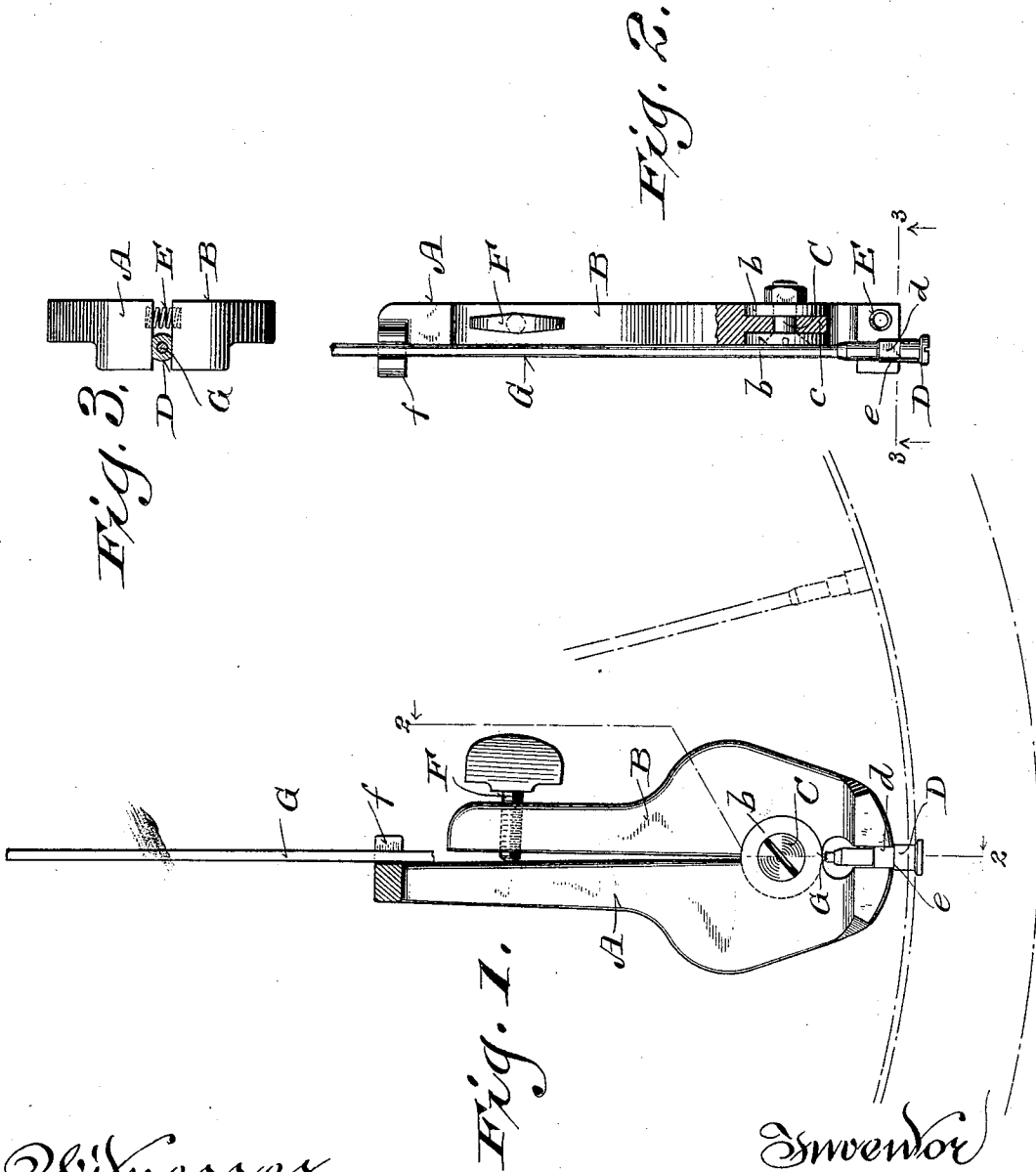


(No Model.)

A. DUDLY.
NIPPLE WRENCH.

No. 520,562.

Patented May 29, 1894.



Witnesses
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UNITED STATES PATENT OFFICE.

ALBERT DUDLY, OF MENOMINEE, MICHIGAN.

NIPPLE-WRENCH.

SPECIFICATION forming part of Letters Patent No. 520,562, dated May 29, 1894.

Application filed March 21, 1894. Serial No. 504,557. (No model.)

To all whom it may concern:

Be it known that I, ALBERT DUDLY, a citizen of the United States, and a resident of Menominee, in the county of Menominee, and in the State of Michigan, have invented certain new and useful Improvements in Nipple-Grips; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention relates to tools of that class especially designed for use in truing bicycle wheels and has for its object to provide such an implement capable of being clamped tight on any of the various well known spoke-nipples even though the corners of the same be worn or covered with enamel, as well as to prevent wear on said corners and to automatically maintain said implement in working position.

A further object of my invention is to facilitate the operation of truing a bicycle wheel by providing a nipple-grip that may be utilized with one hand of the workman, and said invention consists in certain peculiarities of construction and combination of parts hereinafter specified with reference to the accompanying drawings and subsequently claimed.

In the drawings: Figure 1 represents a side elevation of a nipple-grip constructed according to my invention and partly broken away; Fig. 2, an edge view of the same partly in section on line 2—2 of the preceding figure, and Fig. 3, a plan of the grip inverted, the spoke and nipple illustrated in connection therewith being in horizontal section on line 3—3 of the preceding figure.

Referring by letter to the drawings A, B, represent normally parallel shanks out-turned at one end to form jaws. One of the shanks has offset circular ears *b* flush-seated in the other shank on opposite sides of a corresponding ear *c* thereon, and a bolt or other suitable pivot C is employed to connect the aforesaid ears. Below the pivot there is enough space between the squared inner faces of the opposing out-turned jaw ends of the shanks to permit easy engagement of the tool with the squared portion *d* of a spoke-nipple D, but not enough to permit of said tool slipping below the shoulder *e* of said nipple. A spi-

ral-spring E has its ends seated in recesses in the shanks below the pivot, and the expansive force of this spring acts to automatically adjust said shanks on said pivot. Above the pivot a thumb-screw F engages a tapped opening in the shank B and bears against the opposite face of the shank A in order to provide for a clamp of the jaw-ends of said shanks on the spoke-nipple with which the tool may be engaged.

The shank A is made longer than the one B, and that end of the former shank farthest from the pivot has a lateral recessed projection or hook *f* that is designed for engagement with a spoke G when the tool is in use, this projection being parallel with the jaw-portion of said shank.

In practice the hook-portion of the tool is engaged with a spoke and said tool guided onto the squared portion of the corresponding nipple, the shoulder of the latter acting as a stop to insure the proper position of the aforesaid tool. Now if the screw be actuated in the proper direction the tool will be clamped on the nipple and the latter may be easily turned by one hand of the operator, while at the same time the wheel may be rotated without the necessity of removing said tool the latter being automatically held in place.

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

1. A nipple-grip comprising a pair of pivotally united shanks having out-turned jaws at one side of the pivot, a hook on one of the shanks at that side of the pivot farthest from the jaws, and a thumb-screw that engages a tapped opening in one shank to bear against the other, substantially as set forth.

2. A nipple-grip comprising a pair of pivotally united shanks having out-turned jaws at one side of the pivot, a hook on one of the shanks at that side of the pivot farthest from the jaws, a thumb-screw that engages a tapped opening in one jaw to bear against the other, and a spring arranged between said shanks adjacent to their jaws, substantially as set forth.

3. A nipple-grip comprising a pair of pivotally united shanks different as to length and provided at one end with out-turned jaws, a

hook like projection at that end of the longest
shank farthest from the pivot but parallel to
the jaw thereof, and a thumb screw engaging
a tapped opening in the shorter shank to bear
5 against the other, substantially as set forth.

In testimony that I claim the foregoing I
have hereunto set my hand, at Menominee,

in the county of Menominee and State of
Michigan, in the presence of two witnesses.

ALBERT DUDLY.

Witnesses:

H. B. MOULTON,
FRANKLIN H. BROWN.