

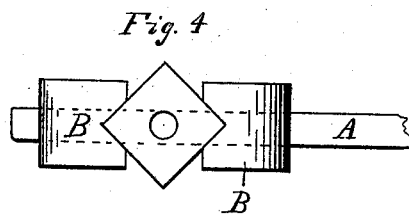
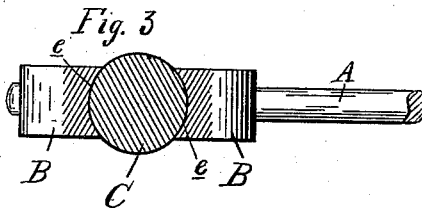
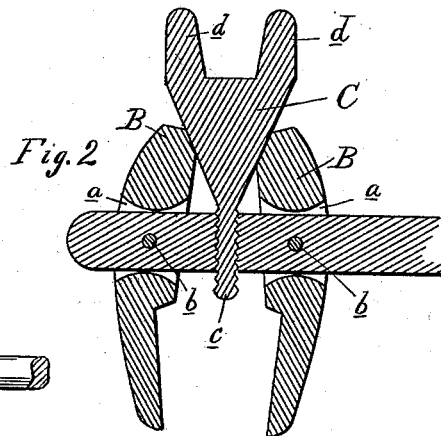
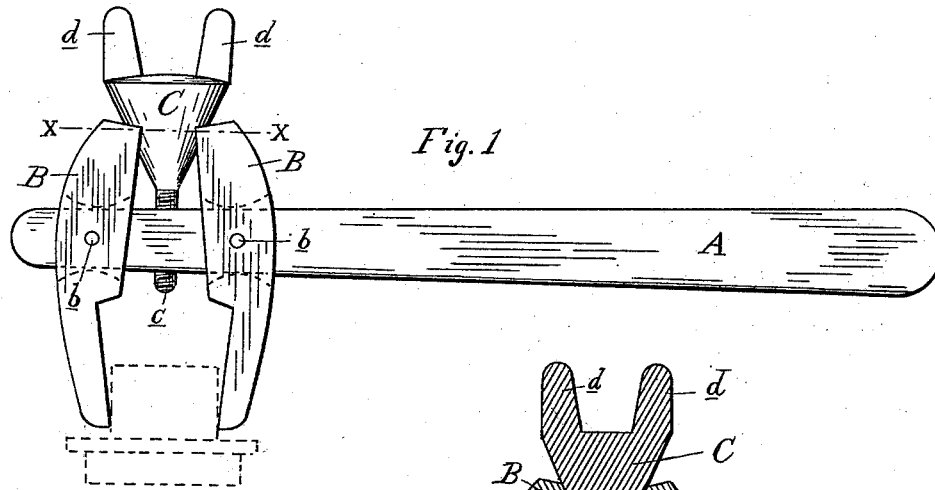
(No Model.)

J. D. ABBOTT.

WRENCH.

No. 383,334.

Patented May 22, 1888.



Witnesses:
P. M. Hubert,
John Schuman.

Inventor:
John D. Abbott,
By Thos. H. Prager & Son
Att'y.

UNITED STATES PATENT OFFICE.

JOHN D. ABBOTT, OF READING, ASSIGNOR OF ONE-HALF TO JAMES A. ARMSTRONG, OF LUDINGTON, MICHIGAN.

WRENCH.

SPECIFICATION forming part of Letters Patent No. 383,334, dated May 22, 1888.

Application filed March 8, 1888. Serial No. 266,601. (No model.)

To all whom it may concern:

Be it known that I, JOHN D. ABBOTT, a citizen of the United States, residing at Reading, in the county of Hillsdale and State of Michigan, have invented certain new and useful Improvements in Vise-Wrenches, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to certain new and useful improvements in vise-wrenches, especially intended for taking off the burr or nut on axles when it is desired to grease the wheels.

The object of my invention is to construct a device which is not liable to drop the nut to the ground, as is the case in using the usual "monkey-wrench," or any ordinary wrench, which, as every one knows who has had occasion to use such a device, does not ordinarily hold the nut fast enough to prevent its dropping out and falling to the ground, where it is apt to become lost, or at least compels the operator to soil his hands in replacing it.

To this end my invention consists in the peculiar construction and operation of the parts, as more fully hereinafter described.

In the drawings which accompany this specification, Figure 1 is a side elevation of my wrench. Fig. 2 is a vertical central cross-section thereof. Fig. 3 is a horizontal cross-section on line *x x* in Fig. 1; and Fig. 4 is an edge view, with the jaws of slightly-modified construction.

A is the handle.

B B are a pair of jaws provided with transverse slots *a*, through which the end of the handle passes, and to which they are secured by means of the pivot-pins *b* at such a distance apart as will enable their free ends to grasp a nut between their open ends, as shown in Fig. 1 by dotted lines. Through the back of the handle and midway between the jaws is screw-threaded the stem *c*, projecting from the apex

of a conical wedge, C, provided with the thumb-pieces *d* at the top, and seated in corresponding conical bearings *e*, between the ends of the jaws, as shown.

In practice the slots *a* in the jaws are sufficiently enlarged to allow the jaws to move upon their pivot. By screwing the cone toward the handle the free ends of the jaws are made to converge, and if applied to a nut may be firmly clamped thereon, so that if the nut is taken off in the usual manner it will not drop out of the wrench, but may, after the work of greasing is completed, be brought to place again, and then released from the wrench by screwing the conical wedge away from the handle.

The clamping ends of the jaws may be serrated, if desired, and instead of having their faces parallel to each other they may be arranged V-shaped, as shown in Fig. 4, to clamp the nut upon opposite corners.

It is obvious that my wrench may be put to other uses where the holding fast of the nut is of advantage.

What I claim as my invention is—

The wrench described, consisting of the handle A, the jaws B B, pivoted on said handle and extended at right angles thereto, and provided with transverse slots for the reception of said handle, and the conical wedge provided with thumb-pieces, and with screw-threaded stem engaging a threaded opening in the handle at right angles to the pivots of the jaws, substantially as shown and described.

In testimony whereof I affix my signature, in presence of two witnesses, this 3d day of March, 1888.

JOHN D. ABBOTT.

Witnesses:

AMOS H. BARTHOLOMEW,
ORLANDO F. BUELL.