No. 750,523. PATENTED JAN. 26, 1904.

J. W. DAVIS.

ADJUSTABLE WRENCH.

APPLICATION FILED AUG. 30, 1902.

NO MODEL.

Fig. 1.

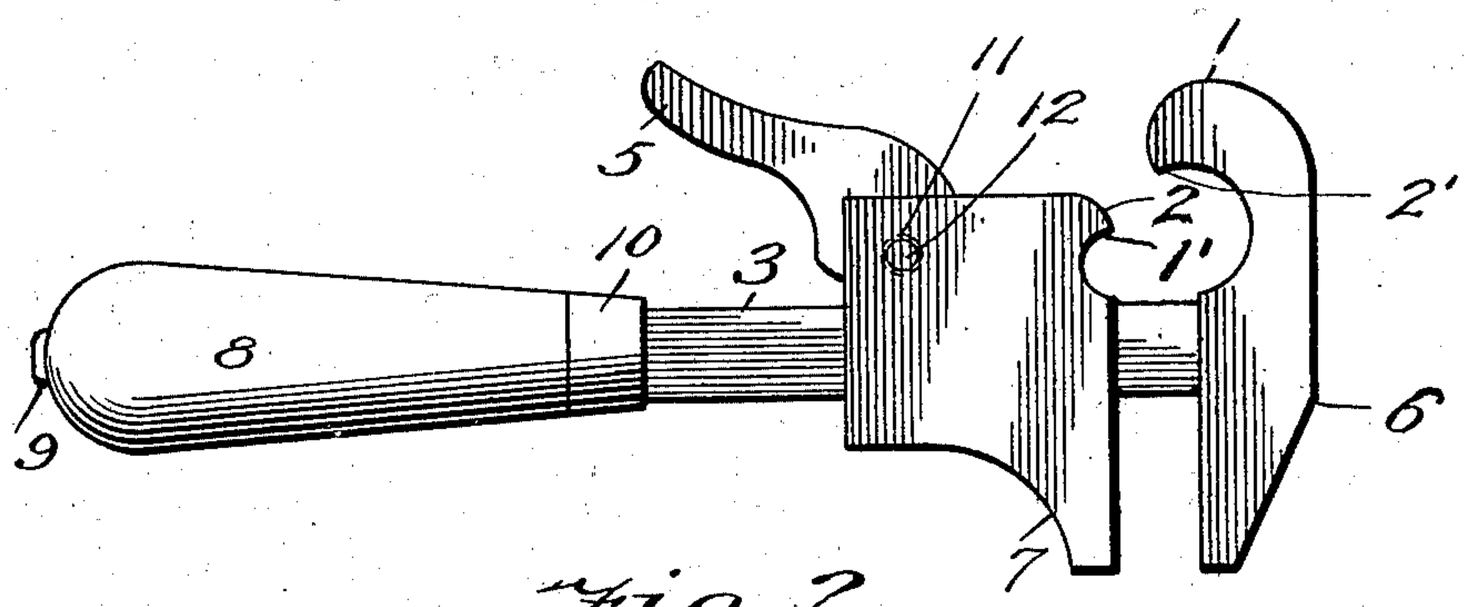


Fig. 2.

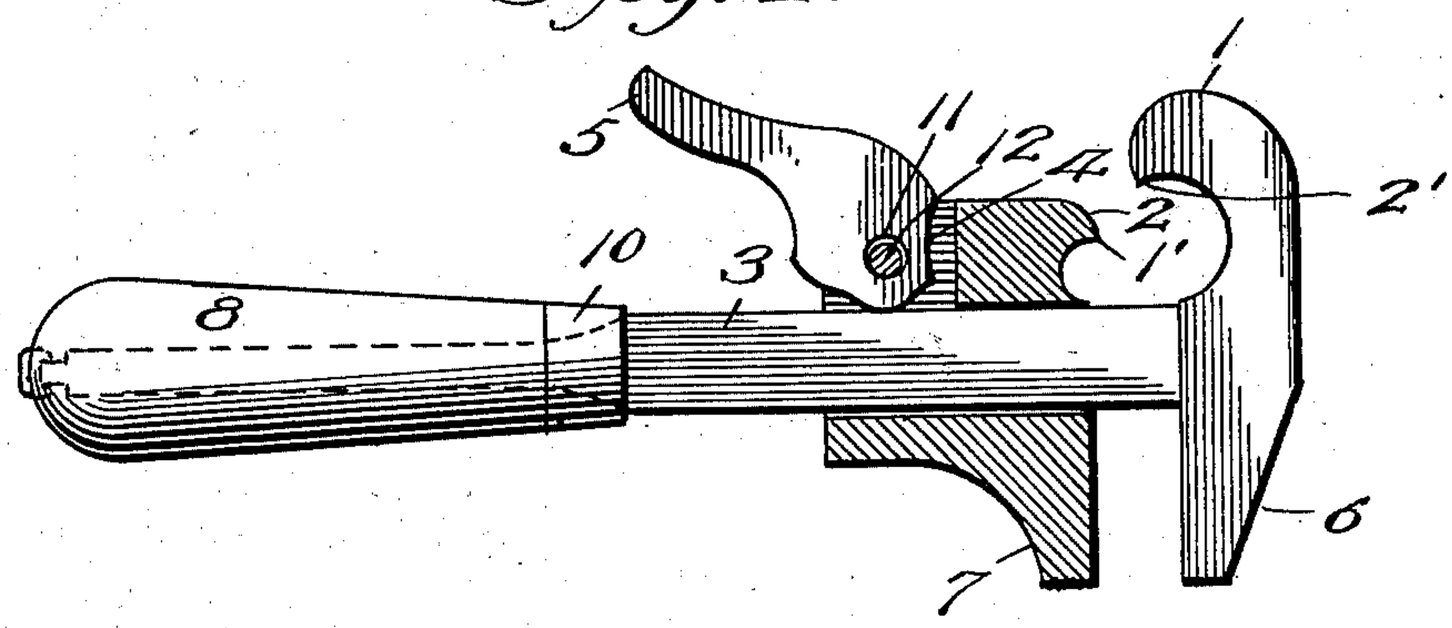


Fig. 4.

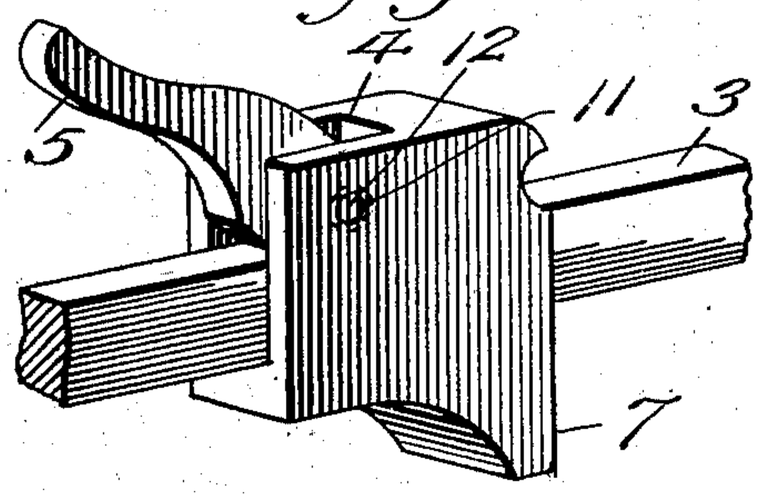
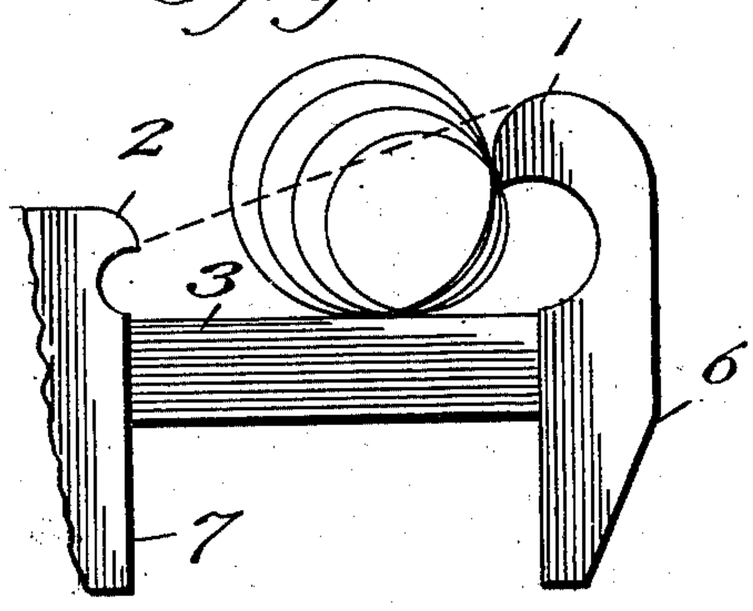


Fig. 3.



WITNESSES:

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No. 750,523. Patented January 26, 1904.

UNITED STATES PATENT OFFICE.

JOHN WILLIAM DAVIS, OF PALMYRA, ILLINOIS.

ADJUSTABLE WRENCH.

SPECIFICATION forming part of Letters Patent No. 750,523, dated January 26, 1904.

Application filed August 30, 1902. Serial No. 121,624. (No model.)

To all whom it may concern:

Be it known that I, JOHN WILLIAM DAVIS, a citizen of the United States, residing at Palmyra, in the county of Macoupin and State of Illinois, have invented new and useful Improvements in Adjustable Wrenches; and I do hereby declare the following to be a full, clear, and exact description of the invention.

My invention relates to adjustable wrenches; and its object is to provide a wrench that can be instantly adjusted. I accomplish this result by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a side view of my improved pipe-wrench. Fig. 2 is a longitudinal sectional view of the same. Fig. 3 is a side view illustrating a modification of the pipe attachment conformable to any radius. Fig. 4 is a detail view of the movable section.

Similar figures refer to similar parts throughout the several views.

This invention relates to that class of pipe-wrenches which are provided with a sliding jaw; and it consists of certain improvements in the construction of the same, which will be hereinafter fully described, and particularly pointed out in the claims.

Referring to the figures by numerals of reference, 3 represents a shank having a suitable handle 8 and provided at its upper end with a fixed jaw, (marked 1 and 6.) The movable jaw-section 2 is fitted to slide upon the shank 3. The jaws 1, 2, 6, and 7 project, as shown, on both sides of the shank 3. The sides of same have flat parallel faces adapted to grasp a nut, so that, as will be seen, the device may when desired be used for a nut as well as for a pipe wrench. The faces of all jaws are finished smooth.

The pipe attachments 1 and 2 are formed after the style of an oblong quarter-circle, having, respectively, tapering wedge-shaped teeth 1 and 2, which is better shown in Fig. 3, where it will be seen that being constructed upon this angle they are both adapted to receive the pipe or cylindrical body and at the same time not deface the same when operated upon. By the construction shown in this particular the jaw 2, extending below the jaw 1, fixed to the shank 3, when engaged will clamp and hold securely by an upward or transverse movement brought to bear. Thus, it will be seen in the drawings, I have introduced smooth footings both in the shank 3 and the lock 5. The object in this is that a closer connection may be had and no adverse binding brought, as in case of serrated footings employed in shank or lock. The movable section (marked 2 and 7) surrounds and slides freely on the shank 3 and is provided with a suitable recess 4, in which is pivoted the leverage-lock 5. The opening 11 through the lock is made larger than the openings 12 in the sides of the recess, thus providing means whereby the leverage-lock can be more easily engaged and disengaged with the shank 3.

The entire structure is cheap and easily made, strong, accurate, and durable. Should any break occur in the movable section, this can be replaced by removing the handle.

I am aware that prior to my invention pipe-wrenches with movable jaws operating in conjunction with a leverage-lock have been made. I therefore do not claim such a combination broadly; but

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

1. A wrench comprising a smooth four-sided shank having a stationary jaw, a sliding jaw mounted on the shank having a recess, a cam-lever pivoted in the recess and having smooth bearing-surfaces to coact with one of the smooth sides of the shank, the pivotal opening of the lever being of a larger diameter than the pivotal pin of the recess substantially as specified.

2. A wrench comprising a shank having a stationary jaw, a sliding jaw mounted thereon provided with a recess, the stationary and sliding jaw being constructed to provide a pipe-wrench, a cam-lever having a smooth bearing-surface pivoted in the recess, and the pivotal opening of the cam-lever being of a larger diameter than the pivotal pin in the recess to

permit of said cam-lever to coact with the smooth surface of the shank to hold the sliding jaw thereto, and said shank and sliding jaw being also constructed to provide a nut-wrench opposite to that of the pipe-wrench, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

JOHN WILLIAM DAVIS.

Witnesses:
BERT SMITH,
L. P. SMITH.