

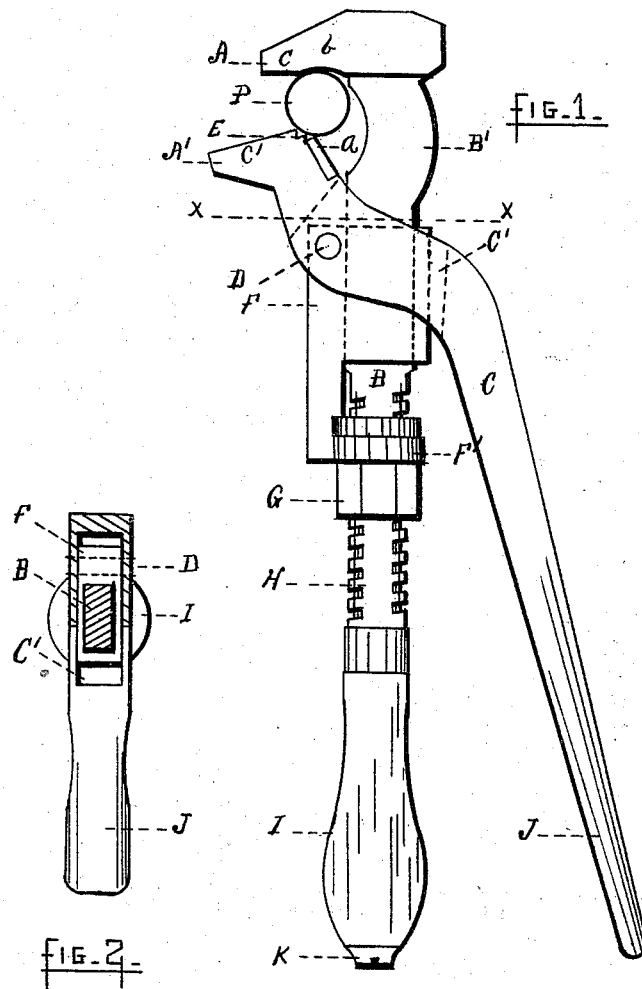
(No Model.)

D. WITT.

COMBINED WRENCH AND PIPE TONGS.

No. 305,495.

Patented Sept. 23, 1884.



WITNESSES.

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DANIEL WITT, OF TEMPLETON, ASSIGNOR OF TWO-THIRDS TO CHARLES A. ADAMS AND ALBERT R. WHITNEY, OF WINCHENDON, MASS.

COMBINED WRENCH AND PIPE-TONGS.

SPECIFICATION forming part of Letters Patent No. 305,495, dated September 23, 1884.

Application filed July 25, 1883. (No model.)

To all whom it may concern:

Be it known that I, DANIEL WITT, a citizen of the United States, residing at Templeton, in the county of Worcester and State of Massachusetts, have invented a new and useful Improvement in a Combined Wrench and Pipe-Tongs, of which the following is a specification.

My invention consists in pivoting the sliding jaw in that class of wrenches known as "monkey-wrenches," and providing the same with a lever-handle, so it may be rotated on its pivot, and its toothed surface made to engage a pipe or rod held against the fixed jaw, and in certain details of construction, which are illustrated in the accompanying drawings, in which—

Figure 1 shows a wrench embodying my invention, and Fig. 2 shows a top and sectional view on line X X.

Similar letters refer to similar parts in the several views.

A is the fixed jaw, and B the fixed jaw-bar, which is bent at B' to allow it to accommodate large pipe or rods. The bar B has also a thread, H, at its lower end, on which bar the handle I may be screwed, and secured by the nut K. Inclosing and sliding upon the jaw-bar B is a block, F, which carries at its lower end the arm F', inclosing a neck or groove in the nut G, which may be turned on the threaded portion of the bar, and thereby actuate the sliding block F.

To the sliding block F, I pivot at D the lever C, whose lower end forms a handle, J, and whose upper end forms a jaw, A', whose flat surface or face *c'* will be parallel with and opposed to the flat surface *c* on the fixed jaw A when the handles J and I are brought together. The tool may then be used for a wrench, the jaw A' being capable of adjustment with reference to the fixed jaw A, so as to suit nuts of different sizes, and the pivot D being nearly or quite under the jaw A', the strain upon the jaw in turning the nut will have but a slight tendency to turn the jaw upon the pivot D. The handles J and I may be fastened together by a link or other means,

as is now frequently done in the case of pipe-tongs. If a pipe or round rod is to be held, the jaw A' is turned on the pivot D, and the corner having the teeth E is brought against the pipe P, holding it firmly against the face of the fixed jaw A, as shown in Fig. 1. The lever C is mortised at C' to inclose the sliding block F, and the pivot D (shown in Fig. 1, and by the broken lines in Fig. 2) passes through the two inclosing sides of the mortise C', and through the sliding block F. In order to furnish a better bearing for the pipe or rod, I make a portion of the face of the fixed jaw concave, as at *b*, and the bar B, I bend at B', so as to allow larger-sized pipe to be received between the jaws. The bar B is also made flat, so the block F may be slipped on and off over the threaded end H by removing the handle J.

I do not confine myself to the above-described method of actuating the sliding block F, as it will readily be seen any of the methods in use for actuating the sliding jaws of the so-called "monkey-wrenches" would be equally applicable for moving the block F.

If desired, a piece of steel, *a*, may be inserted in the movable jaw, so its end may form one or more of the teeth E.

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

1. The combined wrench and pipe-tongs, consisting of a fixed jaw, A, bar B, with threaded shank H, sliding block F, inclosing the bar B, with an arm, F', inclosing the neck of an actuating-nut, the nut G, lever-handle C, pivoted to the sliding block F by the pintle D, and having a jaw, A', so formed at the end of the pivoted handle that when the handles J and I are brought together the face of the jaws A and A' will be parallel and opposing and at right angles to the bar B, all combined and operating as described, and for the purpose set forth.

2. The combination, with a combined wrench and pipe-tongs having a bar, B, threaded at H, fixed head A, nut G, and sliding block F, pivoted lever C, with jaw A', of a plate, *a*, having one or more teeth, E, at the end and attached

to the rear side of the pivoted lever, as shown, so that when the faces of the jaws are brought parallel the plate *a* shall come between the lever C and the bar B, and away from any in-
5 closed nut between the jaws A and A', as and for the purpose set forth.

3. The combined wrench and pipe-tongs, consisting of bar B, fixed jaw A, sliding block F, inclosing the bar B, with suitable connected
10 means for actuating the sliding block, mortised lever-handle C, inclosing the sliding block F, and pivoted thereto by means of the

pintle D, and having a jaw, A', so formed at the end of the pivoted handle that when the handles J and I are brought together the face
15 of the jaws A and A' will be parallel and opposing and at right angles to the bar, all combined and operating as described, and for the purpose set forth.

DANIEL WITT.

Witnesses:

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