

W. Webster,

Pipe Wrench.

N^o 41,554.

Patented Feb. 9 1864.

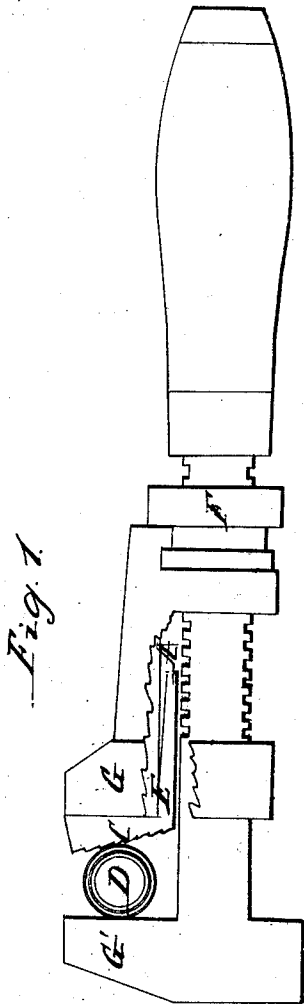


Fig. 3.

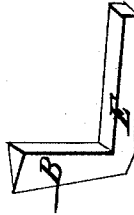


Fig. 4.

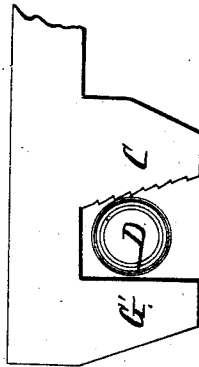
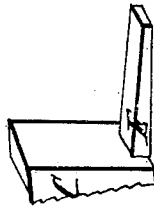


Fig. 2.



Witnesses:

John H. Mead
John W. Mead

Inventor:
William Webster

UNITED STATES PATENT OFFICE.

WILLIAM WEBSTER, OF MORRISANIA, NEW YORK.

IMPROVEMENT IN WRENCHES.

Specification forming part of Letters Patent No. 41,554, dated February 9, 1864.

To all whom it may concern:

Be it known that I, WILLIAM WEBSTER, of Morrisania, in the county of Westchester and State of New York, have invented a certain new and useful Improvement in Wrenches Useful for Common and other Purposes; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, which make a part of this specification.

The nature of my improvement consists in, first, the adaptation and use of an aperture made in the face part of either jaw of a wrench for the introduction and support of a tool or instrument; second, the application and use of a clasp, a pipe or round-rod cutter, or a tool or instrument when used in combination with a wrench having straight or parallel jaws; third, the construction of the clasp, pipe, or round-rod cutter; fourth, the employment and use of a non-revolving cutter in a movable jaw of wrenches, in contradistinction to a rotary cutter-wheel; fifth, the method in which the pipe or round rod adjusts itself to the knife to be cut and to the clasp (or its equivalent) to be turned around.

To enable others to make and use my wrench and improvement, I will proceed to describe its construction and mode of operation.

Figure 1 represents a side view of a common wrench, and having a part of the jaw G cut away to show the aperture A and the pin E inserted. Figs. 2 and 3 represent perspective views of the clasp C (or pipe-wrench) and pipe or round-rod cutter B (as attached or) may be applied to the wrench, which are held stationary within the aperture A by means of the projecting pins E E E, Figs. 1, 2, and 3. Fig. 4 represents a sectional part of a wrench, showing the clasp C as a permanent fixture or a jaw itself. The opposite jaw G' is straight.

The cutter B is made of steel—say one-eighth to three-eighths of an inch thick, and any desired width. This cutter may be pointed, toothed, or have a plain knife-edge, according to circumstances. The face is made wedging or wider at the top than at the bottom, so that the pipe D, or whatever is to be cut, is prevented from slipping out at the top. In cutting pipe rod, &c., the wrench may be turned in either direction. A few turns only is required to sufficiently cut a pipe that it

can be easily broken. In cutting pipe it is or may be necessary to use the screw-nut F, which is made six square, that a key or other power may be used to close up the wrench. Other devices may be used than a screw-nut.

The clasp C is made wedging, the same as the cutter, its thickness to be about the same width as that of the jaws G G'. In clamping a pipe to turn it around, the wrench is turned in the direction of the pitch of the teeth, (or by reversing the wrench or by changing the face of the clasp the pipe may be turned the opposite direction.) Turning the wrench in this direction causes the pipe D to rise or roll up or against the opposite jaw G', thus causing the pipe to become more and more pressed or clamped between the clasp (or its equivalent) and jaw. The face of this clasp is made sufficiently rough as not to slip while putting very great strain upon the wrench.

It will be perceived that by my improvement great advantage and economy are gained. A common wrench is very generally used, and by my improvement is easily and cheaply made; also a pipe-wrench and pipe-cutter, and thus it obviates the expense and burden of keeping three separate wrenches—viz., a common wrench, a pipe-wrench, and a pipe-cutter wrench, the two last of which cost from three to twelve dollars each. My pipe-wrench and pipe-cutter cost, in addition to the cost of a common wrench, only about twenty-five cents each, and the separable clasp and cutting tool can be carried in the vest-pocket, which is a great convenience.

I do not wish to confine myself to any particular shape of the face of the clasp or cutter, as many different shapes may be employed without deviating from the main features of my invention.

In making my improved wrench I wish also to be understood I do not claim or use any angular recess in the claw for the pipe to be forced against, or a cutter as represented in the patent granted to J. E. Stanwood, April 26, 1859, or the jaw made hooked shaped, or to have a wedge to slide in the face of the jaw, as made and represented in the patent granted to G. B. Phillips, May 3, 1859, as they are no part of my invention, and as they would be destructive to a wrench intended to be used for common purposes.

What I claim as new and useful and my improvement in wrenches, and desire to secure by Letters Patent, is—

1. The employment of an ordinary wrench with an aperture in the movable jaw thereof, in combination with a distinct and separate bit for cutting or claspings, which may be adjusted to said jaw and changed at pleasure by means of said aperture, substantially as described.

2. The manufacture and use of the clasp C and cutter B, when constructed as described.

3. The use of the cutter B or clasp C, when

made separate from the wrench and combined therewith, substantially as set forth.

4. In combination with a wrench constructed substantially as described, a clasp, knife, or cutter upon the face of a movable jaw thereof, whether said clasp, knife, or cutter be in one piece with or made separate from said jaw, for the purpose set forth.

WILLIAM WEBSTER.

Witnesses:

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