No. 799,155. PATENTED SEPT. 12, 1905.

M. D. GILL & W. A. HENDERSON.

PIPE WRENCH.

APPLICATION FILED NOV. 7, 1904.

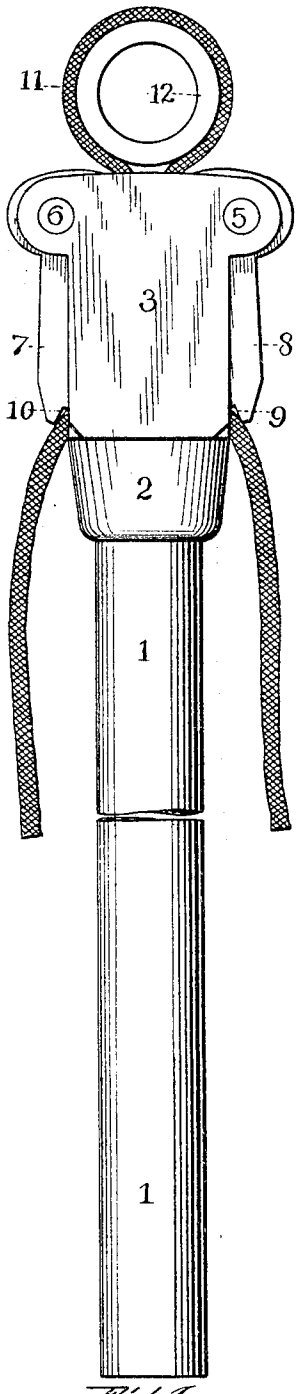



Fig. 1.

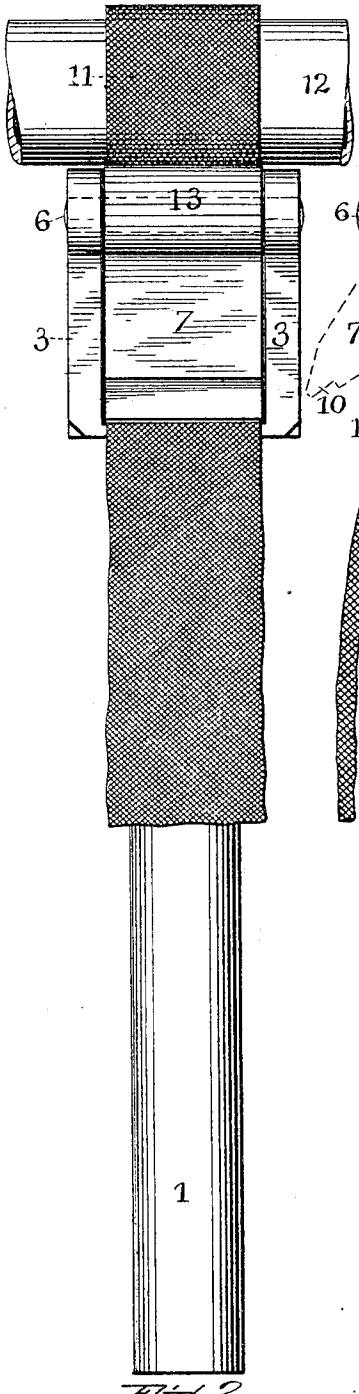



Fig. 2.

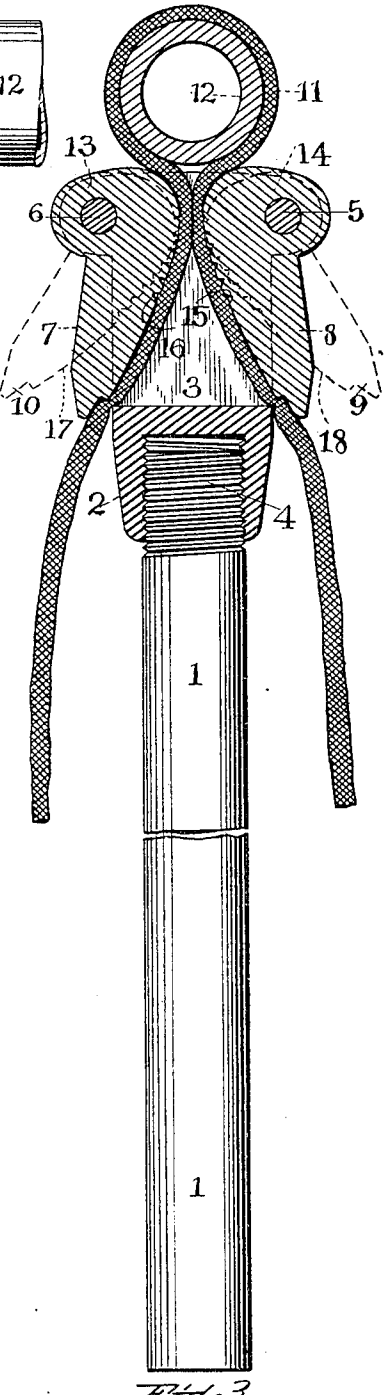



Fig. 3.

Witnesses:
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# UNITED STATES PATENT OFFICE.

MORTIMER D. GILL, OF MEDFORD, AND WILLIAM A. HENDERSON, OF BOSTON, MASSACHUSETTS.

## PIPE-WRENCH.

No. 799,155. Specification of Letters Patent. Patented Sept. 12, 1905.

Application filed November 7, 1904. Serial No. 231,827.

*To all whom it may concern:*

Be it known that we, MORTIMER D. GILL of Medford, Middlesex county, and WILLIAM A. HENDERSON, of Boston, in the county of Suffolk, State of Massachusetts, have invented certain new and useful Improvements in Pipe-Wrenches, of which the following is a specification.

Our invention relates to improvements in pipe-wrenches in which straps operate in conjunction with a metallic head; and the objects of our improvement are, first, to afford facilities for the proper adjustment of the wrench independently of the strap; second, to securely hold the strap for a movement of the wrench backward or forward; third, to allow reverse movement without removal or readjustment of strap.

We attain these objects by means of the mechanism illustrated in the accompanying drawings, wherein—

Figure 1 is a vertical front view of our invention. Fig. 2 is a vertical side view of the same. Fig. 3 is a vertical view, in part section, of our invention.

Similar figures denote similar parts throughout the views.

1 is the handle, which is threaded at the upper end 4.

3 is the head provided with the shoulder 2, in which is held the handle 1 by the said shoulder being adapted to receive the end 4 thereof. Between the sides of the head 3 are the swinging jaws 7 and 8, pivoted in the upper part thereof by pivots 5 and 6, respectively, passing through the shoulders 13 and 14 of said jaws. The jaws 7 and 8 are provided with the lips 9 and 10, respectively, and serrations 15 and 16 and smooth surfaces 17 and 18 between the said serrations and the lips.

12 represents a pipe.

11 is the strap of canvas or other suitable material, its width being adapted to the width of the swinging jaws 7 and 8. The strap 11 is passed around the pipe 12 and allowed to pass through the head 3, one end passing along the inner surface of the swinging jaw 7 and the other end along the inner surface of the jaw 8, with lips 9 and 10 impinging against said strap.

When it is desired to turn the pipe, by moving the handle as desired the pipe is turned in either direction, as the strap is held by the serrations of the jaws from any release and firmly clutched between the jaws, while the very movement of the wrench tightens the strap around the pipe, allowing any slack to be readily pulled through the jaws and withheld from slipping. The handle we have shown as removable, so as to allow transverse or other handles to be used and of shorter lengths.

We have shown our invention with serrated jaws; but the invention is operative without such serrations, and we do not limit its use to serrated jaws, as the strap is held between the bearing-surfaces of the jaws by the impact without serrations.

Having described our invention, what we desire to secure by Letters Patent and claim is—

1. A pipe-wrench, having a head provided with swinging serrated jaws, pivoted therein, and a shoulder, adapted to receive a handle therein inserted, in combination with a strap, of the width of the said jaws, and allowed to pass over the inner surface of said jaws, and between the serrations thereof, all substantially as stated and for the purpose set forth.

2. In a pipe-wrench, in combination, a head provided with swinging serrated jaws pivoted therein, and a strap, adapted to pass over the surface of said jaws, and be held between the serrations thereof, all as and for the purpose set forth.

3. In a pipe-wrench in combination, a head provided with swinging jaws pivoted therein and a strap adapted to pass over the surface of said jaws and be held between the bearing-surfaces thereof as and for the purpose specified.

In testimony whereof we have affixed our signatures in presence of two witnesses.

MORTIMER D. GILL.
WILLIAM A. HENDERSON.

Witnesses:
AMOS W. SHEPARD,
ELIZABETH DUN.