No. 817,709. PATENTED APR. 10, 1906.

A. HAYES.

WRENCH.

APPLICATION FILED OCT. 16, 1905.

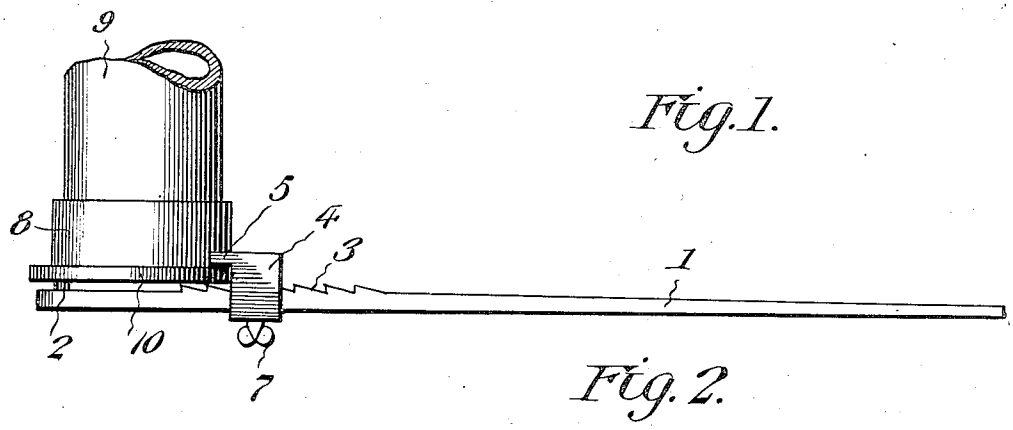


Fig. 1.

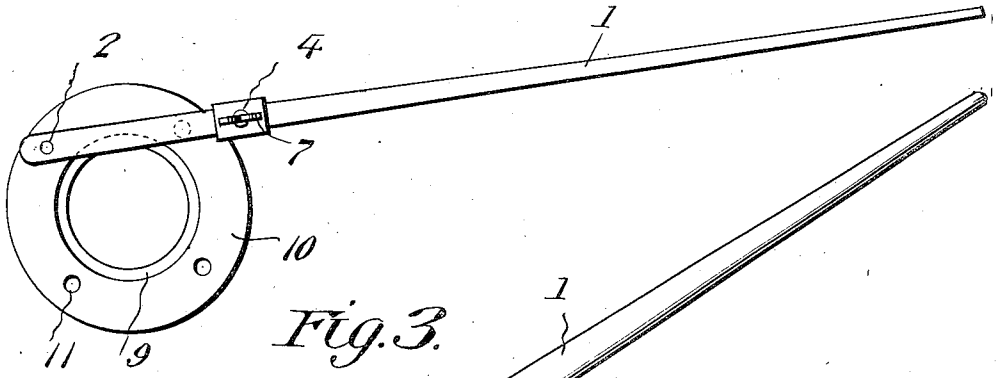


Fig. 2.

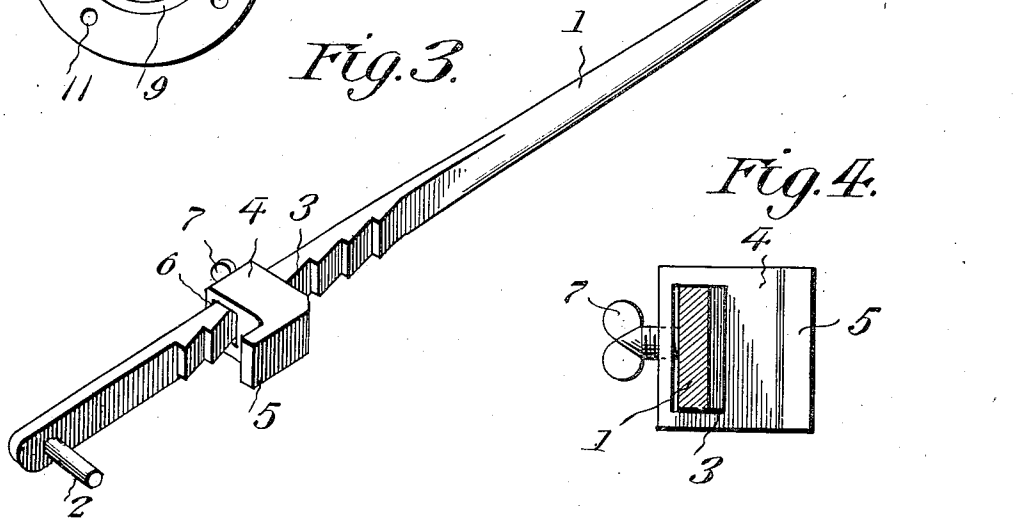


Fig. 3.

Fig. 4.

Witnesses

Geo. Schmanje.

C. C. Hines.

Inventor

Alfred Hayes,

By Victor J. Evans

Attorney

UNITED STATES PATENT OFFICE.

ALFRED HAYES, OF COALVILLE, UTAH.

WRENCH.

No. 817,709. Specification of Letters Patent. Patented April 10, 1906.

Application filed October 16, 1905. Serial No. 282,952.

To all whom it may concern:

Be it known that I, ALFRED HAYES, a citizen of the United States of America, residing at Coalville, in the county of Summit and State of Utah, have invented new and useful Improvements in Wrenches, of which the following is a specification.

This invention relates to wrenches, and particularly to a wrench for applying flanged collars to the screw-threaded ends of pipes, the object of the invention being to provide a simple and inexpensive construction of wrench whereby the collar may be securely gripped and expeditiously applied and whereby such collars may also be readily removed.

In the accompanying drawings, illustrating the invention, Figure 1 is a side view of the wrench, showing it applied for use. Fig. 2 is a bottom plan view thereof. Fig. 3 is a perspective view of the wrench. Fig. 4 is a cross-section through the handle bar or lever looking toward the sliding clamp.

The numeral 1 in the drawings represents a handle bar or lever provided at its forward end with a projecting pin or stud 2 and at a suitable distance in rear thereof with a series of notches or ratchet-teeth 3. A clamp 4 is slidably mounted upon the ratchet-toothed portion of the bar and provided at one side with a forwardly-projecting gripping-flange 5. The body of this clamp is preferably of rectangular form and is provided with a slot or opening 6 for the passage of the bar, said opening being of somewhat greater thickness than the maximum thickness of the toothed portion 3 to permit the clamp to be released from engagement from the ratchet-teeth and freely adjusted toward and from the pin or stud 2. The bottom or rear face of the clamp carries a set-screw 7 to impinge against the bottom or rear face of the bar and adjust and hold the clamp in engagement with any of the ratchet-teeth.

The numeral 8 designates a threaded collar adapted to be applied to the threaded end of a pipe 9 and having at its base or outer end an annular flange 10, formed at intervals with openings 11. In applying and removing the collar the forward end of the bar is brought to bear against the outer face of the flange, the pin or stud 2 fitted into one of the openings 11, and the clamp 4 adjusted to bring its holding-flange 5 into engagement with the flange of the collar, after which the set-screw 7 is adjusted to draw the flange into clamping engagement and lock the clamp against movement. By rotating the handle-bar or lever in one direction or the other the collar may be readily applied to or removed from the pipe, as will be readily understood.

Having thus described the invention, what I claim is—

1. A wrench for applying and removing flanged collars to and from pipes, comprising a handle-bar having a projecting pin or stud to fit an opening in the collar, a clamp adjustable on the bar and provided with a flange to grip the flange of the collar, and means for securing the clamp in adjusted position to the bar.

2. A wrench comprising a handle-bar provided with a projecting pin or stud to fit within an opening and in rear thereof with a series of ratchet-teeth or notches having forwardly-inclined faces and straight front shoulders, a clamp longitudinally adjustable on the bar toward and from said stud and having a gripping-flange, and means for drawing the clamp in engagement with any of said shoulders.

3. A wrench comprising a handle-bar provided with a projecting pin or stud and adjacent thereto with ratchet-teeth or notches, a clamp slidably mounted upon the toothed portion of the bar and having a gripping-flange, and means for holding the clamp in engagement with any of said ratchet-teeth or notches.

4. A wrench for applying flanged collars to and from pipes, comprising a handle-bar having a projecting pin or stud to fit an opening in the collar and a series of teeth or notches in the rear of said stud, a clamp adjustable on the bar and having a portion to engage the flange of the collar, and means for adjusting the clamp to draw the collar in engagement with the teeth.

5. A wrench for applying and removing flanged collars to and from pipes, comprising a handle-bar provided with a projecting pin or stud to fit within an opening in the collar, and means for clamping the bar to the flanged portion of the collar.

In testimony whereof I affix my signature in presence of two witnesses.

ALFRED HAYES.

Witnesses:

W. CALDERWOOD

C. R. JONES.