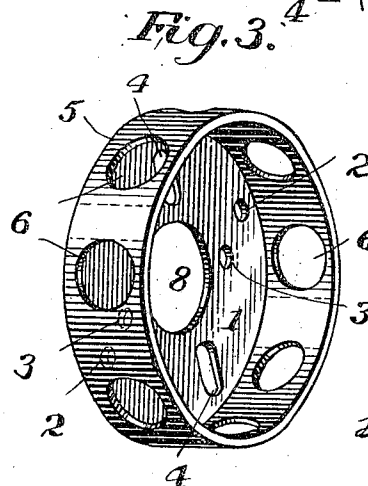
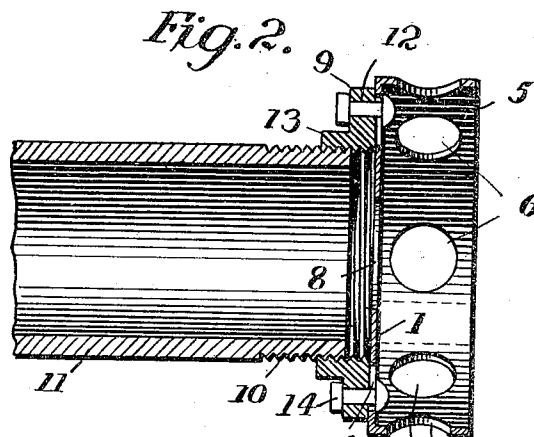
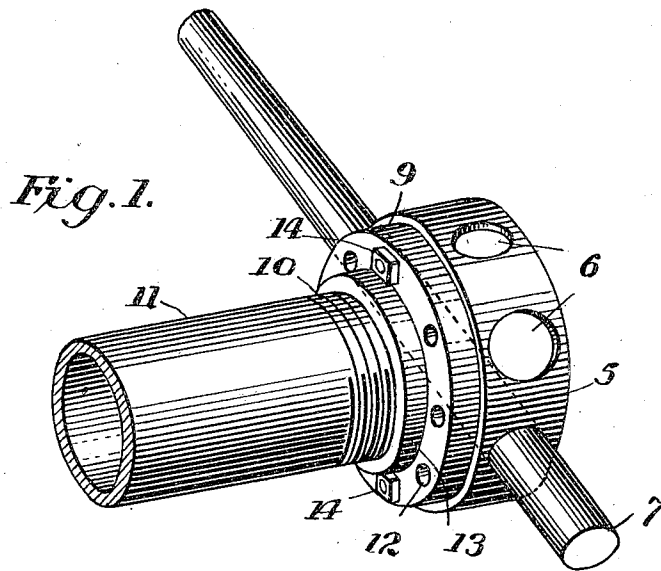


M. McLANE.
 WRENCH FOR SCREWING FLANGES OR SOCKETS ON PIPES.
 APPLICATION FILED AUG. 24, 1909.

949,711.

Patented Feb. 15, 1910.



Witnesses
J. J. Stinson
C. F. Mason

Inventor
Martin Mc Lane,
 by *N. E. Schauborn*
 Attorney

UNITED STATES PATENT OFFICE.

MARTIN McLANE, OF BALTIMORE, MARYLAND.

WRENCH FOR SCREWING FLANGES OR SOCKETS ON PIPES.

949,711.

Specification of Letters Patent. Patented Feb. 15, 1910.

Application filed August 24, 1909. Serial No. 514,381.

To all whom it may concern:

Be it known that I, MARTIN McLANE, a citizen of the United States, residing at Baltimore, in the State of Maryland, have invented certain new and useful Improvements in Wrenches for Screwing Flanges or Sockets on Pipes, of which the following is a specification.

My invention relates to a wrench particularly adapted for screwing different sizes of flanges upon pipes, the wrench being exceedingly simple, durable, and cheap in its construction and capable of being used right-hand or left-hand, as occasion may require, and also capable of adjustment and manipulation in a manner to rapidly and conveniently place a flange in position upon a pipe or remove it therefrom, with the least effort.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and particularly pointed out in the appended claims.

Reference is had to the accompanying sheet of drawings forming a part of this specification, in which similar reference characters indicate corresponding parts in all the views, of which,

Figure 1 is a perspective view showing the wrench applied to a flange screwed on the end of a pipe section and about to be fastened thereon. Fig. 2 is a longitudinal central section of a pipe end with wrench in position for use, and Fig. 3 is a perspective view of the wrench.

In carrying out the invention the wrench consists of an attaching plate 1, of any suitable shape in contour, and which is provided with a series of staggered openings 2, 3, and 4, arranged in pairs diametrically opposite each other and variably placed with respect to a center and adapted to receive bolts passing through corresponding bolt openings in the flanges to be secured on pipe sections. On the periphery of the attaching plate and projecting on one side and preferably at right angles to the plane thereof, is secured a circular band or strip 5, having a series of oppositely and diametrically disposed openings 6, adapted to receive a section of pipe or rod 7, (see Fig. 1) for the purpose of turning the wrench when screw-

ing the flange on a pipe section as will be presently described.

8, is a central opening in the attaching plate for the purpose of seeing how far the flange has been screwed on the pipe, and at the same time materially reducing the weight of the wrench.

The operation of the wrench is plainly shown in Figs. 1 and 2, in which it will be observed that after the flange 9, has been started on the threads 10, at the end of a pipe section 11, the attaching plate 1, with the peripheral band 5, turned away from the end of pipe as shown, is moved or adjusted concentrically with the pipe until two of the oppositely or diametrically disposed openings 2, 3, or 4 register with corresponding openings 12, 12, in the flange 13. Bolts 14, 14 are now passed through these registering openings of the plate 1 and flange 13, and the wrench firmly secured thereby. A section of pipe 7 is passed through opposite openings 6, 6, in the band 5, of the wrench and the same together with the flange are turned without any danger of their slipping which insures a maximum of torque with a minimum of effort to screw home the flange on the threads of the pipe section. The rod 7, may be easily slid through the openings 6, after a half turn has been completed in order to continue the rotation of the flange on its thread if necessary.

It will be noted that I have devised a wrench which may be cheaply produced by casting or forging, having a small number of parts and forming a unitary or self contained structure, with no sections liable to be injured or detached and lost, and also comparatively light and which can be rolled in place to be adjusted instead of carried,—if of a large size. Furthermore a flange by applicant's device may be turned to place on threaded pipes and tubes, without clamping them in tongs or wrenches and the application of any external force or pressure tending to flatten or distort the true cylindrical contour or outline of the pipe or threads.

What I claim as new and desire to secure by Letters Patent is as follows:

1. A flange wrench, comprising a fastening plate having a series of pairs of openings variably disposed with respect to a center and adapted to register with bolt open-

ings of a pipe flange, a circular band attached to the periphery of the fastening plate and at a right angle to the plane thereof, said band having means for engaging a
5 tool and capable of being turned thereby.

2. A flange wrench, comprising a fastening plate having a series of pairs of openings variably disposed with respect to a center as to register with bolt openings of a
10 pipe flange and a circular band having a

series of oppositely disposed openings and attached to the periphery of the fastening plate and at a right angle to the plane thereof.

In testimony whereof I affix my signature 15-
in presence of two witnesses.

MARTIN McLANE.

Witnesses:

ROSSITER S. SCOTT,
WILLIAM J. BRAY.