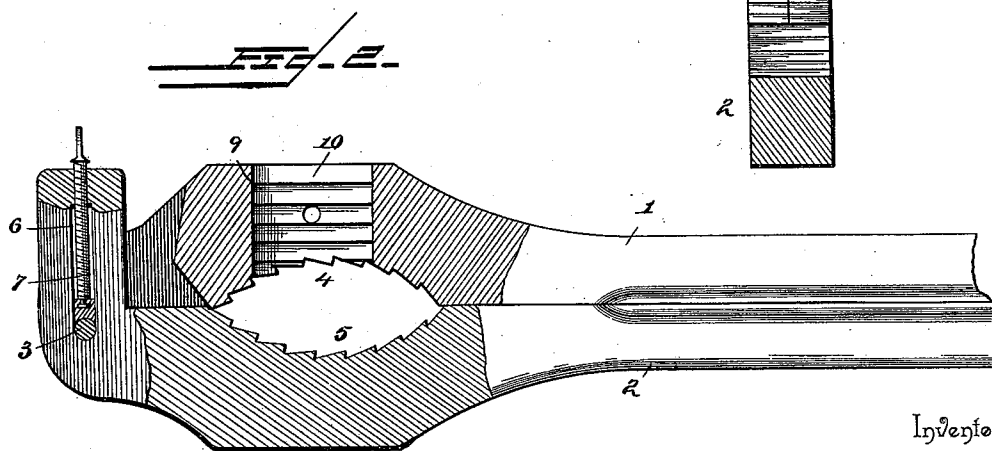
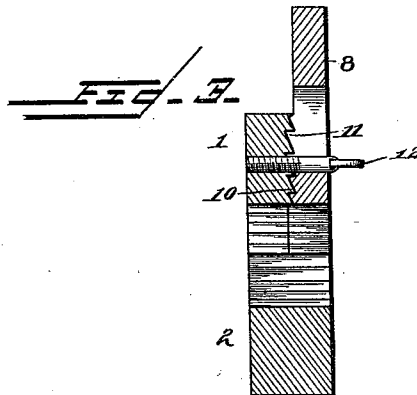
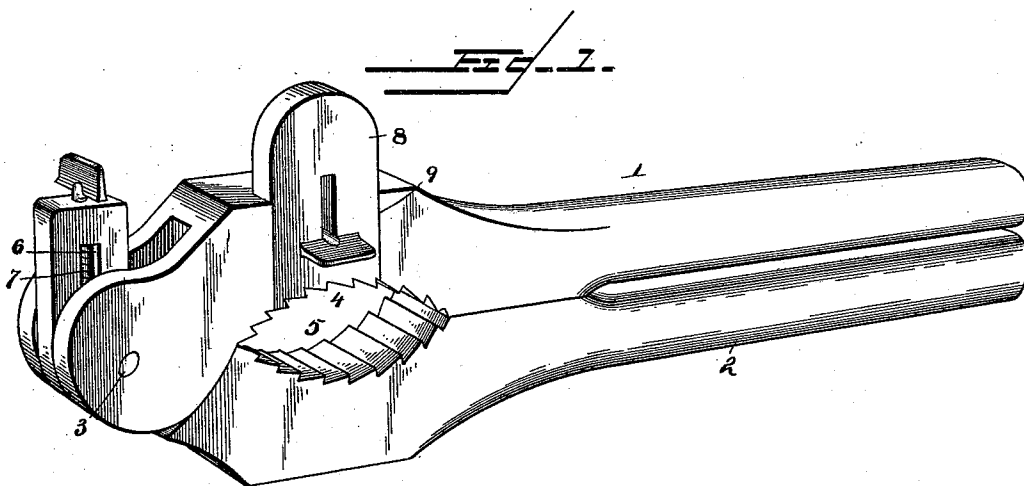


(No Model.)

E. B. LILLY.
PIPE WRENCH.

No. 554,885.

Patented Feb. 18, 1896.



Inventor

Witnesses
J. W. Riley
J. H. Riley

By his Attorneys,

Edward B. Lilly.

C. A. Snow & Co.

UNITED STATES PATENT OFFICE.

EDWARD B. LILLY, OF FARNHAMVILLE, IOWA.

PIPE-WRENCH.

SPECIFICATION forming part of Letters Patent No. 554,885, dated February 18, 1896.

Application filed July 31, 1895. Serial No. 557,723. (No model.)

To all whom it may concern:

Be it known that I, EDWARD B. LILLY, a citizen of the United States, residing at Farnhamville, in the county of Calhoun and State of Iowa, have invented a new and useful Pipe-Wrench, of which the following is a specification.

The invention relates to improvements in pipe-wrenches.

The object of the present invention is to improve the construction of pipe-wrenches, and to provide a simple, strong, and durable one which will be capable of ready adjustment to accommodate itself to pipes, rods, or the like of different sizes.

The invention consists in the construction and novel combination and arrangement of parts, hereinafter fully described, illustrated in the accompanying drawings and pointed out in the claims hereto appended.

In the drawings, Figure 1 is a perspective view of a wrench constructed in accordance with this invention. Fig. 2 is a longitudinal sectional view of a portion of the wrench, illustrating the manner of adjustably pivoting the bars or members of the wrench together. Fig. 3 is a transverse sectional view illustrating the manner of mounting the adjustable plate.

Like numerals of reference indicate corresponding parts in all the figures of the drawings.

1 and 2 designate two bars or members connected by a pivot 3 at one end of the wrench and having their opposite ends rounded or shaped into handles. The bars or members 1 and 2 are provided at their inner adjacent edges at their pivoted ends with curved recesses, and have teeth or serrations forming jaws 4 and 5, adapted to engage and clamp a pipe-rod or other piece of round metal, as will be readily understood.

The bar or member 1 is bifurcated at its pivot end, and the upper bar or member has its corresponding end reduced to fit in the bifurcation of the bar or member 1, and provided with a lateral extension having a transverse opening 6 for the reception of the pivot 3. The transverse opening 6 of the extension is adapted to permit the jaws to be separated or brought together to adapt the wrench to pipes of different sizes, and the bars or mem-

bers are retained in the desired relation by an adjusting-screw 7, mounted in a threaded perforation at the outer end of the extension and provided at its inner end with a bearing-block to receive the pivot 3, to avoid injuring the same.

The wrench is preferably constructed for engaging an inch pipe when the pivot 3 is at the inner extremity of the opening 6, and in order to enable the wrench to engage pipes or rods of less diameter than one inch an adjustable plate 8 is mounted on one of the bars or members and is provided at its inner end with a concavely-curved series of teeth conforming to the teeth of the bar or member on which it is mounted. This bar or member is provided with a recess 9 for the reception of the adjustable plate 8, and it has serrations or teeth 10 at the bottom thereof to interlock with corresponding serrations or teeth 11 of the inner face of the adjustable plate. The adjustable plate is retained in engagement with the teeth 10 by a set-screw 12, having its shank passing through a slot of the plate 8 and engaging a threaded perforation of the bar or member.

It will be seen that the wrench is simple and inexpensive in construction, that it is strong and durable, and that it is capable of ready adjustment to adapt it to different sizes of pipes, rods, and the like.

Changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

What I claim is—

1. A wrench, comprising two bars or members, provided intermediate of their ends with pipe-engaging faces, one of the members being provided at one end with a lateral extension having an opening disposed transversely of the wrench, a pivot mounted on the other bar or member and arranged in said opening, whereby the two bars or members are adapted to move bodily, laterally, and means for confining the pivot at the desired adjustment, substantially as described.

2. In a wrench, the combination of two bars or members pivoted together and capable of lateral adjustment at the pivotal point to vary the space between them, one of the members

being provided with a pipe-engaging face, an adjustable plate mounted on the other bar or member and having at its inner edge an engaging face corresponding with that of the
5 opposite bar or member, and means for securing the plate in its adjustment, substantially as described.

3. A wrench, comprising the bar or member 1, having one of its ends bifurcated, the
10 bar or member 2 having one end reduced to fit in the bifurcation of the other bar or member, and provided with an extension having a transverse opening, a pivot mounted on the bar or member 1 and arranged in the said
15 transverse opening, and an adjusting-screw mounted on the extension and engaging the pivot, substantially as described.

4. A wrench, comprising two bars or members pivoted together, and provided with pipe-engaging faces or jaws, one of the members
20 being provided with a recess and having teeth at the bottom thereof, an adjustable plate provided with corresponding teeth and arranged in the said recess and interlocking
25 with the teeth thereof, and means for securing the plate in its adjustment, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

EDWARD B. LILLY.

Witnesses:

C. F. KIRK,

WILLIAM WASHBURN.