

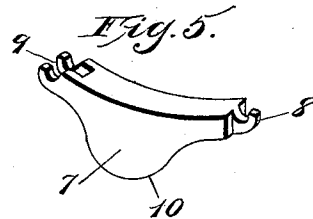
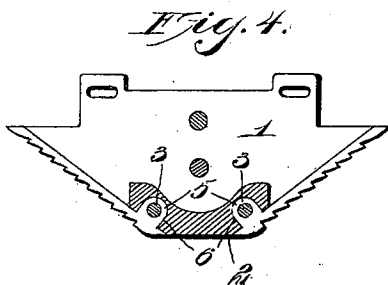
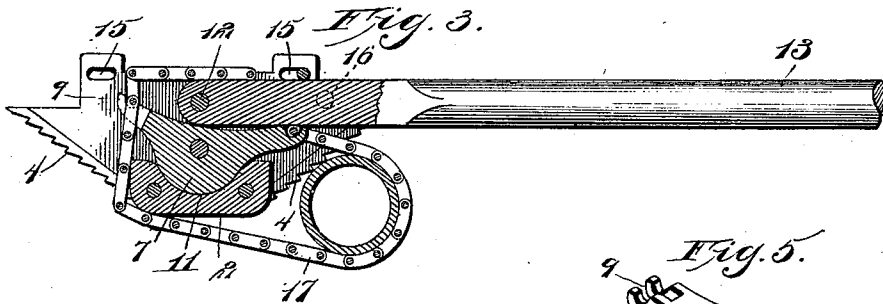
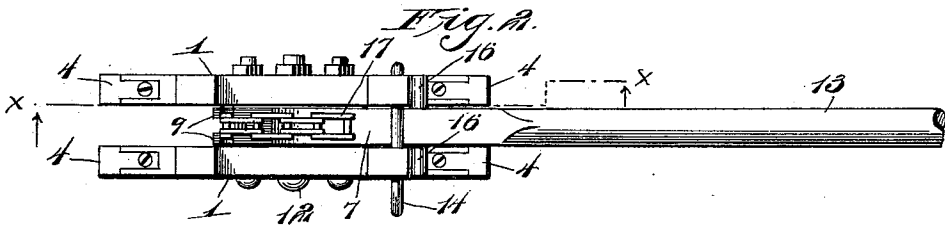
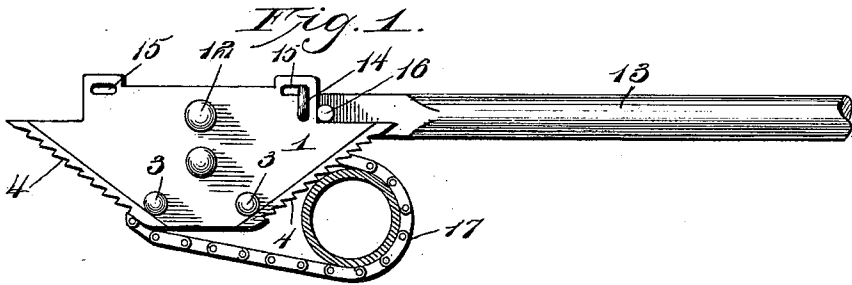
No. 658,968.

Patented Oct. 2, 1900.

W. J. STREALLY.
PIPE WRENCH.

(Application filed May 21, 1900.)

(No Model.)



Witnesses

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UNITED STATES PATENT OFFICE.

WILLIAM J. STREALLY, OF LEWISBURG, WEST VIRGINIA, ASSIGNOR OF ONE-HALF TO JOSEPH M. MCWHORTER, OF SAME PLACE.

PIPE-WRENCH.

SPECIFICATION forming part of Letters Patent No. 658,968, dated October 2, 1900.

Application filed May 21, 1900. Serial No. 17,419. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM J. STREALLY, a citizen of the United States, residing at Lewisburg, in the county of Greenbrier and State of West Virginia, have invented new and useful Improvements in Pipe-Wrenches, of which the following is a specification.

This invention relates to new and useful improvements in pipe-wrenches; and its primary object is to provide a device of this character whereby a pipe or a similar object may be firmly grasped without danger of injury thereto.

A further object is to provide a strong and durable device employing a chain adapted to grip a pipe and which may be applied to a pipe on either side thereof, whereby the pipe may be turned in either direction by one fastening of the chain.

With these and other objects in view the invention consists in the novel construction and combination of parts hereinafter more fully described and claimed, and illustrated in the accompanying drawings, showing the preferred form of my invention, and in which—

Figure 1 is a side elevation showing the same in use. Fig. 2 is a plan view. Fig. 3 is a section on line *x x*, Fig. 2. Fig. 4 is a section through the body of the wrench with the movable parts detached, and Fig. 5 is a detail view of the dog.

Referring to said figures by numerals of reference, 1 1 are similar plates of the body, which are secured at the bottom in any suitable manner and are held at a desired distance from each other by means of an intermediate plate 2, through which pass securing-bolts 3, as shown. Each of these plates is substantially triangular in form and is provided upon its opposite inclined face with jaws 4 of peculiar construction. Each jaw has teeth arranged along its outer edge, and a lug or extension 5 is formed upon the inner surface near the lower end and extends into a recess 6 within the intermediate plate 2, said lug being engaged by one of the bolts 3, which extends through the plates 1 and the intermediate plate. By this arrangement it will be seen that the jaws are firmly secured to the inclined faces of the side plates.

Pivoted between the side plates, near the

center thereof, is a dog 7, preferably of the form shown in Fig. 5. This dog is provided at one end with a tongue 8, while its opposite end is formed as at 9 for the purpose hereinafter more fully described. The dog is also rounded at its lower edge, as shown at 10, and this portion bears within the concave upper face 11 of the intermediate plate 2.

At a point above the pivot of the dog 7 is located a bolt 12, upon which is pivoted a lever 13, which may be of any desired length. This lever is adapted to be swung down upon either of the ends of the dog 7 and is locked in such position by means of a locking-pin 14, which may be detachably secured in slots 15, arranged in the side plates 1, near the upper edges thereof. Trunnions or extensions 16 are arranged upon opposite sides of the lever 13 and are adapted to limit the downward movement of said lever, as will be obvious.

A chain 17, formed of links, preferably of the form shown in Fig. 2, is engaged at one end by the forked end 9 of the dog, while the opposite end is adapted to be engaged by the tongue 8 thereof.

When it is desired to turn a pipe by means of this device, one of the jaws 4 is placed thereagainst and the chain disengaged from one end of the dog. Said chain is then placed around the pipe, as shown in Figs. 1 and 3, and the free end thereof placed in engagement with the dog, as shown. The handle of lever 13 is then thrown downward until its trunnions 16 contact with the upper edges of the side plates 1, and the locking-pin 14 is then placed in position. It will be seen that the working portion of the wrench will then be swung downward with the pipe as a fulcrum, when the lever is raised, and that the teeth of the jaws 4 will firmly grasp said pipe and prevent slipping. It will also be understood that mashing of the pipe will be prevented in view of the fact that the same is nearly fully inclosed by the chain. It is obvious that the jaws at either side of the side plates 1 may be employed by simply loosening the chain and placing the pipe in contact therewith and repeating the operation hereinafter described. The jaws 4 may be readily removed by simply withdrawing the bolts

3, which will thereby release the studs or extensions 5, as will be obvious.

In the foregoing description I have shown the preferred form of my invention; but I do not limit myself thereto, as I am aware that modifications may be made therein without departing from the spirit or sacrificing the advantages thereof, and I therefore reserve the right to make such changes and alterations as fairly fall within the scope of my invention.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination with a body comprising similar plates, of a dog pivoted therein, a chain detachably secured to the opposite ends of said dog and a lever mounted between the plates above, and adapted to contact with said dog.

2. The combination with a body comprising similar plates, of a dog pivoted therebetween, a tongue at one end thereof, and forked at the opposite end, a chain engaged by said tongue and fork, and a lever pivoted between the plates above, and adapted to contact with the dog.

3. The combination with a body comprising similar side plates and an intermediate plate, of a dog pivoted between the side plates, a tongue at one end thereof, a fork at the opposite end, a chain adapted to be engaged by said fork and tongue, a lever pivoted between the side plates above the dog, and means

for locking said lever in contact with said dog.

4. The combination with a body comprising similar side plates and an intermediate plate, of a dog pivoted between the side plates, an arm at one end thereof, a tongue at the opposite end, a chain adapted to be engaged by said tongue, a lever pivoted between the side plates above the dog, trunnions thereto and a pin adapted to engage slots within the side plates and lock the lever in contact with the dog.

5. The combination with a body comprising similar side plates and an intermediate plate having a concave inner edge, of toothed jaws upon the edges of the side plates, lugs thereto secured within recesses in the intermediate plate, a dog pivoted between the side plates and resting within the concave edge of the intermediate plate, a tongue at one end of said dog, a fork at the opposite end, a chain adapted to be engaged by said tongue and fork, a lever pivoted between the side plates above the dog, trunnions thereto to limit the downward movement of the lever, and a locking-pin seated within slots in the side plates and adapted to lock the lever in contact with the dog.

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

WILLIAM J. STREALLY.

Witnesses:

C. S. WINALL,
T. D. CORNELL.