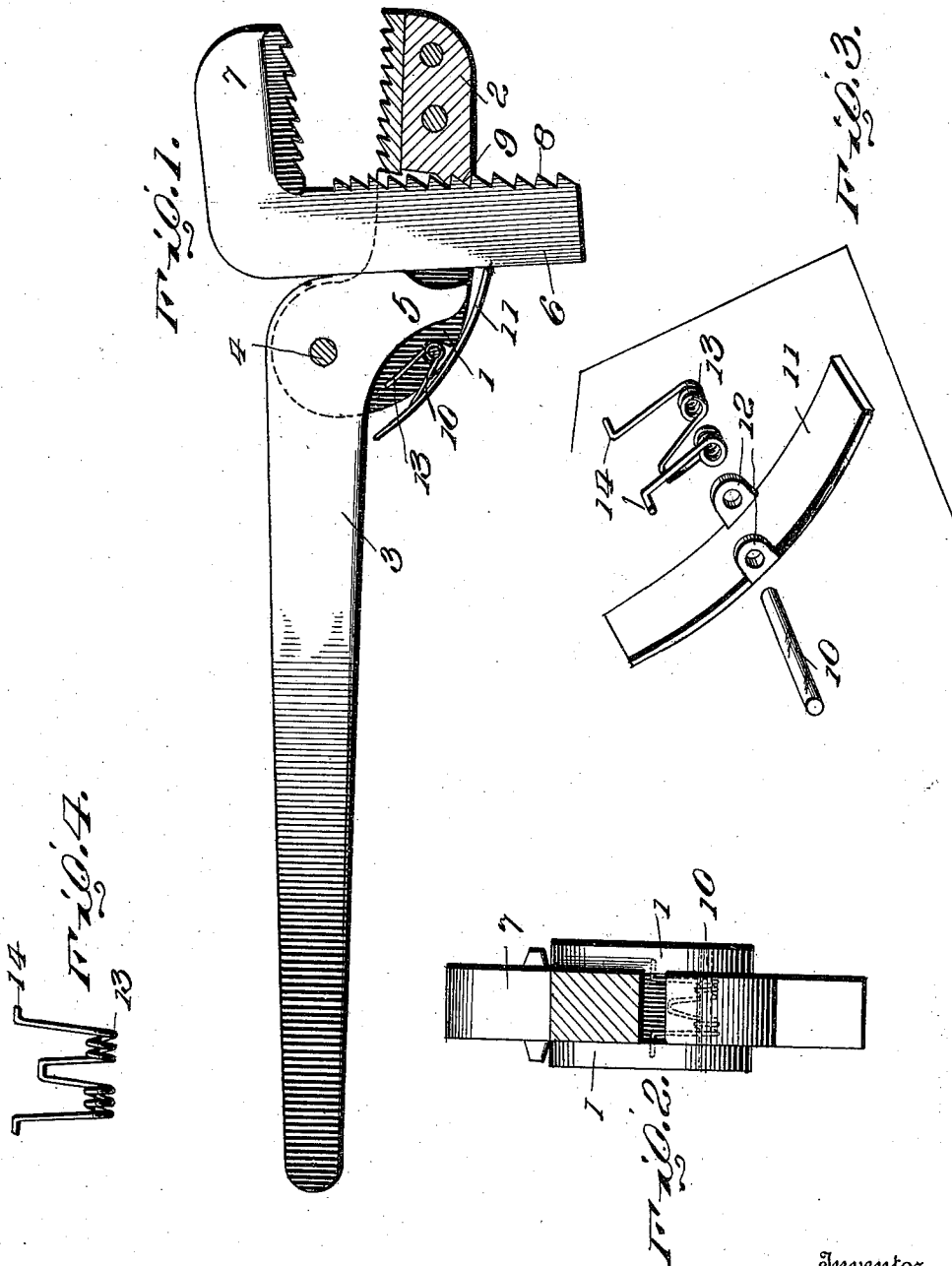


R. O. DOHM.
PIPE WRENCH.
APPLICATION FILED JULY 7, 1910.

977,788.

Patented Dec. 6, 1910.



Witnesses
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UNITED STATES PATENT OFFICE.

ROBERT O. DOHM, OF DANE, WISCONSIN.

PIPE-WRENCH.

977,788.

Specification of Letters Patent.

Patented Dec. 6, 1910.

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To all whom it may concern:

Be it known that I, ROBERT O. DOHM, citizen of the United States, residing at Dane, in the county of Dane and State of Wisconsin, have invented certain new and useful Improvements in Pipe-Wrenches, of which the following is a specification.

This invention comprehends certain new and useful improvements in pipe wrenches, and relates particularly to improvements in that type of wrench embodied in my co-pending application for Letters Patent of the United States filed October 15, 1909, Serial No. 522,827, allowed February 12, 1910.

The present invention has for its primary object an improved construction of wrench of this type embodying improved means for yieldingly holding the relatively movable jaw in place after it has been adjusted, and the invention consists in certain constructions, arrangements and combinations of the parts that I shall hereinafter fully describe and claim.

For a full understanding of the invention, reference is to be had to the following description and accompanying drawing in which:

Figure 1 is a side elevation of my improved wrench, parts being shown in section; Fig. 2 is a transverse sectional view thereof; Fig. 3 is a detail perspective view of a spring held lever employed; and, Fig. 4 is a detail view of the spring of said lever.

Corresponding and like parts are referred to in the following description and indicated in all the views of the accompanying drawings by the same reference characters.

My improved wrench embodies a head which is composed of laterally spaced plates 1 to which the toothed relatively stationary jaw 2 is connected. A handle 3 is fulcrumed between the rear ends of the plates 1, as indicated at 4, the handle being formed with an angularly disposed forward end 5 adapted to engage the rear edge of the shank 6 of the relatively movable jaw 7. The shank 6 extends substantially at right angles to the jaw 7, and is mounted for adjustable movement in the space between the rear ends of the plates 1 and between the jaws 2 and the angularly disposed end 5 of the handle 3. The shank is toothed on its front edge as indicated at 8 and is designed for engagement by one or more teeth 9 formed in the head, as clearly illustrated in the drawing.

A pin 10 is secured to the plates 1 near the

edges thereof, said plates extending transversely as shown, underneath the handle 3 and being designed to support a lever 11, which is formed with apertured ears 12 by which it is fulcrumed intermediate of its ends on said pin. A spring 13 is coiled around the pin 10, said spring embodying an intermediate portion which bears against the rear end of the lever and hooked ends 14 that are engaged with the side plates 1, the spring thereby holding the lever under tension with its forward end pressing forwardly against the rear side of the shank 6.

From the foregoing description in connection with the accompanying drawing, the operation of my improved wrench will be apparent. In order to adjust the jaws, the operator may, by pressing his thumb on the rear end of the lever 11 rock said lever in a direction to carry its front end away from the shank 6 and the jaw 7 may then be moved nearer to or farther away from the jaw 2, so as to effect the required adjustment of the parts. Upon releasing the lever 11, the spring 13 will be permitted to act so as to press against the rear side of the shank 6, the shank being thereby firmly held in engagement with the teeth 9 of the head. By manipulating the handle 3, it is obvious that the movable jaw will be locked tightly into engagement with the work, and upon releasing the pressure on the handle, the movable jaw will be permitted to rock and a fresh hold obtained, the wrench being thereby operated as a ratchet wrench.

Having thus described the invention, what is claimed as new is:

1. A wrench of the character described, comprising a head having an opening extending therethrough, and a jaw in advance of said opening, a handle fulcrumed in the head at the rear of said opening, a movable jaw provided with an angularly disposed shank fitting in said opening, and toothed on its front edge, the first named jaw being toothed to engage the teeth of the shank and the shank being arranged for engagement by one arm of said handle, and a spring pressed lever fulcrumed on the head, one arm of said lever engaging the rear edge of the shank.

2. A wrench of the character described, having an opening extending therethrough and a jaw in advance of said opening, the jaw being provided with a tooth extending into said opening, a handle fulcrumed in

the head at the rear of said opening, a movable jaw provided with an angularly disposed shank fitting in said opening and toothed to engage the teeth of the jaw, a
5 pin secured to the head in the rear of the shank, a lever fulcrumed on said pin to engage the rear edge of the shank, and a spring bearing against the lever and the head and arranged to press one end of the
10 lever into engagement with the shank.

3. A wrench of the character described, comprising a head having an opening extending therethrough, and a jaw in advance of said opening, the jaw being provided with
15 teeth extending into the opening, a handle fulcrumed in the head in the rear of said opening, a movable jaw provided with an angularly disposed shank fitting in said

opening and toothed on its front edge to engage the teeth of the first named jaw, 20 said shank being arranged for engagement by one arm of said handle, a transversely extending pin secured to the head, a lever formed intermediate of its end with apertured ears by which it is fulcrumed on said 25 pin, and a spring secured to said pin, and having an intermediate portion bearing against the lever in a direction to rock the same into engagement with the shank, the ends of said spring engaging the head. 30

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

ROBERT O. DOHM. [L.S.]

Witnesses:

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