

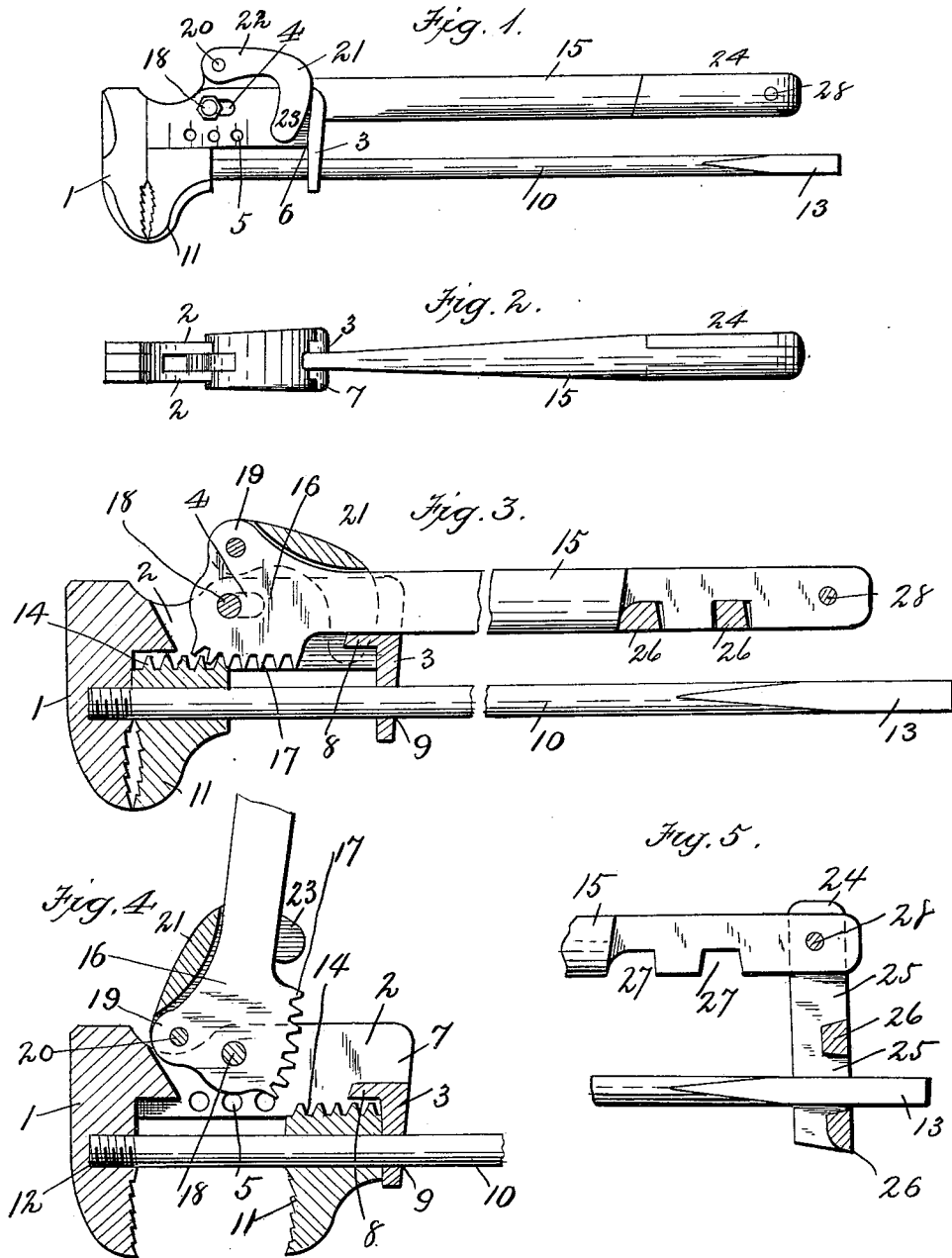
No. 659,281.

Patented Oct. 9, 1900.

J. BEERMAKER.
WRENCH.

(Application filed Apr. 26, 1900.)

(No Model.)



WITNESSES:

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JOHN BEERMAKER, OF WAHOO, NEBRASKA.

WRENCH.

SPECIFICATION forming part of Letters Patent No. 659,281, dated October 9, 1900.

Application filed April 25, 1900. Serial No. 14,288. (No model.)

To all whom it may concern:

Be it known that I, JOHN BEERMAKER, a citizen of the United States, residing at Wahoo, in the county of Saunders and State of Nebraska, have invented new and useful Improvements in Wrenches, of which the following is a specification.

My invention relates to combination-wrenches; and one object of the same is to provide a reliable, efficient, and quickly-adjustable wrench adapted to fit any nut or pipe, together with simple and convenient means for locking the movable jaw in position when adjusted.

Another object is to produce a combination-wrench of comparatively few parts which shall have great strength, ease of adjustment, and reliability when set or adjusted.

I attain these objects by means of the construction shown in the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a side view of my improved wrench. Fig. 2 is a top plan view thereof. Fig. 3 is a central longitudinal section. Fig. 4 is a detail section of the jaws and adjusting-lever. Fig. 5 is a similar view of the handle-latch.

Like numerals of reference designate like parts wherever they occur in the different views.

In said drawings the numeral 1 designates the rigid jaw of the wrench. Integrally formed with said jaw is a slotted frame consisting of the two side bars 2 2 and the depending bracket 3. The side bars 2 are provided with registering slots 4, and aligned sight-openings 5 are also formed in the bars 2 under the slots 4. The bracket 3 has shoulders 6, which project slightly beyond the side faces of the bars 2. Said bracket is also recessed at 7 and has a ledge 8 projecting toward the rigid jaw. A hole 9 is formed in the lower portion of the bracket, and through this hole a rod 10 extends. This rod 10 passes through a perforation in the sliding jaw 11 and is screw-threaded at its end to fit a threaded socket 12 in the rigid jaw 1. The rod 10 may have its outer end 13 formed into a screw-

driver, if found desirable. The jaw 11 slides freely upon the rod 10 when not engaged by the cog-teeth of the adjusting lever or handle. The upper edge of this jaw 11 has a number of cogs or teeth 14. The adjusting lever or handle 15 has a head 16, provided with a series of teeth or cogs 17, which mesh with the cogs or teeth 14 on the jaw 11. The head 16 of the lever 15 is pivoted on the pin 18, passing through a perforation in said head 16 and through the slots 4 in the side bars 2. The head 16 is flat and fits between the side bars 2. A lug 19 is formed on said head 16, and pivoted to said lug at 20 is a lock 21, having the bearing-ears 22 and the locking-lugs 23, which bear against the shoulders 6 on the bracket 3 when the jaws are locked to fit a certain size of nut or pipe. The handle or lever 15 at its outer end has a pivoted latch 24, consisting of a recessed body portion which conforms in shape to the handle end of lever 15 when brought in line therewith. This latch is provided with a number of openings 25 and the intermediate cross-webs 26, which fit in the apertures 27 in the flattened end of the handle when brought in line therewith. This latch is pivoted at 28 to said handle, and when swung out at right angles thereto the rod 10 may be passed through one of the openings 25 to lock the jaws against movement until the rod 10 is released.

The operation of my device is as follows: When it is desired to adjust the wrench to any size of pipe or nut, the handle or lever 15 is swung outward until the cogs or teeth 17 are out of the way of the cogs on the sliding jaw. The jaw 11 is then adjusted by sliding it upon the rod 10. The lever 15 is then brought down, and through the sight-openings 5 the operator can see when the teeth or cogs 14 and 17 are in mesh. When the adjustment is made, the lock 21 is pressed down until the locking-lugs 23 bear against the shoulders 6. The latch 24 is then swung out and the rod 10 is engaged therewith. In this condition the wrench is firmly fixed at the proper adjustment and cannot be changed until the latch 24 is disengaged from the rod 10. It will be obvious from the foregoing that

my device is simple in construction, of few parts which are not liable to get out of order, and which is reliable and efficient in use.

Having thus fully described my invention,
5 what I claim is—

1. A wrench, consisting of a rigid jaw, a rod secured to said jaw, a jaw sliding on said rod, said jaw provided with cogs, a lever pivoted to the frame of the rigid jaw and provided
10 with intermeshing cogs, and a lock pivoted to the lever, and bearing against shoulders on the jaw-frame, substantially as described.

2. A wrench, comprising a rigid jaw on an apertured frame, a rod secured to said jaw,
15 a sliding jaw on said rod, cogs on said jaw, a lever pivoted in slots in the frame and provided with cogs intermeshing with the cogs on the sliding jaw, a lock for said jaws pivoted on the lever, and having locking-ears

which bear against shoulders on the frame, 20 and a pivoted latch for locking the lever after the adjustment is made, substantially as described.

3. A wrench, consisting of a rigid jaw on an apertured frame, a sliding jaw, a pivoted 25 lever for adjusting the jaws, a lock for said lever, cogs on the lever and sliding jaw, and sight-apertures in the frame for indicating when the cogs are in mesh, substantially as described.

In testimony whereof I have hereunto set
30 my hand in presence of two subscribing witnesses.

JOHN BEERMAKER.

Witnesses:

P. J. CAREY,
C. R. GAUCHER.