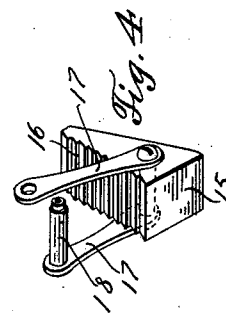
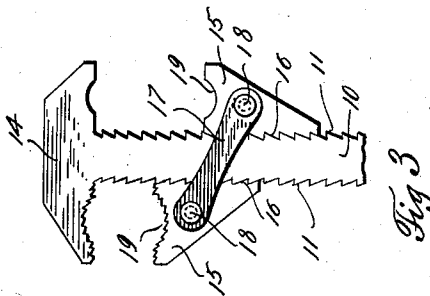
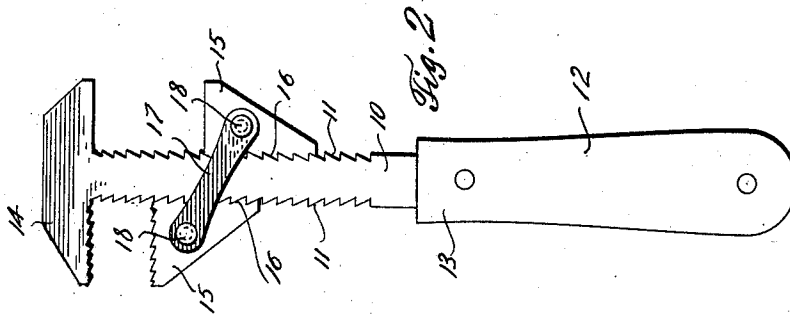
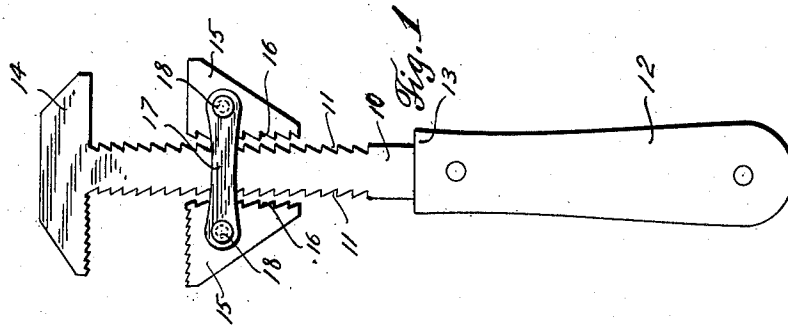


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WRENCH.

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WRENCH.

1,016,776.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JOHN REIBER, a citizen of the United States, residing at Huntington, in the county of Baker and State of Oregon, have invented certain new and useful Improvements in Wrenches, of which the following is a specification.

This invention relates to wrenches and is designed particularly to construct a quick acting wrench which will be adjustable to two nuts at the same time.

A further object is to provide a wrench which will be provided with two slidable jaws connected by a pair of oppositely disposed links so constructed that the greater the pressure on one jaw, the more secure said jaws grip the shank of the wrench.

With the above and other objects in view, this invention consists in the construction, combination, and arrangement of parts, all as hereinafter more fully described, claimed, and illustrated in the accompanying drawings, wherein—

Figure 1 is a side elevation of a wrench constructed in accordance with the present invention, illustrating the same in its inoperative position; Figs. 2 and 3 are similar views of the wrench illustrating the same in operation and a modification thereof respectively; Fig. 4 is a side elevation of the movable jaws removed from the shank, illustrating one of said jaws removed from the connecting links.

In carrying out the present invention a shank is provided having teeth formed on both sides thereof, the upper sides of said teeth being substantially horizontal while the lower sides slope to said horizontal sides. At the upper terminal of the shank is formed a transverse bar forming a stationary jaw on each side of the shank, one of said jaws being serrated, the other substantially smooth. A pair of triangular jaws are slidably mounted on the shank and are provided on their inner faces with teeth oppositely disposed to the teeth on the shank, said slidable jaws being pivotally connected by a pair of oppositely disposed links which when they are substantially horizontal retain said movable jaws from contact with said shank.

Reference being had to the drawings 10 indicates the shank of the wrench constructed in accordance with the present invention, provided on the oppositely disposed sides thereof with the teeth 11, said teeth being so constructed that the upper sides thereof are

normally horizontal while the lower sides slope thereto. A handle 12 is mounted on the lower terminal of the shank 10 and is of any suitable construction and size, having adjacent to the shank an enlargement 13 which retains the slidable jaws about the shank as hereinafter more fully described.

At the upper extremity of the shank is formed a transverse stationary jaw 14 extending outwardly on both sides of the shank 10. Coöperating with the stationary jaw 14 are a pair of slidable jaws 15 which are triangular in elevation and have formed on the inner faces thereof the teeth 16, said teeth being oppositely disposed to the teeth 11 of the shank 10. These slidable jaws 15 are connected by the links 17, said links being secured to the transverse pins 18 which are loosely mounted in the jaws. The transverse pins are provided with a reduced portion at each extremity thereof to be received in an opening in each extremity of each link.

From this construction it will readily be seen that when it is desired to move the jaws upon the shank 10 the jaws are moved until the links 17 are substantially horizontal, at which time the teeth 16 of the jaws are entirely removed from engagement with the teeth 11 of the shank, thus permitting the teeth of said jaws to be moved at will. When the jaws 15 are in their operative position the jaw oppositely disposed to the gripping jaw is moved above the level of said gripping jaw and the teeth thereof are drawn into engagement with the teeth of the shank by the pressure exerted on the gripping jaw. Also the pressure on the gripping jaw forces the teeth thereof into engagement with the remaining teeth of the shank. Thus it will be seen that the slidable jaws 15 are doubly secured on the shank.

In the modifications set forth in Fig. 3 the construction of the jaws is exactly similar to that in the preferred form with the exception that the biting faces of the movable jaws and of the stationary jaw 14 are provided with semi-circular coinciding openings 19 for use as a pipe wrench.

It will be observed by reference especially to Figs. 2 and 3 of the drawings, that the jaws 15 are adapted to be advanced along the shank 10 toward the jaw 14 by a step by step movement and simultaneous pressure on the movable jaws in the direction of the jaw 14 will release the former and permit of free movement thereof toward the latter.

Having thus fully described my invention, what is claimed as new is:

5 A wrench comprising a shank having a stationary double jaw projecting from opposite sides thereof at one end and provided on said sides with series of teeth inclining in the direction of said jaw, a handle at the opposite end of the shank, movable jaws arranged on the opposite toothed sides of the
10 shank and having teeth corresponding with and adapted to engage those of the shank, and links having no connection with and arranged at opposite sides of the shank, the ends of the links having pivotal connections
15 with the movable jaws near the outer work engaging ends of the latter, the pivotal con-

nections aforesaid constituting fulcrums permitting independent pivotal movement of each movable jaw relative to the other jaw whereby a step by step adjustment of the jaws on the shank may be obtained, and whereby a simultaneous pressure on the movable jaws in the direction of the stationary jaw will release the former relative to the shank. 20

In testimony whereof I affix my signature in presence of two witnesses. 25

JOHN REIBER.

Witnesses:

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."