S. R. AUDIBERT.

TOOTHED JAW FOR WRENCHES.

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1,103,927. **Patented July 21, 1914.**

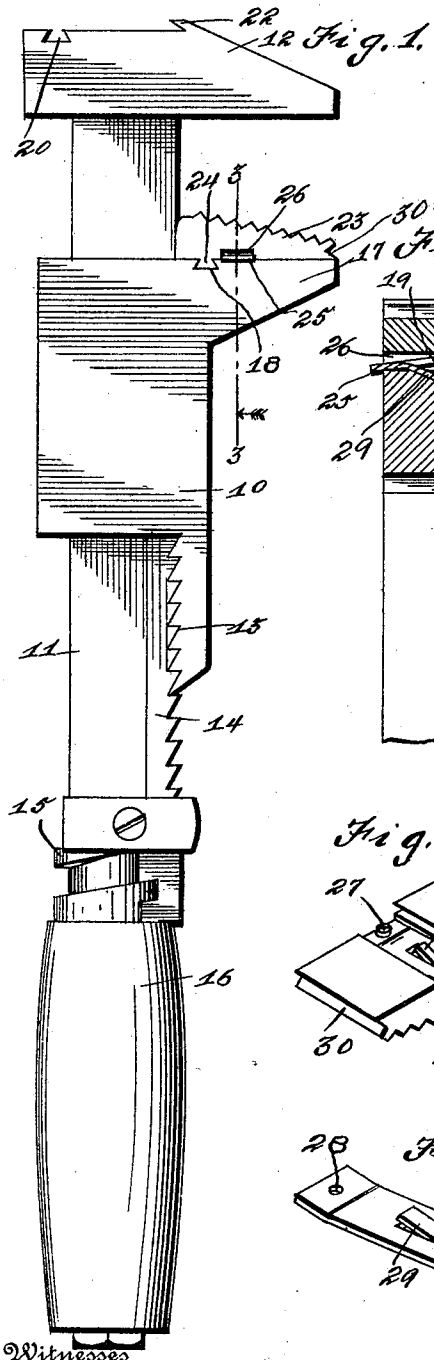


Fig. 1.

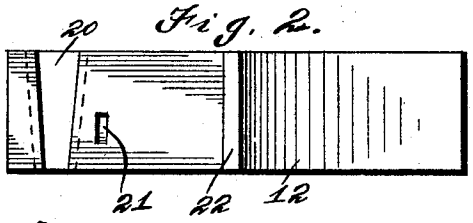


Fig. 2.

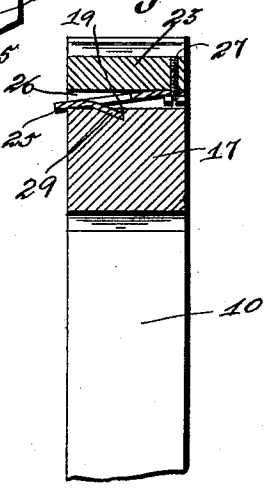


Fig. 3.

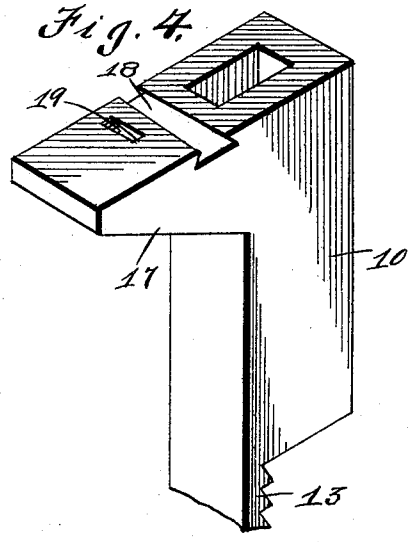


Fig. 4.

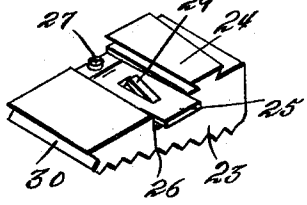


Fig. 5.

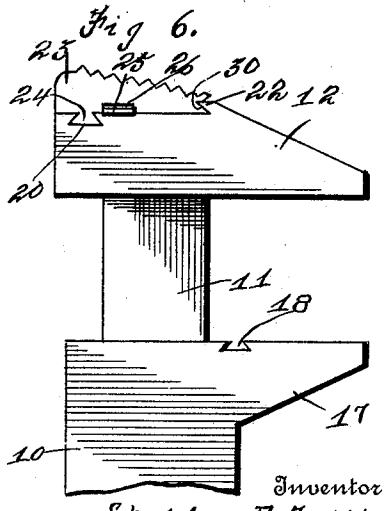


Fig. 6.

Fig. 7.

Witnesses

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TOOTHED JAW FOR WRENCHES.

1,103,927. Specification of Letters Patent. Patented July 21, 1914.

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To all whom it may concern:

Be it known that I, STEPHEN R. AUDIBERT, a citizen of the United States, residing at Fort Kent, in the county of Aroostook and State of Maine, have invented certain new and useful Improvements in Toothed Jaws for Wrenches, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to an improved wrench and the principal object of the invention is to provide the wrench with an improved jaw plate which is so constructed that it may be removably connected with either the stationary or movable jaw, thus permitting the wrench to be converted from a flat jawed wrench into a pipe wrench.

Another object of the invention is to so construct the removable plate of the two jaws of the wrench that the plate may be securely held in place and prevented from working loose while in use, and from being lost while not in use.

With these and other objects in view this invention consists of certain novel combinations, constructions and arrangements of parts as will be hereinafter fully described and claimed.

This invention is illustrated in the accompanying drawing, wherein:

Figure 1 is a side elevation of the improved wrench. Fig. 2 is a view looking at the end face of the stationary jaw. Fig. 3 is a section taken along the line 3—3 in Fig. 1. Fig. 4 is a perspective view of the movable jaw. Fig. 5 is a perspective view of the removable jaw. Fig. 6 is a side elevation showing the jaw plate connected with the stationary jaw. Fig. 7 is a perspective view of the spring latch which holds the plate in the desired position.

The movable jaw 10 is slidably mounted upon the shank 11 of the stationary jaw 12 and is provided with a tooth extension 13 which engages the teeth of a bar 14. This bar 14 engages the threads 15 of the handle 16 so that the movable jaw may be adjusted and then tightened by moving the handle. The movable jaw has its lip 17 provided with a transversely extending under-cut groove 18 which is tapered so that a wedge-shaped slot or seat is formed. A notch 19 is formed in the lip 17 adjacent the seat 18 and is intended to be engaged by a spring latch carried by a removable jaw to be hereinafter described. The stationary jaw 12 is provided with a transversely extending under-cut slot 20 which extends transversely across the outer face of the jaw, and is tapered as shown in Fig. 2, so that the slot or seat 20 will be wedge-shaped. A notch 21 similar to the notch 19 is formed in the stationary jaw so that the removable plate can be held in engagement with the stationary jaw. A rib 22 is formed upon the outer face of the stationary jaw and overhangs the jaw as shown in Fig. 1, so that its seat is formed between the rib 22 and the rear end of the stationary jaw. The removable jaw plate 23 is provided with a toothed outer face which is sloped, as shown in Fig. 1, so that when the plate is connected with the removable jaw it converts the wrench into a pipe wrench of the alligator type. A dove-tailed wedge 24 is formed upon the inner face of the plate 23 and is intended to fit into the slots 18 and 20 so that the plates can be connected with either the stationary or the movable jaw. A spring strip 25 is positioned in a slot 26 formed in the plate 23 and is secured at one end by a screw 27 which passes through an opening 28 so that the strip 25 which is resilient will be permitted to have a certain amount of movement in order to move its spring tongue 29 into and out of the notches 19 and 21. The smaller end of the plate 23 is provided with a groove 30 into which the strip 22 is intended to fit as shown in Fig. 6, thus assisting in holding the plate in engagement with the stationary jaw.

When this device is used as a flat jawed wrench, the removable plate is connected with the stationary jaw, as shown in Fig. 6 with the dove-tailed wedge 24 positioned in the slot 20 and with the tongue 29 positioned in the notch 21. The strip 22 fits into the groove 30 and the plate will, therefore, be securely connected with the stationary jaw and be always convenient to reach when it is desired to convert the wrench into a pipe wrench. When it is desired to use the wrench as a pipe wrench, the strip 25 is pressed toward the inner face of the plate, thus causing the tongue 29 to be raised out of the notch 21 and permitting the plate to be removed from the stationary jaw. The wedge 24 is then slipped into the tapered slot 18 and when the tongue 29 reaches the notch 19, the plate will be connected with the movable jaw as shown in Fig. 1. The wrench will now be converted into a pipe

wrench of the alligator type and can be used for any desired purpose. A wrench has thus been provided which can be used as a monkey wrench or as a pipe wrench and which is so constructed that the removable plate will be securely held in position when in use, and which is also so constructed that the removable plate can be connected with one of the jaws of the wrench when not in use.

What is claimed, is:

1. A wrench comprising a stationary jaw, a shank extending from said stationary jaw, a movable jaw adjustably mounted upon said shank, said movable jaw being provided with a lip having a transversely extending under-cut wedge shaped groove formed in said outer face and being also provided with a notch adjacent said groove, the outer end face of said stationary jaw being provided with a transversely extending under-cut wedge-shaped groove and with a notch adjacent its grooves, a transversely extending strip carried by said stationary jaw and overhanging the outer face thereof, a jaw plate, a dove-tailed wedge carried by said jaw plate and fitting into the under-cut grooves of said movable and stationary jaws, said plate having one end provided with a groove in which the strip of said stationary jaw fits to assist in holding said plate in position, and a resilient strip carried by said plate and having a tongue struck therefrom, the tongue fitting into the notches of said stationary and movable jaws to removably hold said plate in position.

2. A wrench comprising a stationary jaw, a shank extending from said stationary jaw, a movable jaw slidably mounted upon said stationary jaw, one of said jaws being provided with a transversely extending under-cut tapered groove and with a notch positioned adjacent the groove, a strip carried by said last mentioned jaw and overhanging the face of the jaw, a plate provided with a transversely extending groove in its inner face, and with a groove in one end face, a dove-tailed wedge carried by said plate and fitting into the under-cut groove of said jaw to hold said plate connected with said jaw in a position to permit the overhanging strip of said jaw to fit into the end groove of said plate, and a resilient strip secured to the first mentioned groove of said plate and having a tongue struck therefrom to fit into the notch of said jaw whereby said plate may be removably held in place.

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

STEPHEN R. AUDIBERT.

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."