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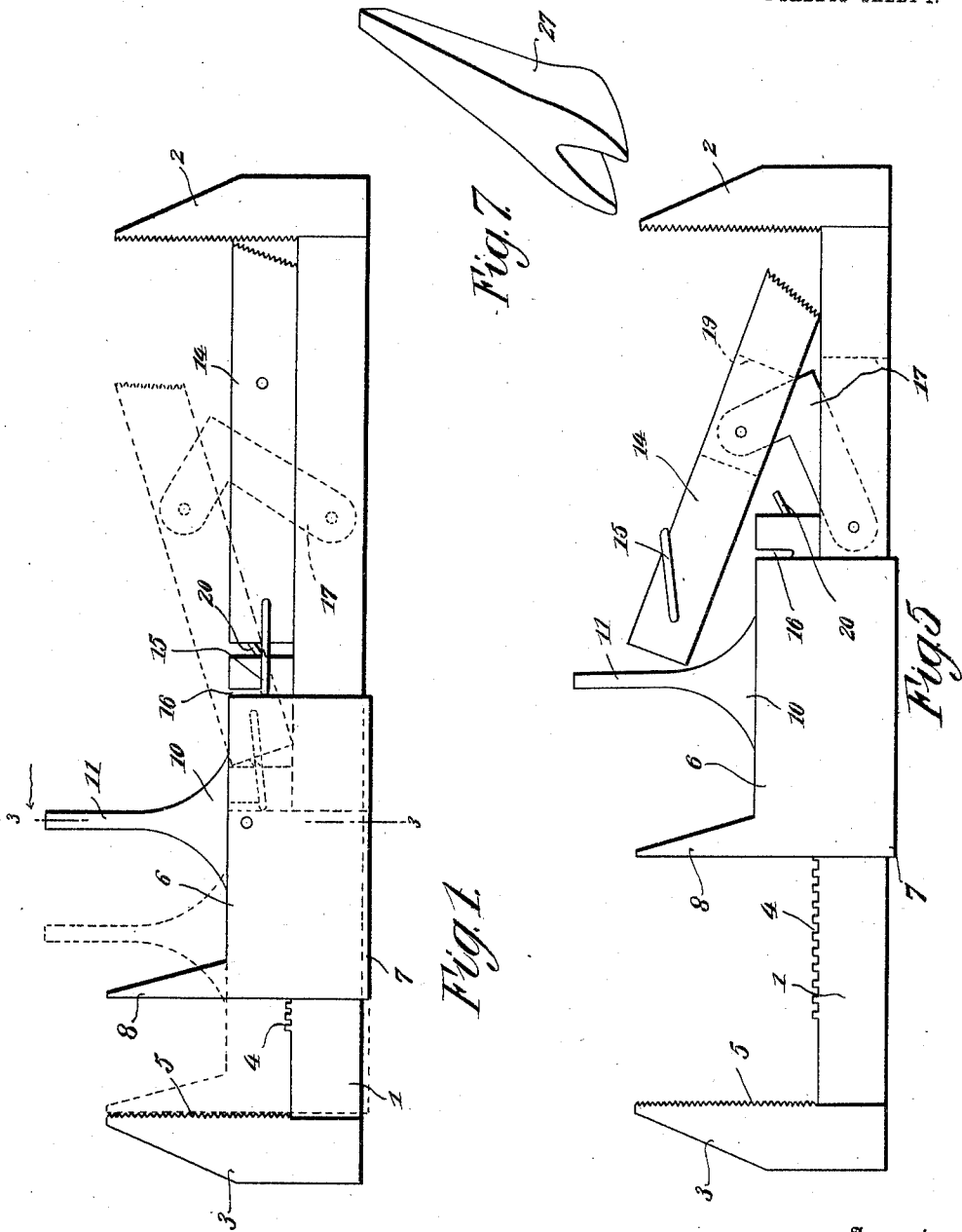
MONKEY WRENCH.

APPLICATION FILED FEB. 14, 1911.

1,009,683.

Patented Nov. 21, 1911.

2 SHEETS—SHEET 1.



Witnesses

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2 SHEETS—SHEET 2.

Fig. 2.

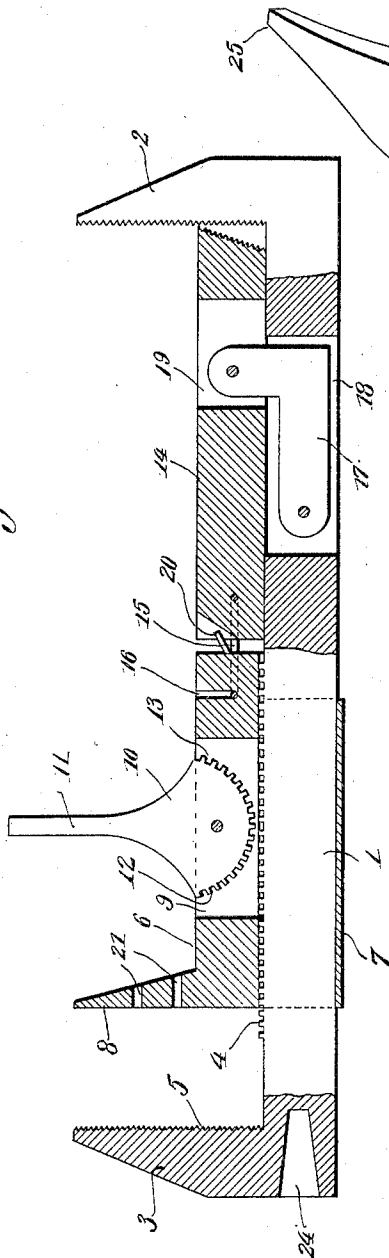


Fig. 3.

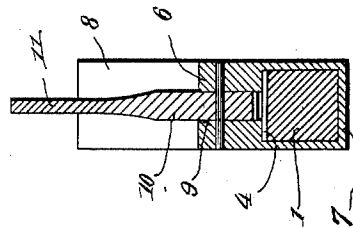


Fig. 4.

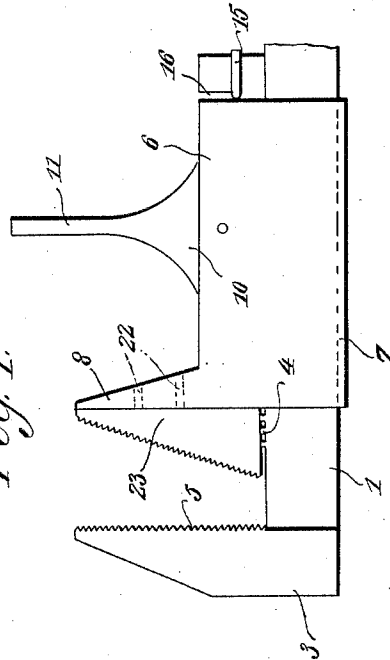
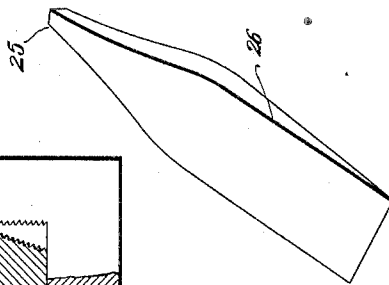


Fig. 6.



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UNITED STATES PATENT OFFICE.

ISRAEL H. MURDICK AND CHARLES J. GAREY, OF BENTON HARBOR, MICHIGAN.

MONKEY-WRENCH.

1,009,683.

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To all whom it may concern:

Be it known that we, ISRAEL H. MURDICK and CHARLES J. GAREY, citizens of the United States, residing at Benton Harbor, in the county of Berrien and State of Michigan, have invented new and useful Improvements in Monkey-Wrenches, of which the following is a specification.

This invention relates to wrenches and more particularly to combination tools of the monkey wrench type.

The object of the invention is to provide a simple, efficient and cheaply constructed device which will combine a monkey wrench and pipe wrench and to provide ready means for attaching a screw driver or nail puller.

A further object of the invention is the provision of a movable monkey wrench jaw and a movable pipe wrench jaw, together with means for connecting the same whereby they may be independently or jointly movable and also providing means whereby either of the jaws may be locked in position to grip a nut or pipe.

Further objects of the invention will appear as the following specific description is read in connection with the accompanying drawings, which form a part of this application, and in which:—

Figure 1 is a side elevation. Fig. 2 is a longitudinal sectional view. Fig. 3 is a detail transverse sectional view on the line 3—3 of Fig. 1. Fig. 4 is a detail side elevation showing an auxiliary pipe gripping jaw mounted in operative position on the movable monkey wrench jaw. Fig. 5 is a side elevation showing the position of the parts when it is desired to operate upon a large sized nut or square or rectangular object. Fig. 6 is a perspective view of the screw driver used in connection with the wrench. Fig. 7 is a similar view of the spike puller.

Referring more particularly to the drawings, 1 represents the shank of the device which is provided, upon its opposite ends, with stationary jaws 2 and 3. The shank is provided on its inner face with a rack surface 4 and the inner face of the jaws is serrated or roughened, as shown at 5. Slidably mounted over the rack surface of the shank is a movable jaw body 6 which is held in position thereon by means of a yoke-shaped casing 7 which surrounds the shank. This jaw body is provided with the movable

jaw 8 adapted to coact with the jaw 3 and has pivoted within the slot 9 a cam lever 10. This cam lever, when in normal position with its handle 11 extending at direct right angles to the jaw body, will not be in engagement with the rack bar but when thrown to either direction the cam surfaces 12 and 13, which are serrated or toothed, will engage the rack bar to lock the jaw body 6 or the movable pipe jaw 14.

The pipe jaw 14 is removably connected to the jaw body 6 by means of a pivoted link 15 carried by the jaw 14 and adapted to engage in the lateral or transverse slot 16 in the jaw body 6. The jaw 14 is pivotally connected to the shank 1 by means of a bell crank rock lever 17 having its lower end operating in a slot 18 in the shank 1 and its upper end operating in a slot 19 in the jaw 14. When the jaw 14 is opened up it separates from the jaw 2 and from the shank 1 and when closed it moves toward the jaw 2 and shank 1 simultaneously, the end of the jaw 14 being held down by means of the pin 20 carried by the jaw body 6 and entering the recess in the adjoining end of the jaw 14. The pin is held in the recess only when the link 15 is in engagement with the slot 16.

The jaw 8 is shown as provided with a socket or aperture 21 in which a pin 22, carried by an auxiliary pipe 23, is adapted to seat, so as to secure this jaw in position, as shown in Fig. 4. When this jaw is used it will be noticed that the jaw body has a comparatively slight movement if the link or loop 15 is in engagement with the slot 16 and in order to accommodate the device so as to be operable upon larger sized pipes, the link 15 is disconnected from the slot and the jaw 14 raised, as shown in Fig. 5, so as to permit the jaw body 6 to slide thereunder.

In the drawings, the end of the shank is shown as provided with a squared recess 24 in which the reduced and squared ends 25 of either the screw driver 26 or the spike puller 27 are adapted to seat and be held therein by friction or in any other suitable manner.

When the lever is thrown toward the jaw 8 the jaw 14 is locked from movement toward the jaw 3 and when the lever is thrown to the left the jaw 8 is locked from movement toward the jaw 2.

Having thus described the invention, what we claim as new is:—

1. A wrench comprising a shank, stationary jaws on opposite ends of the shank, a
5 movable jaw slidably mounted upon the shank, a movable jaw pivoted to the shank, means to removably connect said slidable and pivoted jaws, whereby a movement of one will simultaneously move the other, and
10 means carried by one of the jaws for locking both of said jaws against movement in one direction when said jaws are connected.

2. A wrench comprising a shank, stationary jaws on opposite ends of the shank,
15 a jaw slidably mounted upon the shank and adapted to coöperate with one of the stationary jaws, a second jaw pivotally mounted upon the shank and adapted to operate in connection with the opposite jaw, means
20 for connecting said jaws together, whereby a movement of one will simultaneously move the other, said means comprising a pivoted link carried by one of the jaws and a double acting locking device carried by the slidable

jaw for locking both jaws against movement 25 in one direction when said jaws are connected.

3. A wrench comprising a shank, stationary jaws on opposite ends thereof, a movable jaw slidably mounted upon the shank, 30 a second movable jaw, a bell crank lever for connecting the second movable jaw to the shank, means for removably connecting said jaws together, a double acting locking device carried by said first movable jaw and 35 adapted to lock either of the jaws against movement in either direction, and means for preventing the end of the second movable jaw adjoining the first movable jaw from rising when the second movable jaw is in 40 operation.

In testimony whereof we affix our signatures in presence of two witnesses.

ISRAEL H. MURDICK.
CHARLES J. GAREY.

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."