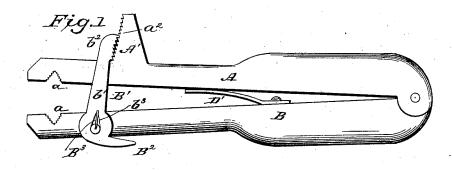
(No Model.)

R. L. MABREY.

WRENCH.

No. 385,464.

Patented July 3, 1888.



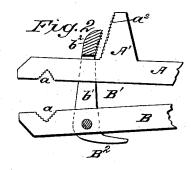


Fig. 3.

Fred G. Dieterich. P.B. Turpin INVENTOR:
RS Makrey
BY Munn Co
ATTORNEYS.

United States Patent Office.

RICHARD LEE MABREY, OF DONIPHAN, MISSOURI.

WRENCH.

SPECIFICATION forming part of Letters Patent No. 385,464, dated July 3, 1888.

Application filed November 15, 1887. Serial No. 255,276. (No model.)

To all whom it may concern:

Be it known that I, RICHARD LEE MABREY, a citizen of the United States, residing at Doniphan, county of Ripley, and State of Missouri, 5 have invented a new and useful Wrench, of which the following is a specification.

My invention is an improved wrench; and it consists in certain novel constructions and combinations of parts, as will be hereinafter

10 described and claimed.

In the drawings, Figure 1 is a side view of a wrench constructed according to my invention. Fig. 2 is a detail view, part in section, of the head end of the wrench; and Fig. 3 is a 15 detail perspective view of a part of the head of the wrench.

The wrench-bars A B have their head ends forming the head of the wrench suitably formed to grip the nut or other object it is desired to 20 turn. This is preferably effected by forming in the inner sides of said bars near their ends V-shaped transverse notches a, and also by providing in said inner faces V-shaped notches a', formed in the direction of length of and 25 opening out of the ends of the bars. These notches a' are useful in turning nuts or bolts, so located that room is not provided for the turning of the wrench in the ordinary manner.

To the lower wrench-bar, B, is pivoted the 30 pawl B', formed, preferably, of the arms b' and the cross-bar b^2 , forming a bail-shaped pawl. This pawl overlaps and engages the upper arm, A, and may be set to hold the bars in any desired adjustment to properly grip the nut or

35 other object.

To insure a proper engagement between the pawl and the bar A, it is preferred to serrate such parts at the point of engagement, so there will be a positive gripping thereof when prop-40 erly adjusted. The bar A has its serrated face a² formed at approximately right angles to its length, the said face inclining slightly backward toward its upper end, as shown, and the cross-bar b^2 of the pawl is serrated on its 45 rear face or side in position to engage the face a^2 . By preference, this face a^2 is formed on a

lug, A', on the upper edge of the bar A. At its lower end this pawl B' has a handle, B2, by which it may be moved, against the action of its spring B3, out of engagement with the ser- 50 rations of the wrench-bar when it is desired to open the wrench. The serrations, it will be seen, are after the form of ratchets, so that when the pawl is engaged therewith the wrench may be closed to fit the nut or other object, 55 but cannot be opened except by releasing the pawl.

The spring B³ is preferably a spring-plate secured at one end of the bar B, or preferably to one of the pivot-studs extended therefrom, 6c on which the pawl is pivoted, and entering a recess, b3, formed in the side bar of the pawl and opening onto said pivot-stud, as shown in

Figs. 1 and 4.

 ${f A}{f t}$ or near their rear ends the bars ${f A}$ ${f B}$ are $\,65$ pivoted together. This may be effected by means of the pivot-pintle, as shown; and when such form of pivot is used it is preferred to arrange a spring, as D', to bear between the bars A B, as shown in said figures.

The construction, it will be seen, is simple, inexpensive, and will be found convenient in

operation.

Having thus fully described my invention, what I claim as new, and desire to secure by 75

Letters Patent, is-

In a wrench, the combination of the bar A, having a lug, A', projected from its upper edge and provided with serrations on the face of said lug, the bar B, having pivot studs pro 80 jeeted from its sides, the bail shaped pawl having its arms pivoted on the said studs and provided in one of said arms with a recess opening onto said stud, and having its crossbar serrated to engage the serrated face of the 85 bar A, and the spring secured to the pivotstud and entering and bearing in the recess of the pawl-arm, substantially as set forth. RICHD. LEE MABREY.

Witnesses:

Jas. K. Langford. JOHN P. CAMPBELL,