

Feb. 7, 1928.

1,658,495

V. B. PETERSON

WRENCH

Filed May 17, 1924

Fig. 1.

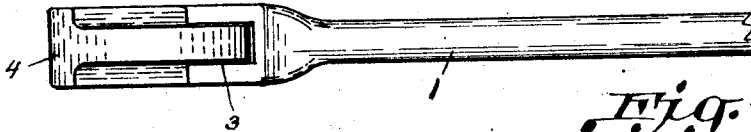


Fig. 4.

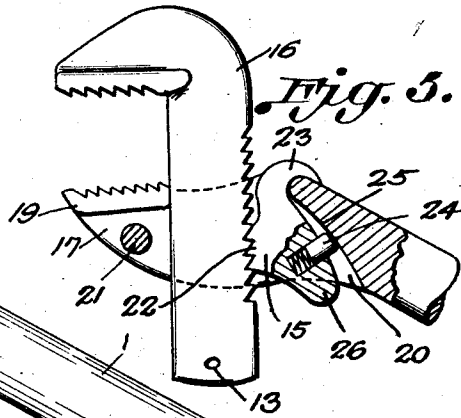
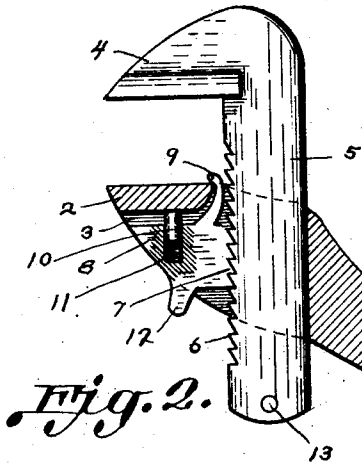
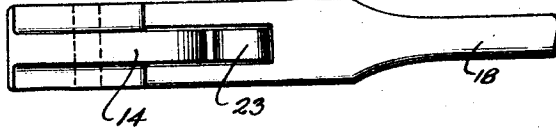
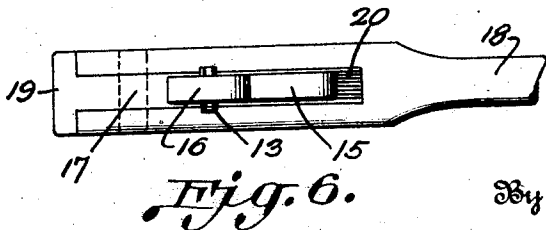
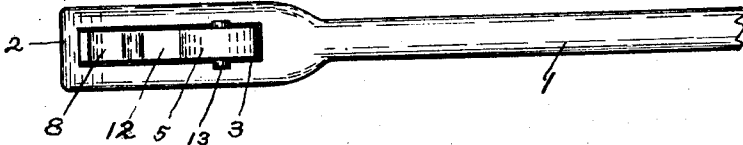


Fig. 3.



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WRENCH.

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This invention relates to a quick adjustable wrench for use either as a pipe or nut wrench, and combining great strength and non-slipping grip, with lightness, and consisting of few parts, rendering it cheap to manufacture and not easily affected by rusting of the parts or abuse in use.

The object of the invention is to provide a wrench that shall be quick and easy of adjustment, and yet positive in its action.

Another object being to construct a wrench having great gripping power and leverage, without crushing strain when applied to pipe or round work.

Still a further object is to provide a wrench that shall consist of few parts, be cheap, durable and efficient and of well balanced proportions.

With these and other objects in view, my invention consists in certain construction and combination of parts as will hereinafter be fully described and claimed, and illustrated in the accompanying drawings which form a part thereof, and in which like figures of reference refer to corresponding parts in all of the views, but it is fully understood that I do not confine myself to the exact design as shown, as slight changes may be made without departing from the spirit of the invention.

In the drawings:—

Fig. 1 is a top view of a wrench embodying my invention, and shown with plain jaws for use with nuts;

Fig. 2 is a side view of the same, shown partly in section to illustrate the construction and operation of the several parts;

Fig. 3 is a bottom view of the same;

Fig. 4 is a top view of another form of the same invention, showing the wrench arranged as a pipe wrench;

Fig. 5 is a side view of the same, partly in section to show the working parts and their arrangement; and

Fig. 6 is a bottom view of the same.

Referring to the drawings and especially to Figs. 1, 2 and 3, the device comprises a handle member 1 formed with the lower jaw 2 which is placed at an angle with respect to the handle 1, and between said jaw 2 and the handle 1, the slotted portion is provided as at 3.

Slidably and adjustably mounted in said slot 3 is the movable jaw member 4 which is provided with the shank 5 formed with the serrations 6 on one edge thereof, and adapted

to coact and interlock with the serrations 7 which are formed on the edge of the latch or locking dog 8. The lower end of said shank 5 is provided with the pin 13, to prevent the removal of the member 4 from the slot 3.

Said locking dog 8 is formed with a hook or finger 9 extending upward between the jaw 2 and the shank 5 and engaging the upper edge of the member 2 to retain and hold said dog 8 in place within the slot 3.

And for retaining said locking dog 8 in a normally locked position with respect to the shank 5 of the movable jaw 4, there is provided a plunger 10 mounted in said dog 8 and actuated by a spring 11 to press against the lower part of the jaw 2 and force the serrated edge 7 into contact or engagement with the serrated edge 6 of the shank 5; while a finger lug 12 is provided by which the dog 8 can be moved outward against the action of the spring 11 to disengage the same for the purpose of allowing the movable jaw 4 to be moved outward either by pushing upward on the lower end of the shank 5, with the thumb, or by inverting the wrench, when the jaw 4 will drop until limited by the retaining pin 13 in the end of the shank 5 which prevents the jaw 4 from being removed from the handle member 1.

In operating the wrench, in closing the movable jaw 4 down on the nut, the top of said jaw 4 is pressed down by the finger or thumb, the serrations passing each other with a click as the dog 8 is forced outward against the spring 11.

It may be noted that in this form of the invention, the serrations are so spaced apart as to correspond to the adjustment required for the standard sizes of nuts within the limits of the wrench.

In Figs. 4, 5, and 6, I have shown the wrench as adapted to pipe or round work, and to give the movable jaw 14 a slight swing, I have placed the dog 15 to the rear of the shank 16, and for the purpose of ease in manufacture and to be able to renew the lower jaw 17, I have milled or slotted the handle member 18 as shown, and inserted therein the lower jaw 17, which is formed with the shoulders or head 19 adapted to rest or bear upon the edges of the handle member 18 adjacent to the slot 20, and retained therein by the rivet 21 extending through the dog 15 and the sides of the handle member 18.

Said stationary jaw 17 also acts as a guide for the shank 16 of the movable jaw 14.

Both of the jaws 14 and 17 are formed with serrations for gripping the pipe, and the jaw 14 has a slight swing as provided in wrenches of this class.

5 The rear or back edge of the shank 16 is also formed with serrations adapted to be engaged and coast with the serrations 22 which are formed on the locking dog 15, which is formed with the hook 23 for engaging the
10 upper edge of the handle member 18, and also having a spring actuated plunger 24 bearing against the wall 25 of the slot 20 to retain the dog 15 in a normally engaged position with respect to the shank 16; but adapt-
15 ed to be released by the finger lug 26.

Having thus described my invention, what

I claim as new and desire to secure by Letters Patent, is

In a wrench of the class described and in combination with a handle member, and a
20 movable jaw member mounted therein, and having a locking dog mounted in said handle member for engagement with the jaw member, of a retaining finger formed on the upper part of said dog for engagement with
25 the handle member, and a lug formed on the lower part of said dog and projecting below said handle member, for the purpose set forth.

In testimony whereof I hereunto affix my
30 signature.

VICTOR B. PETERSON.