

R. W. BRITTSAN & A. L. VAN HORN.
WRENCH.

APPLICATION FILED AUG. 26, 1911.

1,065,209.

Patented June 17, 1913.

Fig. 1

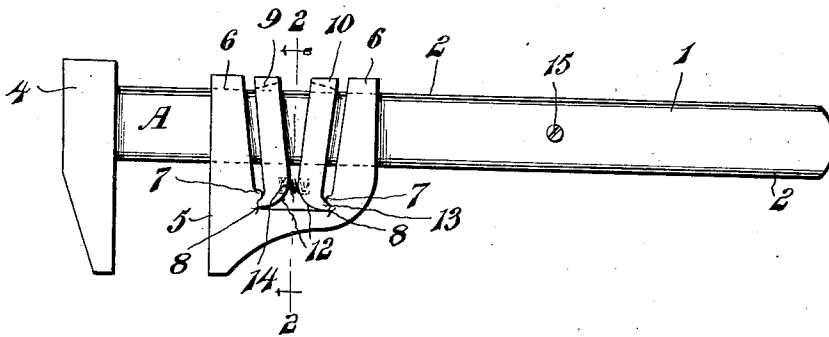


Fig. 2

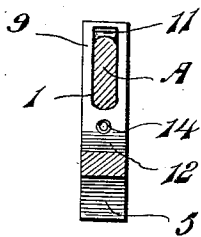
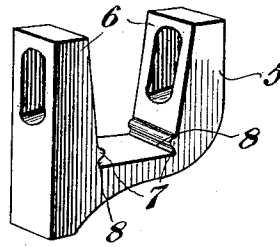


Fig. 3



Witnesses
W. H. Howell.
R. B. Cavanagh.

Inventors
Robert W. Brittsan
Alva L. Van Horn
By Victor J. Evans
Attorney

UNITED STATES PATENT OFFICE.

ROBERT W. BRITTSAN AND ALVA L. VAN HORN, OF KLAMATHON, CALIFORNIA.

WRENCH.

1,065,209.

Specification of Letters Patent.

Patented June 17, 1913.

Application filed August 26, 1911. Serial No. 646,086.

To all whom it may concern:

Be it known that we, ROBERT W. BRITTSAN and ALVA L. VAN HORN, citizens of the United States, residing at Klamathon, in the county of Siskiyou and State of California, have invented new and useful Improvements in Wrenches, of which the following is a specification.

The present invention relates to certain novel and useful improvements in wrenches and has particular application to the type of wrench known commonly as a monkey wrench.

In carrying out our invention, it is our purpose to provide a construction of wrench wherein the use of pivoted levers, screws and threads is dispensed with and it is further our purpose to provide a wrench which may be quickly set to engage desired objects such as a nut or the like.

Still a further object of our invention is to provide a wrench which will embody in its construction the desired features of simplicity, durability, strength and efficiency, and which may be manufactured and marketed at a relatively low cost.

With the above-recited objects, and others of a similar nature in view, the invention consists in the construction, combination, and arrangement of parts, set forth in and falling within the scope of the appended claims.

In the accompanying drawing: Figure 1 is a view in side elevation of a wrench embodying our invention. Fig. 2 is a cross sectional view, taken on the line 2—2 of Fig. 1, looking in the direction of the arrows. Fig. 3 is a perspective view of the movable jaw.

Referring to the accompanying drawings in detail, the numeral 1 indicates the stock or shank of the wrench which is formed of any suitable metal, and has the rear and front longitudinal edges thereof rounded as at 2 while carried at the outer end of the shank or stock is the stationary jaw 4 of any preferred construction.

The numeral 5 indicates the movable jaw which is slidably mounted upon the shank or stock by means of the arms 6—6, suitably spaced apart and having inner faces inclined rearwardly and apart. At the forward ends of the inner faces, or at the point of juncture of said arms with the body of the jaw, we form inwardly projecting lugs 7—7 before which lie the recesses 8—8.

Mounted upon the shank between the two arms of the movable jaw, are the clamping members 9—10, each clamping member being in the form of a bar and having a longitudinal elongated slot 11 therethrough for the passage of the stock or shank of the wrench. The front adjacent end of each of the clamping members is curved forwardly and outwardly, or rounded as at 12, while 13 indicates a tongue or rib formed at the termination of the rounded face of each of the clamping bars or members, said ribs being adapted to lie within the recesses 8—8, beneath the lugs 7 and normally locking the clamping members against movement.

Interposed between the two clamping members 9 and 10 and preferably at the front ends of the clamping members is a spring preferably in the shape of a coiled spring 14 which is connected at its ends to the clamping bars and normally tends to force the bars into locking position relative to the shank of the wrench, this spring maintaining the ribs 13 in the recesses 8. The numeral 15 indicates a stud or pin projecting laterally from the shank of the wrench near the handle thereof to prevent the movable jaw and its operating parts from sliding upon the shank.

From the above description, taken in connection with the accompanying drawings, the construction and manner of employing our improved wrench will be readily apparent. It will be noted that the clamps hold the movable jaw from sliding in either direction and when it is desired to actuate the jaw, to move the latter forward, the inner clamping member 10 is pushed forward at its rear end so as to bring the same substantially into a position at right angles to the shank and by pressing forward on the member, the jaw may be moved toward the stationary jaw. Similarly to shift the sliding jaw inward, the clamping member 9 is grasped near the top and pulled backward into approximately a position at right angles to the shank so that the jaw may be moved rearward toward the handle of the wrench.

It will be noted that we have provided an exceedingly simple and efficient form of wrench which dispenses with the use of gears, racks, pinions, adjusting nuts, pivoted levers and the like, and, furthermore, it will be seen that the moving jaw will be held firmly upon the body of the wrench in

any desired position along the same so that the tool may be operated effectively and with security.

We claim:—

- 5 1. A wrench comprising a shank having a stationary jaw at one end, a movable jaw slidable upon said wrench, two clamping members provided with longitudinal slots for the passage of the shank of the wrench
10 having ribs formed at the front ends thereof adapted to engage with recesses in the movable jaw, and a spring connecting the adjacent front ends of the clamping members.
- 15 2. A wrench comprising a shank having the longitudinal edges thereof rounded, a stationary jaw at one end of said shank, a movable jaw slidably mounted upon the

shank, shoulders on the movable jaw with recesses formed beneath the same, two 20 clamping bars mounted upon the shank of the wrench at the movable jaw and having the front ends thereof outwardly curved or rounded and terminating in rods adapted to lie in the recesses in the movable jaw, the 25 coiled spring connecting the front end of the clamping members, and a stop for limiting the sliding movement of the movable jaw toward the handle.

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

ROBERT W. BRITTSAN.

ALVA L. VAN HORN.

Witnesses:

HILLERY G. PARKER,

DEWEY BEVANS.

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