

B. B. CHASE & E. VAN SICKLE.
WRENCH.

APPLICATION FILED AUG. 8, 1911.

1,033,049.

Patented July 16, 1912.

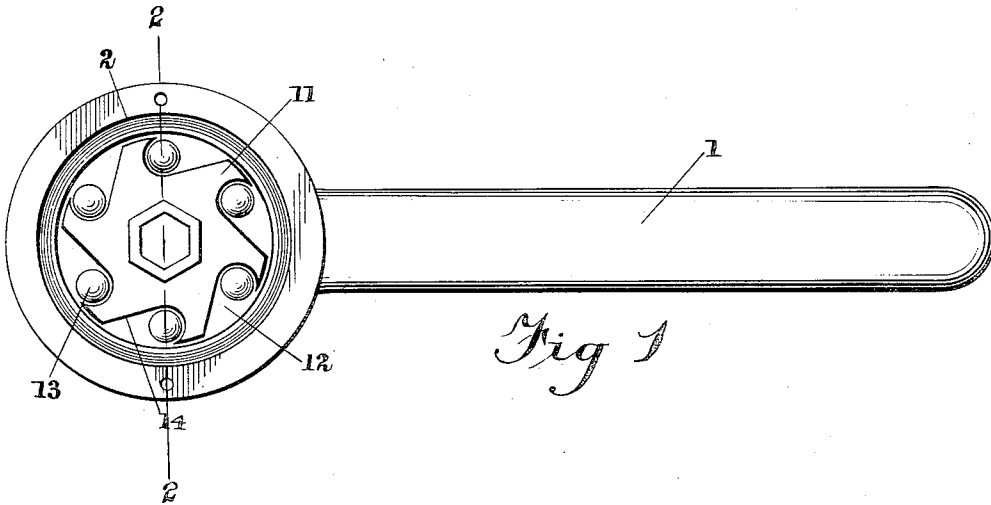


Fig 1

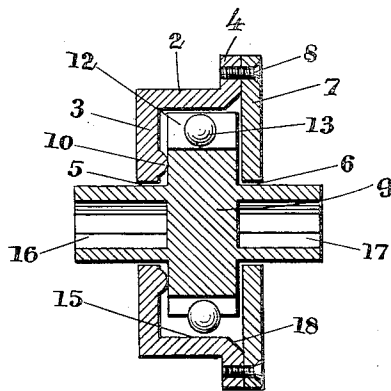


Fig 2

Witnesses
Alfred L. Seiler

[Signature]

Inventors
Burton B. Chase
Emmett Van Sickle
By Victor J. Evans
Attorney.

UNITED STATES PATENT OFFICE.

BURTON B. CHASE AND EMMETT VAN SICKLE, OF PORT JERVIS, NEW YORK, ASSIGNORS
OF ONE-THIRD TO CHARLES N. KNAPP, OF PORT JERVIS, NEW YORK.

WRENCH.

1,033,049.

Specification of Letters Patent.

Patented July 16, 1912.

Application filed August 8, 1911. Serial No. 642,939.

To all whom it may concern:

Be it known that we, BURTON B. CHASE and EMMETT VAN SICKLE, citizens of the United States, residing at Port Jervis, in the county of Orange and State of New York, have invented new and useful Improvements in Wrenches, of which the following is a specification.

This invention relates to wrenches, and has for an object to provide a device of this character which will include a movable socket and means for securely holding the socket against movement in one direction when the socket is engaged with the nut and the wrench operated for the purpose of loosening the nut from a bolt.

In the drawing, forming a portion of this specification and in which like numerals of reference indicate similar parts in the several views:—Figure 1 is a side view of the wrench with the face plate removed. Fig. 2 is a section on line 2—2 of Fig. 1.

Our improved wrench comprises a handle member 1 which is provided at one end with a substantially cylindrical portion 2. The walls of the cylindrical portion 2 are provided at one side with an inwardly extending annular flange 3 and at the opposite side the walls of the cylindrical portion are provided with an outwardly extending flange 4. The flange 3 is provided with a central opening 5 which is disposed in line with the opening 6 in the head 7. The head 7 is disposed in parallel relation to the flange 3 of the cylindrical portion 2 of the wrench, and as shown, said head is detachably secured to the outwardly extending flange 4 by screws or other such equivalent fastening devices 8.

A member 9 is revolubly mounted in the cylindrical portion 2, being confined between the head 7 and the flange 3 thereof, the latter having formed thereon an inwardly extending annular bead 10 which bears against one side of the member 9 as shown. The member 9 is provided with

peripheral teeth 11 which are spaced from each other to define pockets 12 in which the spherical locking elements 13 are engaged. The walls 14 of the pockets which are defined by the teeth of the element 9 are inclined outwardly in the direction of the surface 15 of the cylindrical portion 2 so that when the handle 1 is actuated in one direction the friction bodies 13 will travel on the inclined surfaces 14 of the pockets and be brought into effective frictional contact with the surface 15 so as to cause an effective locking of the element 9 and securely hold the same against rotation in one direction. The member 9 is provided with the oppositely extending nut engaging sockets 16 and 17 which extend through the passages 5 and 6 respectively, hereinbefore described. The walls of the member 2 are inclined outwardly, at 18, from the surface 15 so as to extend in the direction of the head 7. This construction is such that a relatively large passage is provided between the innermost portions of the pockets 12 and the said surface 18 so as to facilitate the insertion of the bodies 13 in said pockets or the removal of such bodies therefrom.

We claim:

A wrench comprising a handle having an integrally formed cylindrical member, the walls of said cylindrical member being provided at one end with an inwardly extending flange provided with a central opening and its other end being flared outwardly and terminating in a laterally extending flange, a removable head member detachably secured to the latter flange and provided with a central opening alining with the former mentioned opening, a revoluble member formed of one piece and having nut-engaging sockets projecting from its face walls in opposite directions and extending through the said central alining openings, said revoluble member being mounted in the cylindrical member and provided with a series of relatively spaced teeth having pe-

ripheral pockets therein, spherical bodies located in said pockets, an inwardly extending annular beading formed on said inwardly extending flange and abutting against one
5 of the faces of said revoluble member, thereby preventing any free longitudinal movement of said revoluble member within said casing.

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

BURTON B. CHASE.
EMMETT VAN SICKLE.

Witnesses:

JAMES C. LAUER,
HENRY W. LA DUE.