C. O'NEILL.

WRENCH.

APPLICATION FILED FEB. 17, 1908.

904,008. Patented Nov. 17, 1908.

Fig. 1.

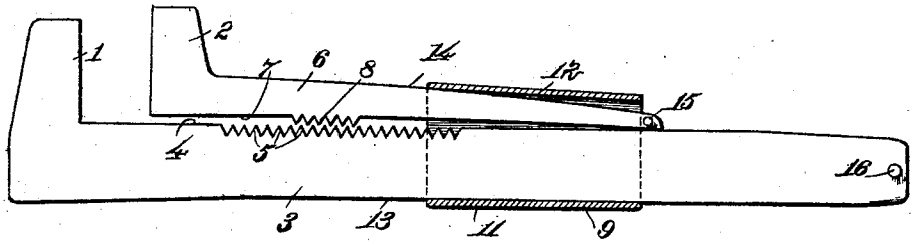


Fig. 2.

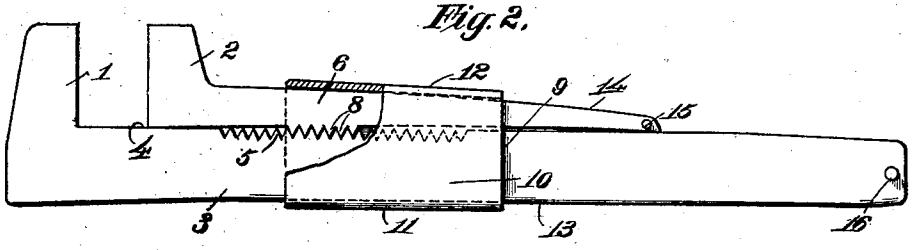
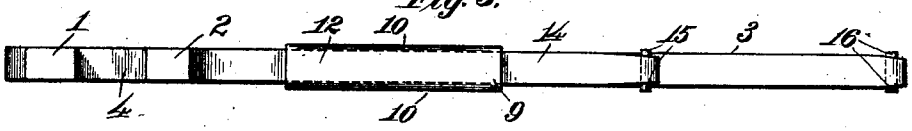


Fig. 3.



Witnesses:

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UNITED STATES PATENT OFFICE.

CORNELIUS O'NEILL, OF CHICAGO, ILLINOIS, ASSIGNOR OF ONE-HALF TO FRED SANTWARE, OF CHICAGO, ILLINOIS.

WRENCH.

No. 904,008. Specification of Letters Patent. Patented Nov. 17, 1908.

Application filed February 17, 1908. Serial No. 416,196.

To all whom it may concern:

Be it known that I, CORNELIUS O'NEILL, a citizen of the United States, residing at 3848 South State street, in the city of Chicago, county of Cook, and State of Illinois, have invented certain new and useful Improvements in Wrenches, of which the following is a specification.

My invention relates to wrenches and particularly to that class thereof wherein the movable jaw is slidably mounted upon the shank of the stationary jaw.

The object of my invention is to provide a wrench of the class mentioned which shall be simple of construction, easily and quickly operated, and which shall be of low cost to manufacture.

Other objects will appear hereinafter.

With these objects in view my invention consists generally in a wrench comprising a stationary jaw having a shank which constitutes a handle, a movable jaw having a shank lying parallel with and slidable upon the shank of the stationary jaw and the sleeve for locking said shanks and consequently the jaws against relative movement, the adjacent edges or faces of the shanks being toothed or notched and the shank of the movable jaw being tapered to permit the sleeve to move to locking or unlocked positions.

My invention further consists in various details of construction and arrangements of parts all as will be hereinafter fully described and particularly pointed out in the claim.

My invention will be more readily understood by reference to the accompanying drawings forming a part of this specification and in which,

Figure 1 is a side elevation of a wrench embodying my invention in its preferred form, the sleeve being shown in section and the parts illustrated in unlocked position. Fig. 2 is a similar view, a portion of the sleeve being broken away and the parts illustrated in locked position, and Fig. 3 is an edge view of the wrench.

Referring to the drawings 1 indicates the stationary jaw of the wrench and 2 the movable jaw. The jaw 1 is provided with a shank 3 extending at right angles thereto and preferably formed integrally therewith. The shank 3 is preferably of uniform thickness and breadth throughout its length, and its inner edge 4 is straight and smooth except for a portion of its length where it is indented or serrated by the teeth 5.

The movable jaw 2 is provided with a tapered shank 6, the taper extending in the opposite direction from the jaw or toward the end of the shank. The shank 6 is of substantially the same thickness as the shank 3 and its inner face 7 is arranged to lie against the face 4 of the shank 3. The face or edge 7 is smooth throughout its length except for a few teeth or serrations 8 adapted to interlock with the teeth or serrations 5 to lock the jaw with relation to the jaw 1. By raising the jaw end of the shank 6 as shown in Fig. 1 the teeth 8 are disengaged from the teeth 5 and the jaw 2 may slide freely on the shank 3.

To lock the shanks, hence the jaws, against relative movement I provide the sleeve 9 which surrounds the shanks 3 and 6. The sleeve comprises the parallel side walls 10—10 which lie against the sides of the shanks and the non-parallel or converging walls 11 and 12 which engage the outer edges 13 and 14 of the shanks 3 and 6 respectively. By sliding the sleeve 9 to the smaller end of the shank 6 the shank may be raised as shown in Fig. 1 to unlock it from the shank 3. When the jaws 1 and 2 are at the desired distance apart the sleeve is shoved upwardly on the shanks binding them firmly together with the teeth 5 and 8 interlocked. The end of the shank 6 is provided with a transverse pin 15 the ends of which engage the ends of the walls 10 and the end of the shank 3 is provided with a similar pin 16. It is obvious that the pins 15 and 16 will prevent dismembering of the wrench or separation of its parts.

Having described my invention what I claim as new and desire to secure by Letters Patent is:

A wrench comprising a stationary jaw having a shank of substantially uniform thickness and breadth throughout its length, a movable jaw having a shank lying parallel with the shank of the stationary jaw, the shanks having serrated edges formed integrally therewith and said serrations being coextensive in width with their respective shanks and the shank of the movable jaw

being tapered, and a tapered sleeve comprising parallel side walls and converging walls to engage the tapered edges of the shanks and adapted in one position to hold said serrations interlocked, and in another position to release them from engagement with each other, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CORNELIUS O'NEILL.

Witnesses:

ANNA L. EKVALL,

HOWARD S. AUSTIN.