

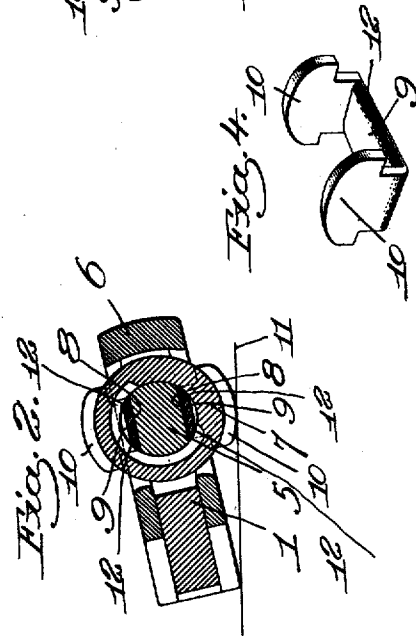
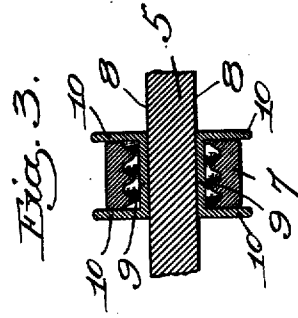
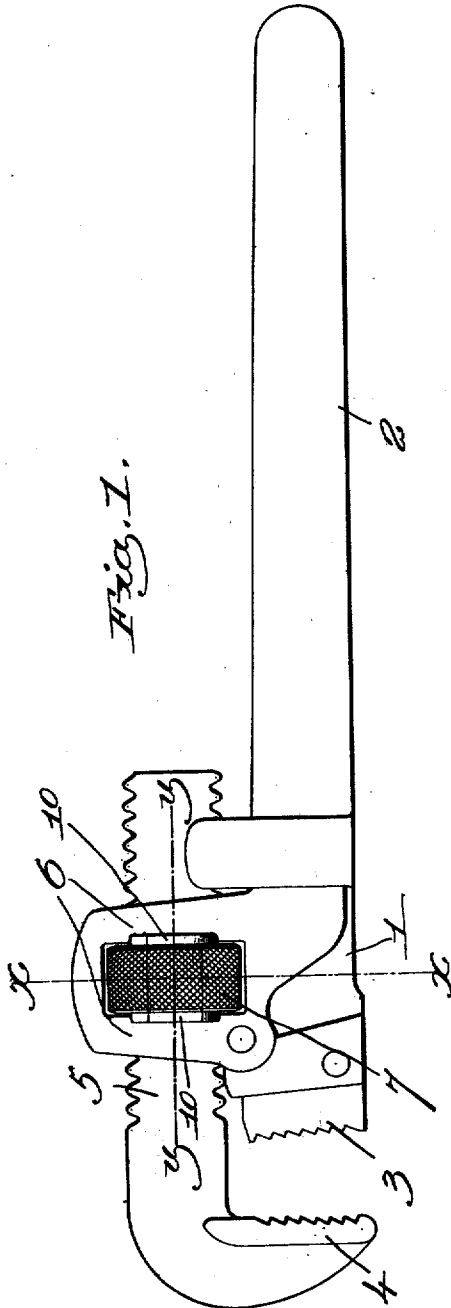
J. H. VINTON.

WRENCH.

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1,012,036.

Patented Dec. 19, 1911.



Witnesses:
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UNITED STATES PATENT OFFICE.

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WRENCH.

1,012,036.

Specification of Letters Patent.

Patented Dec. 19, 1911.

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To all whom it may concern:

Be it known that I, JOHN H. VINTON, a citizen of the United States, residing at Boston, county of Suffolk, State of Massachusetts, have invented an Improvement in Wrenches, of which the following description, in connection with the accompanying drawing, is a specification, like characters on the drawing representing like parts.

10 This invention relates to wrenches and particularly to that type of wrench in which the movable jaw is adjusted by or through the operation of a nut. In many wrenches of this type the nut projects beyond the 15 body of the wrench on opposite sides so as to provide a projecting portion which can be readily grasped when it is desired to turn the nut. If a wrench of this sort is laid down on a flat surface the periphery 20 of the nut engages the surface, and if the wrench is accidentally moved over the surface the friction of the nut thereagainst is very likely to turn the nut and thus destroy the adjustment of the jaws.

25 The object of my invention is to provide means for preventing the nut from becoming accidentally turned when the wrench is laid down or is moved about over a surface on which it rests.

30 I accomplish my object by providing a nut guard which is associated with the nut and which projects beyond the nut sufficiently so that when the wrench is laid down it will be supported on the nut guard and 35 not on the nut, and the nut will be prevented from contacting with the supporting surface.

My invention is capable of employment in almost any wrench wherein the movable jaw 40 is operated by turning a nut or its equivalent, but in order to illustrate the principle of the invention I have chosen to show it as it would be embodied in a well-known type of pipe wrench.

45 In the drawings Figure 1 is a side view of a wrench having my invention applied thereto; Fig. 2 is a section on the line $x-x$, Fig. 1; Fig. 3 is a section on the line $y-y$, Fig. 1; Fig. 4 is a perspective view of one 50 of the nut guard members.

The wrench herein shown comprises the wrench body 1 having the handle 2 and fixed jaw 3 integral or rigid therewith and the movable jaw 4 which is provided with 55 the screw-threaded shank 5 that slides

through the guide 6 formed on the wrench body and that has screw-threaded engagement with the nut 7 that is confined in said guide 6 and is held from longitudinal movement thereby. The screw-threaded shank 5 60 is shown as having two opposed flat sides 8 which fit corresponding flat faces in the opening through the guide 6.

The parts thus far described are such as are commonly found in pipe wrenches, or in 65 fact in some types of monkey wrenches, and form no part of my present invention, it being understood that the movable jaw 4 is given its movement simply by turning the nut 7. In this type of wrench the nut 7 is 70 of such a diameter that it projects beyond the wrench body on opposite sides thereof, the projecting portions of the nut affording means by which the nut can be readily 75 turned. As stated above when a wrench of this sort is laid down on its side the nut will contact with the surface on which the wrench rests and if the wrench is accidentally moved over the surface the nut is liable 80 to be turned, thus destroying the adjustment of the jaw 4.

My invention comprises a nut guard which is associated with the nut and which supports the wrench when the latter is laid 85 down. This nut guard may have a variety of constructions without departing from my invention. One simple and convenient construction is that herein illustrated wherein two guard members are employed, one on 90 either side of the shank 5. These guard members have a general U-shape, as shown in Fig. 4, and each is formed with the flat body portion 9 which overlies the flat face 8 of the shank and extends through the nut 7 and with the wings or arms 10 which over- 95 lie the sides of the nut and are of a size to project beyond the periphery of the nut, as clearly seen in Figs. 2 and 3. I will preferably use a guard member of this nature on each side of the shaft 5, both 100 guard members extending through the nut and the wings 10 thereof overlying the ends of the nut and extending beyond the periphery. These guard members are prevented from turning by their engage- 105 ment with the shank 5, but they do not interfere at all with the turning of the nut. Since the wings 10 project beyond the periphery of the nut it will be readily seen that when the wrench is laid down on its 110

side, as shown in Fig. 2, said wrench will rest on the wings 10, thus holding the periphery of the nut 7 above the surface 11 on which the wrench rests. Since the nut 7 is entirely out of contact with the surface 11 said nut will not be turned at all by any movement of the wrench over the surface as would be the case if the nut rested directly on the surface.

10 In the preferred embodiment of my invention the wings 10 are wider than the body portion 9 and have a sufficient extent of bearing surface at their outer ends so that they will prevent the nut from contacting with the surface 11 in any position of the wrench. I wish to state in this connection that my improvements are not limited to the type of wrench herein illustrated, as the principle of the invention can be embodied in almost any wrench where the jaw is turned by a nut or other equivalent part whether the nut is situated as shown in the drawings or is placed at the end of the wrench handle, or in any other location. I, therefore, wish to cover this feature broadly regardless of the particular construction of the wrench.

15 In practice I propose to make the body portion 9 of each guard member of a size to substantially fill the space between the flat face 8 and the interior of the nut 7, said body portion having the rounded edges 12 as seen best in Fig. 2. The advantage of this construction is that the nut will operate more evenly and with less loose play than where a comparatively large space exists between the sides 8 and the nut interior

as would be the case if the nut guards were not present.

Having fully described my invention, 40 what I claim as new and desire to secure by Letters Patent is:—

1. In a wrench, the combination with a wrench body, of a movable jaw having a screw-threaded shank, a nut screw-threaded 45 to said shank, and a nut guard extending through the nut and provided with wing portions overlying the ends of the nut and projecting beyond the periphery thereof.

2. In a wrench, the combination with a wrench body, of a movable jaw having a 50 flat-sided screw-threaded shank, a nut encircling said shank, and a U-shaped guard member extending through said nut and provided with wings which overlie the end 55 thereof and extend beyond the periphery thereof.

3. In a wrench, the combination with a wrench body, of a movable jaw having a screw-threaded shank provided with opposed flat sides, of a nut embracing said 60 shank, and two guard members each having a flat body portion overlying a flat side of the shank and provided with laterally-extending wings or arms which embrace the nut and extend beyond the periphery 65 thereof.

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

JOHN H. VINTON.

Witnesses:

LOUIS C. SMITH,
THOMAS J. DRUMMOND.

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