

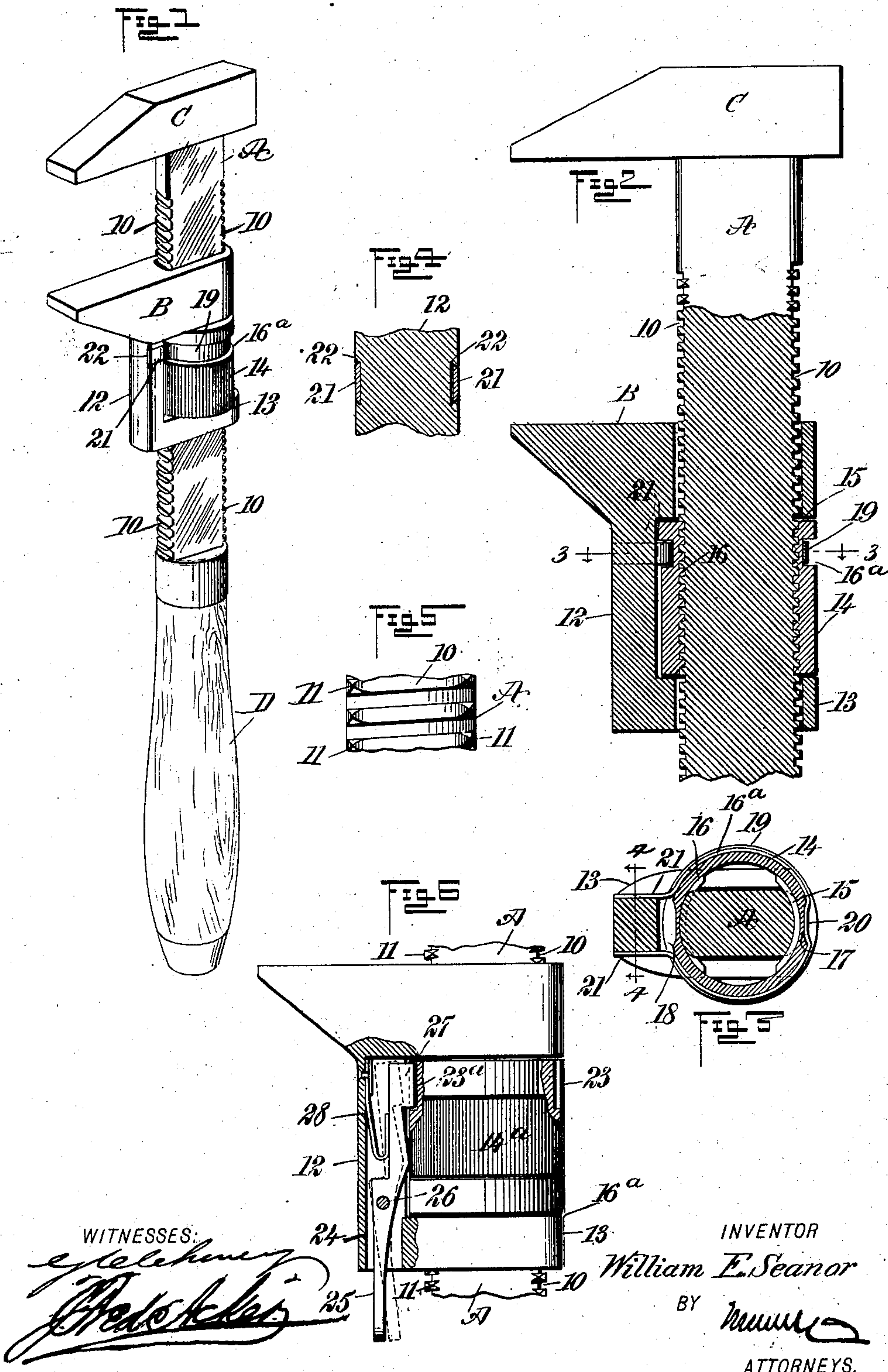
No. 742,240.

PATENTED OCT. 27, 1903.

W. E. SEANOR.
WRENCH.

APPLICATION FILED JAN. 17, 1903.

NO MODEL.



UNITED STATES PATENT OFFICE.

WILLIAM E. SEANOR, OF HOPE, IDAHO.

WRENCH.

SPECIFICATION forming part of Letters Patent No. 742,240, dated October 27, 1903.

Application filed January 17, 1903. Serial No. 139,418. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM E. SEANOR, a citizen of the United States, and a resident of Hope, in the county of Kootenai and State of Idaho, have invented a new and Improved Wrench, of which the following is a full, clear, and exact description.

The purpose of the invention is to provide a wrench in which the movable jaw can be expeditiously and conveniently adjusted upon the shank or body of the wrench to and from the fixed jaw and as conveniently and rapidly locked in adjusted position against all strain to which the movable jaw may be subjected, and to accomplish the foregoing results with a construction which is simple, economic, and reliable.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view of the improved wrench. Fig. 2 is a sectional side elevation of a portion of the shank of the wrench and a vertical section through the sliding jaw, actuating-nut, and locking device, the said view being drawn on an enlarged scale. Fig. 3 is a transverse section taken practically on the line 3 3 of Fig. 2. Fig. 4 is a vertical section taken substantially on the line 4 4 of Fig. 3. Fig. 5 is a fragmentary exterior view of the threaded portion of the body-shank of the wrench; and Fig. 6 is a sectional side elevation of the movable jaw and a side elevation of a portion of the shank upon which the movable jaw slides, illustrating a slight modification in construction.

A represents the shank or body of the wrench, which is provided at its front and rear edges with threads 10, and these threads are made tapering or are brought to a point, as is shown at 11 in Fig. 5, in order to engage more readily with the threads in the nut 14, hereinafter described. The fixed jaw C is attached to the shank A in the customary manner.

The lower or movable jaw B is provided with a guide-yoke consisting of a guard-stand-

ard 12, which extends down from the under side of the lip-section of the said jaw B, and a ring-section 13, integral with or attached to the said guard-section 12. The guard-section 12 is located in front of the body-shank A, and the ring-section 13 loosely receives the said shank.

A nut 14 is received by the yoke extension on the lower or movable jaw B, and this nut 14 is provided with broken threads 15 and 16 at diametrically opposite sides, as is shown in Fig. 3, and when the lower jaw is to be adjusted up or down it is accomplished by the threads 15 and 16 of the nut engaging with the threads 10 of the body-shank A. When the threads of the nut 14 are out of engagement with the threads of the body-shank A or are opposite the side faces of the said body-shank, the nut 14, and consequently the lower or movable jaw B, may be freely moved to and from the fixed jaw C, so as to make a quick adjustment relative to a nut or other object to be clamped or operated by the wrench.

The nut 14 is provided with an exterior annular groove 16^a and with recesses 17 and 18 in the back wall of the groove. These recesses are diametrically opposite, and are produced in the outer surface of the nut at the back of the threads 15 and 16, as is also shown in Fig. 3. In connection with the nut 14 a locking-spring 19 is employed, which is in the form of an open ring loosely fitting in the groove 16^a in the exterior of the said nut, and the said locking-spring has a depressed section 20, which when it enters a recess 17 or 18 serves to hold the nut 14 stationary, and consequently the lower or movable jaw B in its adjusted position.

The ends 21 of the spring 19 are more or less dovetailed in cross-section and are made to enter, preferably, dovetailed recesses 22 in the side portions of the guide-section 12 of the yoke, the ends of the spring being secured in any approved manner, and such attachment of the locking-spring in the guide-section 12 of the yoke may be made by tightly fitting the terminals of the said locking-spring in the recesses 22 or by securing them therein through the medium of a screw, a pin, or the like, or, if desired, one terminal member 21 of the locking-spring 19 may have movement in its recess 22.

Instead of a locking-spring 19 being employed to hold the adjusting-nut 14 in its adjusted position a lever may be utilized instead, as is illustrated in Fig. 6, in which figure it will be observed that the adjusting-nut 14^a is provided with opposing recesses 23 and 23^a, exteriorly located and more pronounced than the depressions 17 and 18, (shown in Fig. 3,) and the guide-section 12 of the yoke carried by the lower or adjustable jaw B is provided with a longitudinal chamber 24, in which chamber a lever 25 is fulcrumed between its ends by a suitable pivot-pin 26, and this lever is provided at its upper end with a head 27, adapted to enter either of the recesses 23 and 23^a, the head 27 being normally held in position to enter the said recesses by a suitable spring 28. Under this latter construction when the nut is to be released from the locking-lever 25 the lower end of the lever is carried inward, as is shown by dotted lines in Fig. 6, thus removing its head 27 from the recess 23 or 23^a, which it may have entered, thus permitting the nut 14^a to be freely turned, whereas when the locking-spring 19 is employed to hold the adjusting-nut of the wrench in locking position the nut may be carried from locking engagement with the spring by forcibly turning the nut by the fingers against the resistance of the spring.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. In a wrench the combination with a threaded shank having a fixed jaw and a movable jaw cooperating therewith, of a nut carried by the movable jaw and having threaded engagement with the shank and adapted to rotate thereon to operate said movable jaw, said nut having an annular recess with depressions in its back wall, and a spring carried by the movable jaw and having a section adapted to engage one of said

depressions to hold the nut against accidental movement, as set forth. 45

2. In a wrench, the combination with a body-shank having opposing flat side faces and threads at its forward and rear edges, which threads at their extremities are made to approach a point, a lower jaw movable upon the body-shank and provided with a yoke extending in direction of the inner end of the said body-shank, a nut held to turn in the said yoke, freely around the body-shank, the said nut being provided with interior diametrically opposite broken threads, the adjusting-nut being also provided with a plurality of recesses on its outer periphery, and a locking device carried by the yoke and held to yieldingly engage one or the other of said recesses for the purpose described. 50 55 60

3. In a wrench, the combination with a shank having opposing flat sides and threads at its front and rear edges, and a jaw fixed to the outer end of said shank, of a second jaw movable on the body-shank to and from the fixed jaw, a yoke carried by the movable jaw and loosely received by the said body-shank, a nut carried by the said yoke, which nut surrounds the body-shank and is provided with interior diametrically opposite broken threads and with exterior diametrically opposite recesses, and an open locking-ring having its ends attached to the said yoke and its body portion fitted around the exterior of the said adjusting-nut, the said locking-ring being provided with a depression adapted in one position of the adjusting-nut to enter an exterior recess therein, as set forth. 65 70 75 80

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

WILLIAM E. SEANOR.

Witnesses:

S. P. DOMER,

J. W. MCARTHUR.