

F. E. RUSH.
WRENCH.

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1,155,278.

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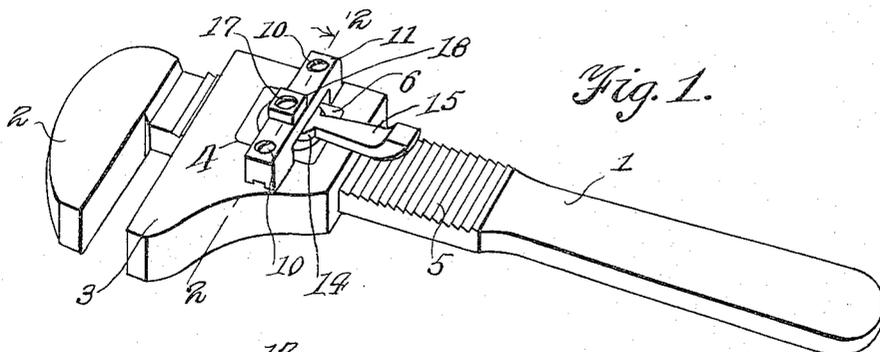


Fig. 1.

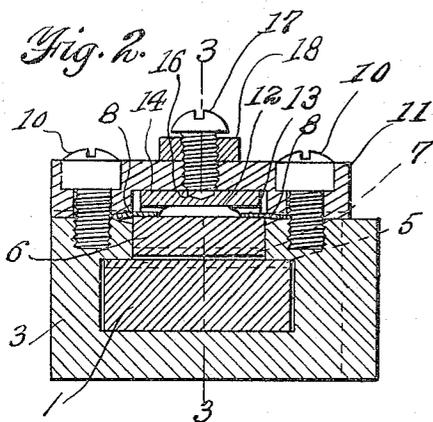


Fig. 2.

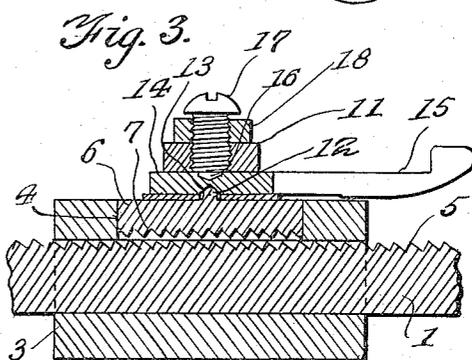


Fig. 3.

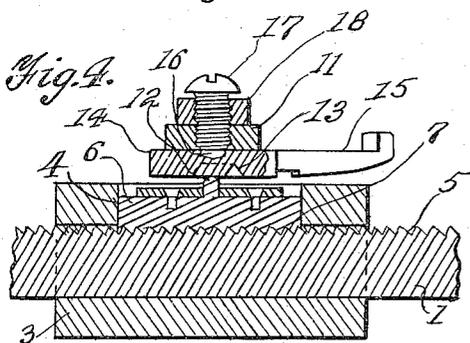


Fig. 4.

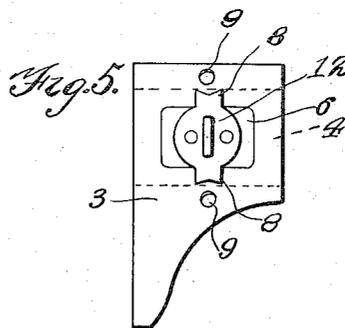


Fig. 5.

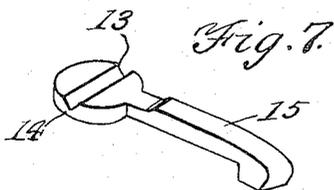


Fig. 7.

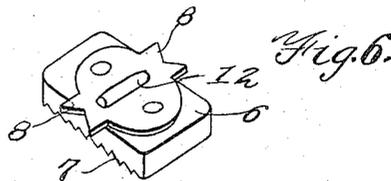


Fig. 6.

Witnesses

H. Hallenberger
Wm. J. Smith

Inventor

Frank E. Rush.

By

Victor J. Evans

Attorney

UNITED STATES PATENT OFFICE.

FRANK E. RUSH, OF SULLIVAN, INDIANA.

WRENCH.

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To all whom it may concern:

Be it known that I, FRANK E. RUSH, a citizen of the United States, residing at Sullivan, in the county of Sullivan and State of Indiana, have invented new and useful Improvements in Wrenches, of which the following is a specification.

The present invention relates to improvements in wrenches, and the primary object of the invention is to provide novel and effective means for the rapid and easy adjustment of the sliding or movable jaw.

The invention resides in the peculiar construction and arrangement of parts and features and in certain parts thereof, substantially as illustrated and as set forth hereinafter.

In the accompanying drawing: Figure 1 is a perspective view of a wrench constructed in accordance with the present invention, Fig. 2 is a transverse sectional view approximately on the line 2—2 of Fig. 1, Fig. 3 is a longitudinal sectional view on the line 3—3 of Fig. 2, Fig. 4 is a similar sectional view illustrating the lever actuated to lock the slidably jaw upon the shank of the stationary jaw, Fig. 5 is a detail side elevation of the friction block and its spring member arranged upon the movable jaw, the operating mechanism being removed. Fig. 6 is a detail perspective view of the friction or tooth member and spring attached thereto, and Fig. 7 is a perspective view of the operating lever, looking toward the inner face thereof.

In the drawings, the numeral 1 designates the shank of the wrench having at one of its ends a fixed jaw 2. The movable jaw 3 is slidably mounted upon the shank and is capable of moving the entire length thereof.

The carriage of the movable jaw has one of its sides provided with a cut-away portion or opening 4 which communicates with one of the sides of the shank 1 when the said shank is arranged in the bore of the movable jaw and the said side of the shank is provided with transverse teeth 5.

Arranged within the opening 4 and filling the same is a block 6, the said block preferably having its inner face provided with teeth 7 which are adapted to engage said teeth when the block is forced toward the teeth 5 of the shank 1. The outer face of the block 6 has either formed therewith or secured thereon laterally extending spring arms 8 which may be received in suitable

depressions provided in the carriage of the movable jaw which communicate with the depression within which the block is received, or the spring members, which are centrally arranged upon the said block, may have their ends around and disposed adjacent the opposite threaded openings 9—9 provided in the shank of the movable jaw.

Engaging with the openings 9 are threaded members 10 which secure the bracket 11 transversely of the opening 4 and of the block 6. The block 6 upon its said outer face is provided with a laterally disposed lug 12, the corners of which are preferably rounded, and the said lock is adapted to contact with a substantially rounded kerf or depression 13 provided in the head 14 of an operating lever 15. The lever has its head arranged within the central and reduced portion of the bar or bracket 11 and the outer face of the head 14 provided with a rounded aperture or depression 16 which receives the end of a set screw 17 provided centrally in the bar or bracket 11, the said screw being provided with a binding nut 18, so that the contacting engagement of the said screw with relation to the head 14 of the operating lever may be regulated.

It will be apparent that when the handle of the lever is arranged centrally and longitudinally of the shank of the wrench, the kerf 13 and the head 14 thereof will receive the lug 12, so that the spring members acting upon the block will elevate its engaging face out of contact with the teeth 5 of the shank 1, but it will also be apparent that when the lever is swung to bring the lug out of its kerf to permit of the head bearing against the said lug, the block 6 will be moved within its depression or opening to have its friction face contact with the friction face 5 of the shank of the stationary jaw.

From the above description, taken in connection with the accompanying drawings, the simplicity of the device, as well as the advantages thereof will, it is thought, be perfectly apparent to those skilled in the art to which such invention appertains without further detailed description.

Having thus described the invention, what I claim is:

In a wrench, the combination with a shank having a fixed jaw, of a movable jaw slidably mounted upon the shank, said movable jaw having a substantially rectangular opening communicating with the shank, a

rectangular block filling and arranged for lateral movement through the opening, said block having an inner friction face, a spring secured to the block and extending laterally
5 thereof, the extension of the spring being received in depressions in the movable jaw, a lug arranged centrally of the block upon its outer face, a bar straddling the block and its spring and secured to the movable
10 jaw, said bar having a central reduced portion, a lever having its head arranged within the said reduced portion of the bar, the head of said lever having a kerf normally receiving the lug of the friction block, an
15 adjustable means contacting with the head

of said lever for normally retaining its kerf in alinement to receive the said lug, said lever adapted to force the block against the compression of the spring to bring its friction surface into contact with the shank of
20 the wrench when the lever is swung to bring the lug out of its kerf and its head in contact with said lug.

In testimony whereof I affix my signature in presence of two witnesses.

FRANK E. RUSH.

Witnesses:

I. N. CASHNER,
E. P. HILL.

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