

J. M. HODGSON.

WRENCH.

APPLICATION FILED APR. 11, 1910.

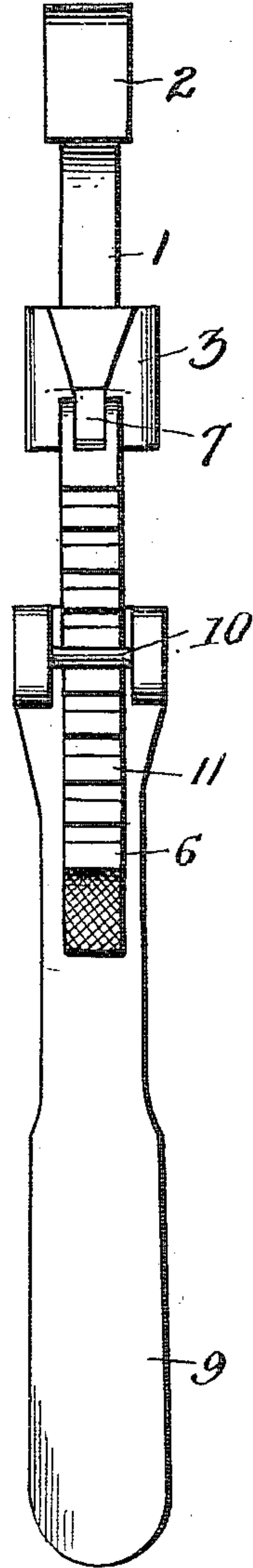
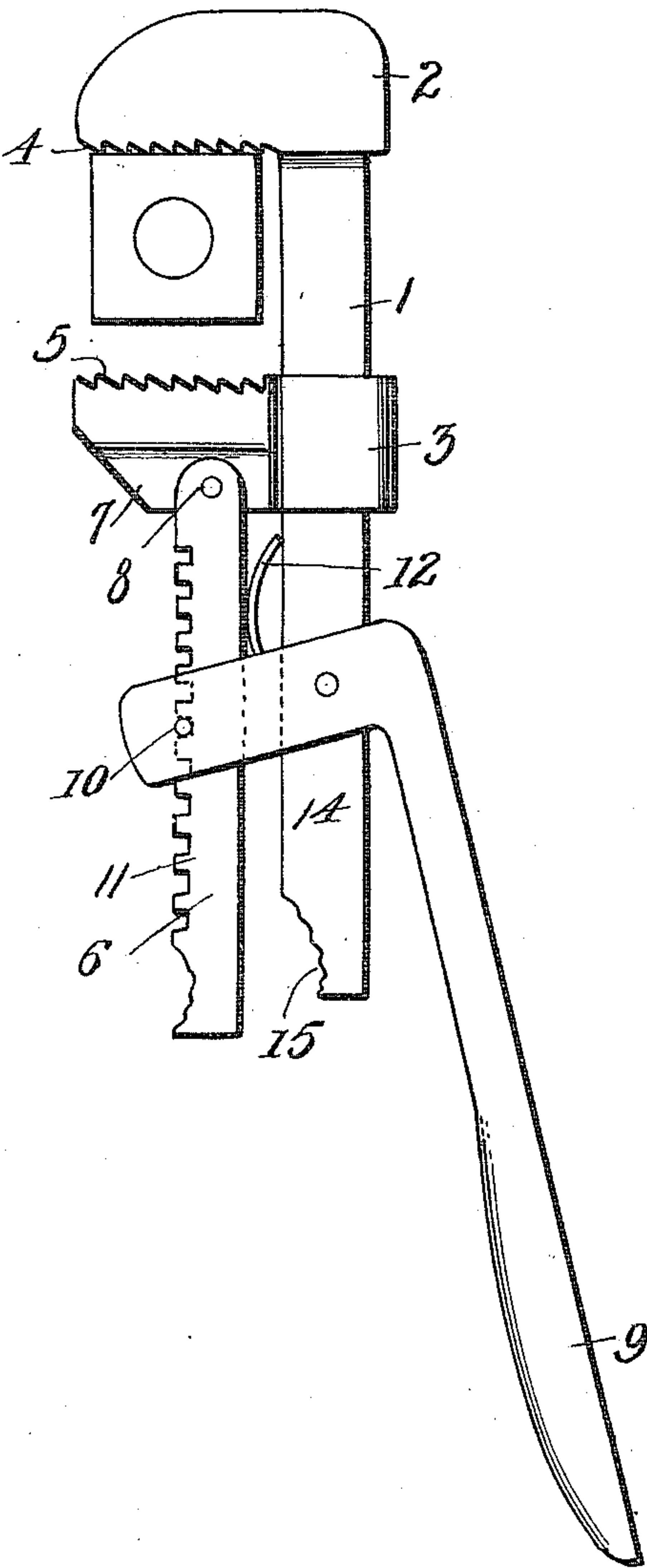
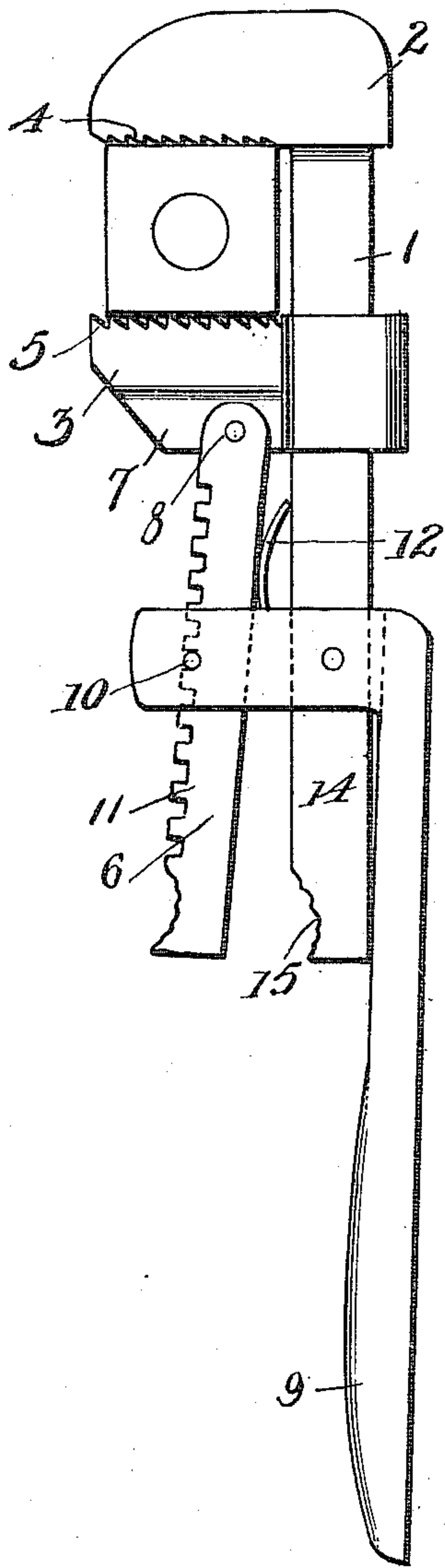
994,682.

Patented June 6, 1911.

Fig. 1.

Fig. 2.

Fig. 3.



Witnesses

John C. Rathbone
Edna S. Thomas,

Inventor
J. M. Hodgson

By

P. J. Lockwood & Co.

Attorneys

UNITED STATES PATENT OFFICE.

JESSE M. HODGSON, OF LOOKOUT, OKLAHOMA.

WRENCH.

994,682.

Specification of Letters Patent.

Patented June 6, 1911.

Application filed April 11, 1910. Serial No. 554,777.

To all whom it may concern:

Be it known that I, JESSE M. HODGSON, a citizen of the United States, residing at Lookout, in the county of Woods and State of Oklahoma, have invented certain new and useful Improvements in Wrenches, of which the following is a specification.

This invention relates to wrenches and particularly to those of the sliding jaw type, the object of the invention being to provide a shank member having a fixed jaw and a sliding jaw and to so construct the sliding jaw whereby it can be quickly adjusted on the shank and moved toward or away from the fixed jaw, and to provide a handle movably mounted on the shank and provided with means cooperating with the sliding jaw to hold it in its adjusted position, the said handle being operable to move the sliding jaw away from the fixed jaw when it is desired to release both jaws from the object with which they have been engaged.

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 elevation of my improved wrench showing the jaws moved to clamping engagement with the nut. Fig. 2 is a similar view showing the handle member operated so that the jaws are moved out of gripping engagement with the nut. Fig. 3 is an edge view of the wrench.

My improved wrench consists of a shank 1 having a fixed jaw 2 and a sliding jaw 3. The fixed jaw 2 is provided with a toothed gripping surface 4 which is similar to the gripping surface 5 on the sliding jaw 3, the difference being in that the teeth on one jaw extend in opposite directions to the teeth on the other jaw. A movable member 6 is connected with the movable jaw and as illustrated, the said member is forked at one end to receive the reduced portion 7 of the movable jaw. The pivot pin 8 extends through the arms of the fork and through the said portion 7 of the movable jaw whereby the said member 6 may be moved toward or away from the shank 1 as is obvious.

A handle or equivalent movable member 9 is pivoted to the shank 1, and as illustrated, the said handle is forked to straddle portions of the member 6. The arms of the forked portion of the handle are connected by a keeper-pin 10 which is adapted to cooperate with the teeth 11 of the movable

member 6 so as to hold the sliding jaw in its adjusted position on the shank. A spring or equivalent elastic element 12 exerts its tension against the movable member 6 on the sliding jaw so as to normally hold said member engaged with the keeper 10. The inner extremity of the member 6 is formed to provide a roughened thumb-engaging surface 13 which may be engaged by the thumb of the operator when it is desired to move the member 6 against the tension of the said spring, this being desirable when adjustment of the movable jaw is required.

The shank 1 is provided with a portion 14 which is adapted to bear against a portion of the handle member as shown in Fig. 1 of the drawing when stress is applied to the handle. In this manner swinging movement of the shank member 1 is limited in one direction. The portion 14 of the shank is provided with a roughened thumb-engaging surface 15 which is adapted to be engaged by the thumb so as to move the shank to a position where it will lie approximately in a plane parallel with the handle member.

In operation of the wrench herein described and shown the movable member 6 is moved toward the shank 1 and against the tension of the spring 12 so that the teeth of the member 6 will be moved out of engagement with the keeper 10. After moving the member 6 to the position just named the operator may grasp the thumb-engaging portion of the member 6 to impart sliding movement thereto and to the said sliding jaw so as to obtain the desired adjustment of the latter. After the adjustment has been obtained the operator releases his thumb from the member 6 to permit the spring 12 to move the member into locking engagement with the keeper so as to hold the jaws fixed relatively. When it is desired to move the jaws out of gripping engagement with the nut or other article which is being manipulated the handle member 9 may be swung on its pivot to the position shown in Fig. 2 of the drawing and thus, incident to the engagement of the keeper 10 with the toothed portion of the member 6, the said movable jaw will be moved away from the said fixed jaw.

The construction of the wrench herein described and shown is extremely simple, it is strong and durable and it may be manufactured at a relatively low cost.

By constructing the shank 1 as described

the portion 14 thereof will be brought to bear against a portion of the handle member when stress is applied thereto and the pivot pin which connects the shank with the
5 forked portion of the handle member will be considerably relieved of strain.

I claim:

1. A wrench comprising a fixed jaw, a shank carried by the jaw, a sliding jaw
10 mounted on the shank, a pivoted rack bar carried by the sliding jaw, a pivoted lever on the shank, a rack actuating element supported by the lever and operating to move the sliding jaw on movement of the lever,
15 and means normally yieldingly holding the said rack bar engaged with the said actuating element.

2. A wrench comprising a fixed jaw, a shank thereon, a movable jaw supported by the shank, a movable member supported by
20 the shank, a rack bar pivotally supported upon the movable jaw, a rack engaging element supported by the movable member, and a spring supported by the shank and normally engaging the rack bar to hold it en-
25 gaged with the actuating element and to hold the said movable member outwardly at an angle with respect to the shank.

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

JESSE M. HODGSON.

Witnesses:

A. W. MAGEEHON,
PEARLY MAGEEHON.

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