

(No Model.)

A. L. ROSE.
WRENCH.

No. 534,124.

Patented Feb. 12, 1895.

Fig. 1.

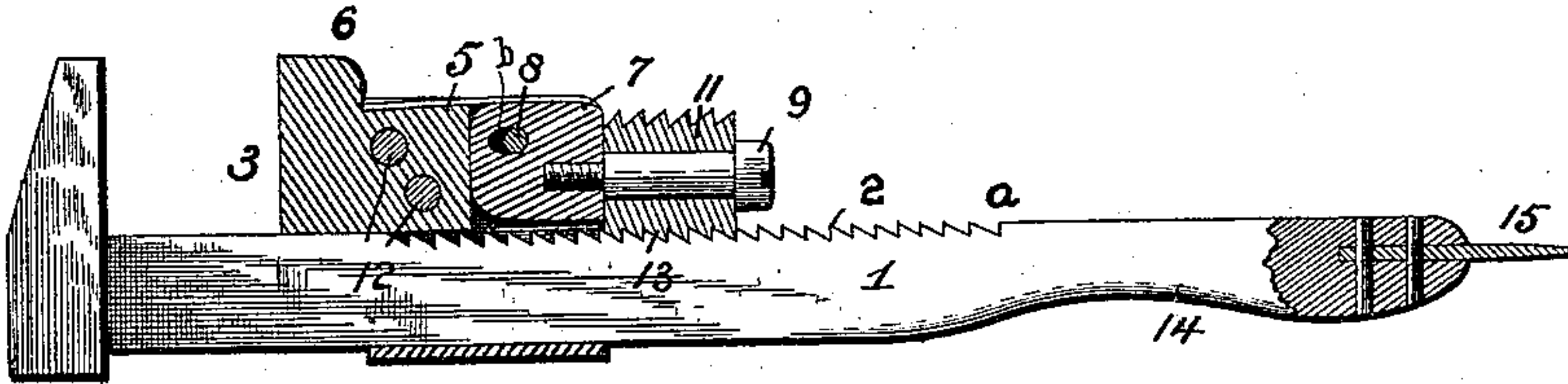


Fig. 2.

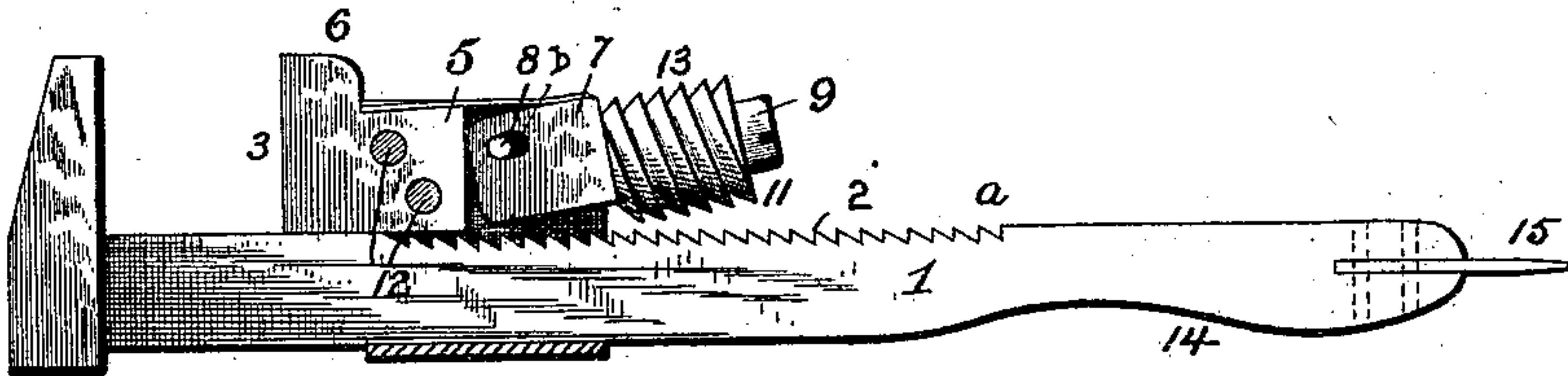


Fig. 5.

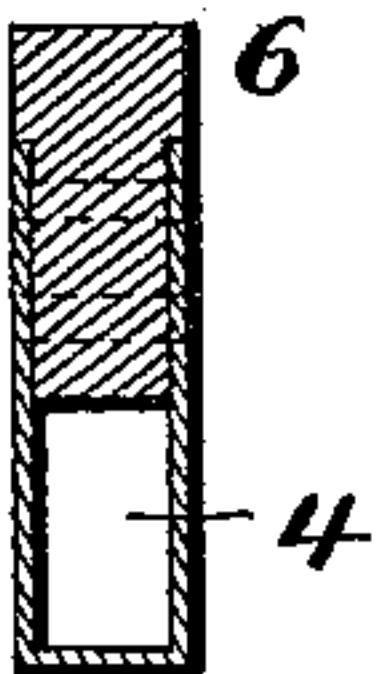


Fig. 3.



Witnesses:

J. B. McGirr.
C. L. Reese

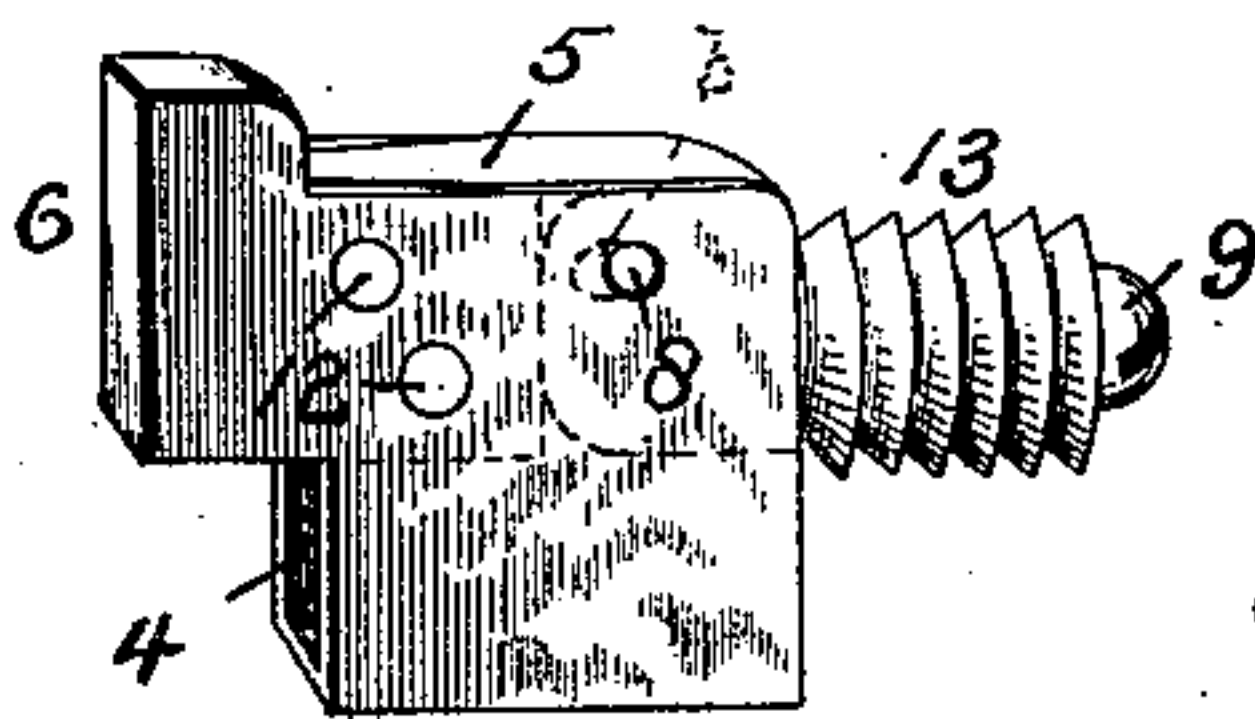


Fig. 4.

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UNITED STATES PATENT OFFICE.

ANDREW L. ROSE, OF JOHNSTOWN, PENNSYLVANIA.

WRENCH.

SPECIFICATION forming part of Letters Patent No. 534,124, dated February 12, 1895.

Application filed November 1, 1894. Serial No. 527,597. (No model.)

To all whom it may concern:

Be it known that I, ANDREW L. ROSE, a citizen of the United States of America, residing at Johnstown, in the county of Cambria and State of Pennsylvania, have invented certain new and useful Improvements in Wrenches, of which the following is a specification, reference being had to the accompanying drawings.

10 This invention relates to certain new and useful improvements in wrenches; and more particularly to that class operating with a sliding jaw.

15 The object of the invention is to construct a wrench of the aforesaid class that will be strong, durable, and extremely simple in its construction and operation, a still further object of the invention being to provide novel and inexpensive means whereby a free and 20 easy movement of the sliding jaw on the wrench-bar is obtained.

25 With the above and other objects in view the invention consists in the novel construction, combination, and arrangement of parts to be hereinafter more particularly described, and specifically pointed out in the claims.

30 In describing the invention in detail, reference is had to the accompanying drawings forming a part of this specification and wherein like letters and figures of reference indicate similar parts throughout the several views, in which—

35 Figure 1, is a side view of my improved wrench, the sliding jaw and portion of the handle being represented in section. Fig. 2, is a similar view, with a portion of the casing of the jaw removed. Fig. 3, is a front view. Fig. 4, is a detail view in perspective of the sliding jaw. Fig. 5 is a sectional view of the 40 removable jaw.

45 In the drawings 1, represents the wrench-bar, provided on its front face with a female screw thread 2, the threads *a*, of which have an inclination transversely downward toward the handle of the wrench. Upon the wrench-bar 1, and movably mounted thereon, is the sliding jaw 3, said jaw being provided with a vertical slot 4, the latter being adapted to receive the wrench-bar 1. The sliding jaw 50 3, is further provided with a spring 5, said spring being keyed to the anvil portion 6, and extending downwardly between and in align-

ment with the side walls of the casing, its free end butting against the locking block 7, the latter being pivotally secured at 8, to the 55 side walls of the casing; the pivot 8, operating in a slot *b* of the locking block 7. The slot *b* is provided to allow the block to ride on the pivot when the screw is lifted from engagement with the threaded handle, said slot 60 being also provided for the purpose of causing a more positive engagement between the screw threaded sleeve 11 and the threads of the wrench bar, as will be apparent, thus reducing the strain on the spring. The locking 65 portion of the device further consists of a bolt 9, rigidly attached to the portion 7, and encircled by screw-threaded sleeve 11, said sleeve being free to rotate on its axis. The anvil portion 6, is preferably secured to the 70 walls of the casing by means of rivets 12, 12. The male screw threads 13, of the sleeve 11, are likewise undercut and inclined downwardly to correspond with the female screw-thread 2, of the wrench bar. The handle 14, 75 of the wrench is slightly cut away, for the purpose of obtaining a better grasp; the end of said handle being provided with a screw driver 15.

80 In Fig. 1, of the drawings the wrench is shown in its normal position. The threads of the male and the female screws being cut parallel to each other and on planes transverse to the wrench bar, the jaw of the wrench can be advanced toward the head thereof, as desired, 85 by simply turning the screw-threaded sleeve toward the right hand side; but the same construction of said threads prevents the free retraction of the jaw until the screw threaded sleeve is slightly tilted (as shown in Fig. 2). 90 Therefore, should the object to be gripped be of such size as to be capable of being accurately held between the head and jaw in any position they can assume, it is only necessary to advance the latter. Should however said 95 object be of less size than the distance between the head and jaw when the latter is advanced as near as it can be to the object, then it is only necessary to move the jaw as close to the object as possible, and operate the 100 screw threaded sleeve, which further advances the jaw, taking up the excess of space and bringing the jaw firmly in contact with the object.

In order that the sliding head may be readily moved in either direction on the wrench bar, it is only necessary to slightly cant or tilt the screw threaded sleeve to such a degree that will admit a clearance between the male and female screw threads of the sleeve and wrench-bar respectively.

The tension of the spring will always tend toward retaining the locking portion pressed against the female screw threads of the wrench-bar, thus preventing lost motion and obtaining a firmness that is essential to the successful operation of the device.

The extreme simplicity of the device will be noted, all parts being easily accessible and when broken or deranged, may be readily adjusted or new parts substituted, as the case may be.

I am aware that previous to my invention sliding jaws for wrenches have been patented and described, and I therefore do not claim this broadly, but

What I do claim as new, and desire to secure by Letters Patent, is—

1. In a wrench, a screw-threaded sleeve encircling a bolt, a sliding jaw carrying a block provided with a slot adapted to receive the pivot, in combination with a screw-threaded wrench bar provided with a permanent jaw, substantially as described.

2. In a wrench, a screw-threaded wrench bar having a permanent jaw, a sliding jaw on the wrench bar having a spring, a block engaged by the spring, said block being provided with a slot pivoted to the side walls of the casing, the bolt extending from the block, and a screw-threaded sleeve encircling the bolt and engaging the screw-threads of the wrench bar, substantially as described.

3. In a wrench, a screw-threaded wrench bar having a permanent jaw, a sliding jaw mounted thereon provided with a casing formed by the side walls and the spring, a block provided with a slot pivoted in said casing, and a screw-threaded sleeve secured to the block, substantially as described.

4. In a wrench, a screw-threaded wrench bar provided with a permanent jaw, a sliding jaw provided with a casing, a block provided with a slot pivoted in the casing and carrying a screw-threaded sleeve to engage the screw threads of the wrench bar, substantially as and for the purpose specified.

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

ANDREW L. ROSE.

Witnesses:

L. G. RAGER,
EDW. E. DEVERGOOD.