

No. 762,592.

PATENTED JUNE 14, 1904.

W. LEACH.
WRENCH.

APPLICATION FILED APR. 14, 1904.

NO MODEL.

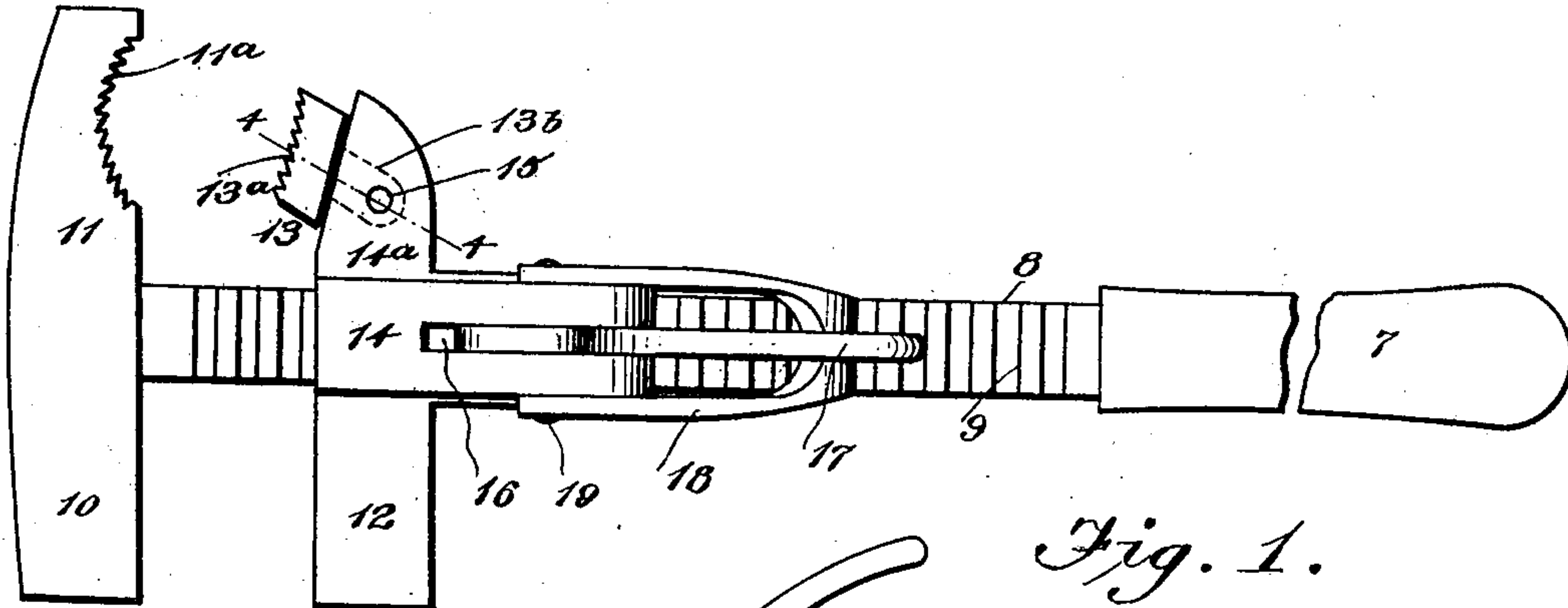


Fig. 1.

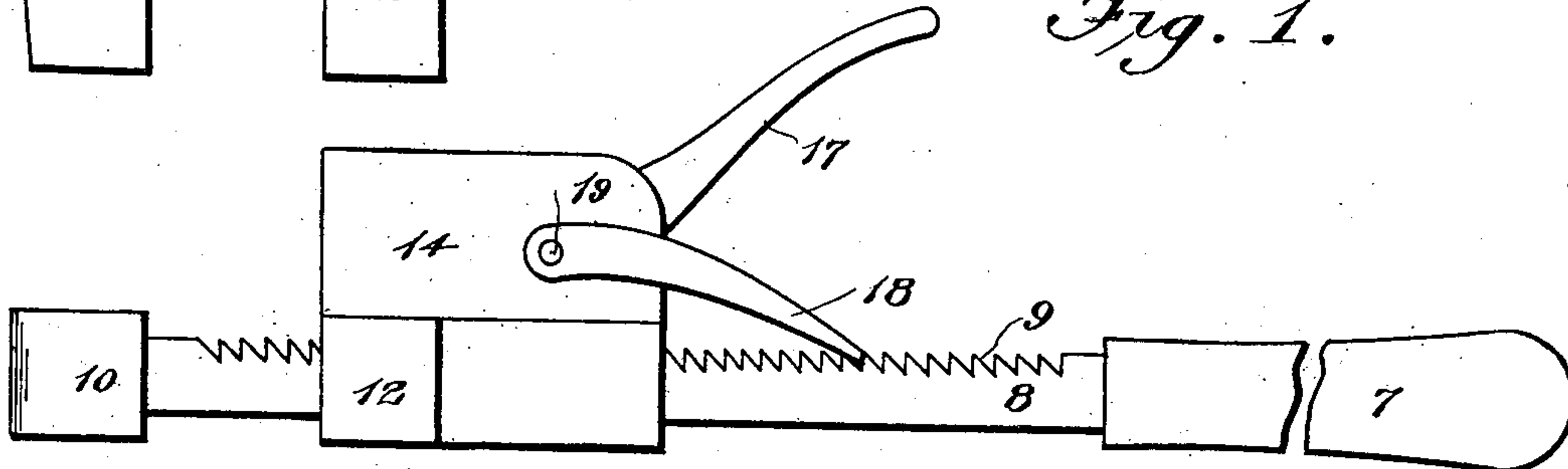


Fig. 2.

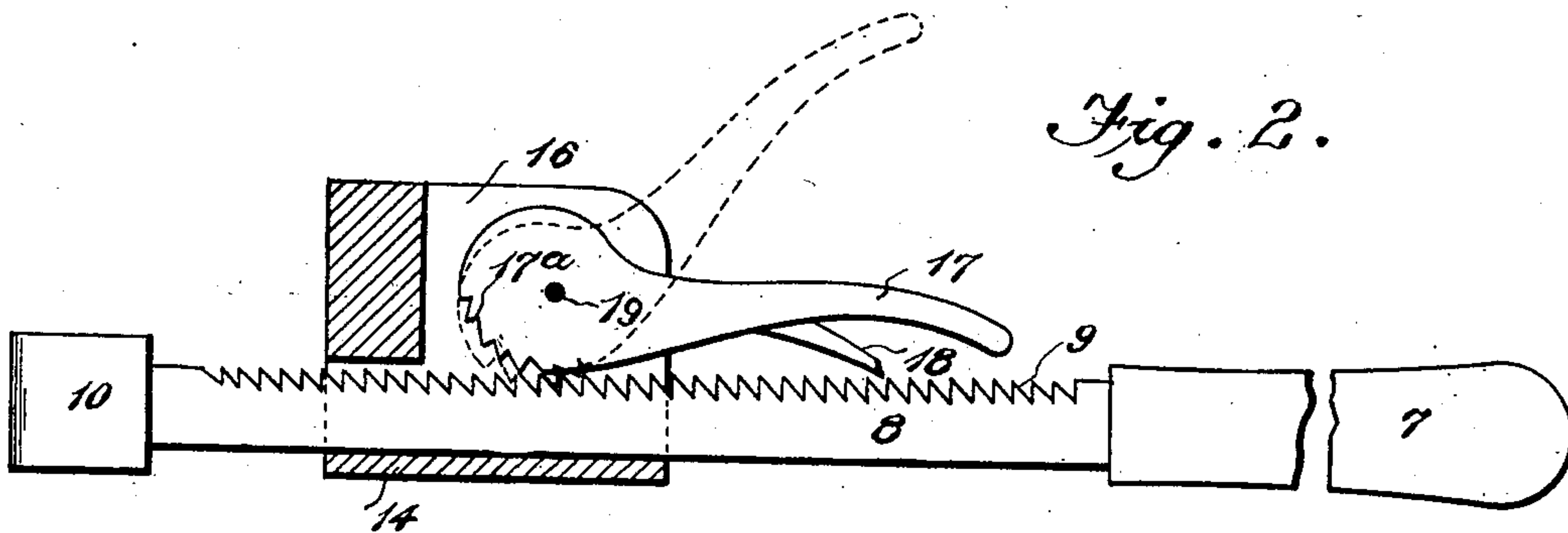


Fig. 3.

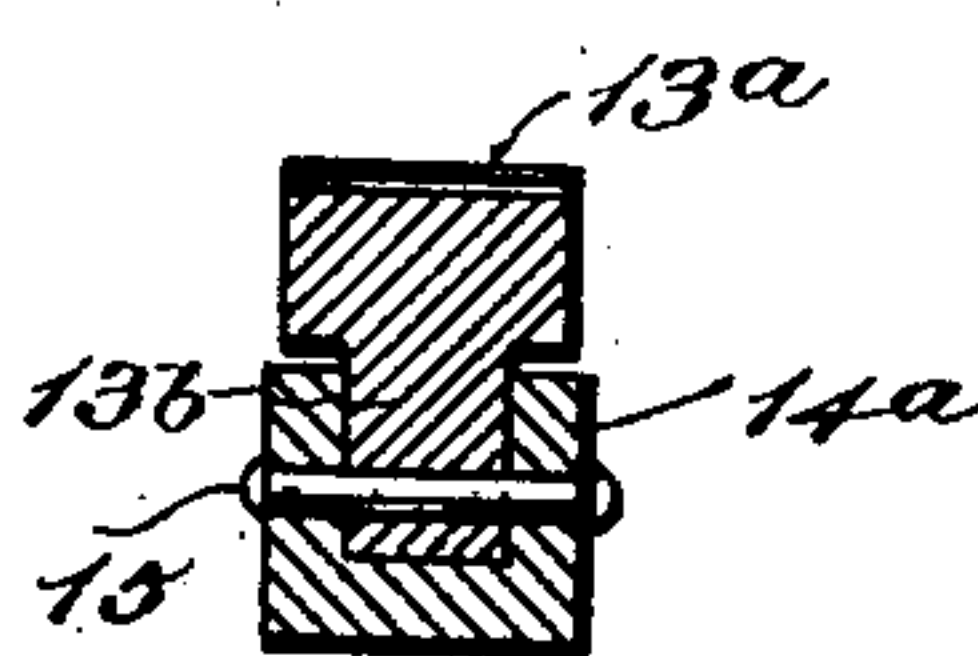


Fig. 4.

Witnesses

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UNITED STATES PATENT OFFICE.

WALTER LEACH, OF HOXIE, ARKANSAS.

WRENCH.

SPECIFICATION forming part of Letters Patent No. 762,592, dated June 14, 1904.

Application filed April 14, 1904. Serial No. 203,106. (No model.)

To all whom it may concern:

Be it known that I, WALTER LEACH, a citizen of the United States, residing at Hoxie, in the county of Lawrence and State of Arkansas, have invented new and useful Improvements in Wrenches, of which the following is a specification.

My invention relates to wrenches, and has for its object a combined nut and pipe wrench, together with a novel sliding adjustment whereby the movable jaw can be quickly adjusted and released.

In the accompanying drawings, Figure 1 is a plan view of the wrench, and Fig. 2 an edge view thereof. Fig. 3 is a sectional view showing the operation of the lever for locking the sliding jaw. Fig. 4 is a transverse section on the line 4 4 of Fig. 1.

Referring specifically to the drawings, 7 denotes the handle of the wrench, which carries a shank 8, having on one side a rack 9. From the outer end of the shank fixed jaws 10 and 11 extend laterally in both directions and cooperate with the sliding jaws 12 and 13, extending from a block 14, mounted on the shank. The jaws 10 and 12 have plain faces and form a nut-wrench. The face of the jaw 11 is concave and has teeth or serrations 11^a and cooperates with the jaw 13 to form a pipe-wrench. The jaw 13 comprises a block having on its face teeth or serrations 13^a and also has a shank 13^b, which fits loosely in a socket formed in a lateral extension 14^a on the block 14, being pivoted therein by a pin 15. The jaw 13 therefore has a slight lateral movement, which increases its grip on the pipe.

The block 14 is recessed on top, as at 16, in which recess a lever 17 is pivoted. A catch 18 is also pivoted to the block, having a forked front end embracing the same and extending rearwardly therefrom to engage the rack 9. A pivot-pin 19 secures both the lever and the rack-catch. The lever has a cam-shaped edge provided with teeth 17^a to engage the rack for a purpose to be described.

In use the cam-lever is lowered, as shown in Fig. 3, whereby it is disengaged from the

rack. The rack-catch is also lifted from the rack, which permits the block to be adjusted along the shank to set the jaws. After this is done the catch is brought into engagement with the rack and the cam-lever is raised and held, which will cause its teeth to engage the rack and move the block forwardly slightly to increase the grip of the jaw, and by reason of its cam-shaped edge the block will be locked on the shank, whereby the jaws will be tightly held on the object which they grip.

To release the jaws, the catch is first disengaged from the rack, after which the cam-lever is lowered, which will move the block rearwardly slightly, and thus loosen the grip of the jaws. At the same time the lever will be disengaged from the rack, thus enabling the wrench to be promptly removed or adjusted for another hold.

Having thus described my invention, what is claimed as new, and desired to be secured by Letters Patent, is—

1. A wrench comprising a shank having fixed jaws and a rack, a recessed block slidably mounted on the shank and having jaws cooperating with the fixed jaws, a lever pivoted in the recess of the block and having a toothed cam-shaped edge to engage the rack, and a rack-catch pivoted to the block.

2. A wrench comprising a shank having a fixed jaw and a rack, a recessed block slidably mounted on the shank and provided with a recessed lateral extension, a block pivoted in the recess of said extension and cooperating with the fixed jaw to form pipe-gripping jaws, a lever pivoted in the recess of the block and having a toothed cam-shaped edge to engage the rack, and a rack-catch pivoted to the block.

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

WALTER LEACH.

Witnesses:

EFFIE HARRIS,
C. W. WHITE.