

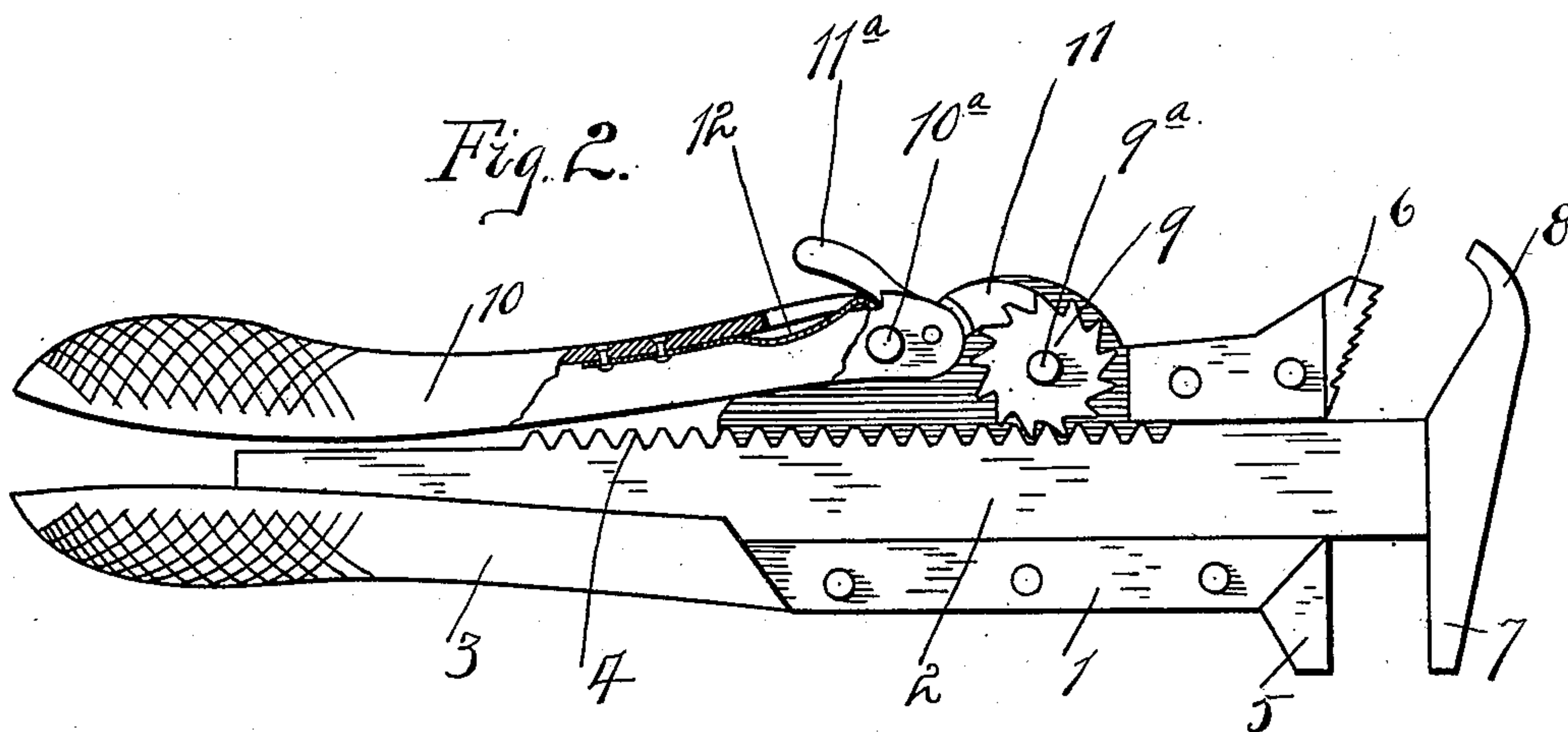
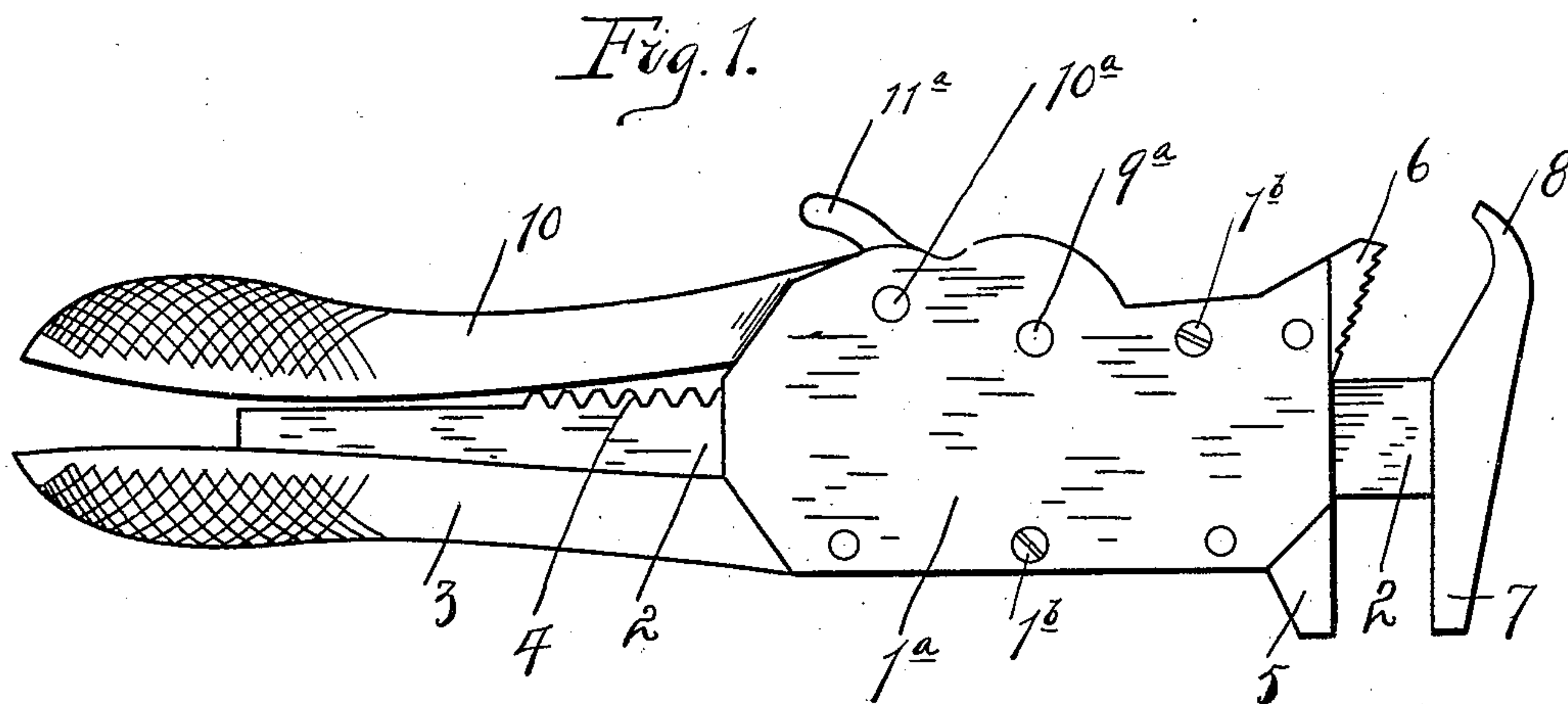
No. 673,524.

Patented May 7, 1901.

L. H. KROKE.
MONKEY WRENCH.

(Application filed Mar. 1, 1901.)

(No Model.)



Witnesses.

C. S. Turner.

Harry Kilgore

Inventor.

Lewis H. Kroke.

By his Attorneys.

Williamson Merchant

UNITED STATES PATENT OFFICE.

LEWIS H. KROKE, OF DWIGHT, NORTH DAKOTA.

MONKEY-WRENCH.

SPECIFICATION forming part of Letters Patent No. 673,524, dated May 7, 1901.

Application filed March 1, 1901. Serial No. 49,446. (No model.)

To all whom it may concern:

Be it known that I, LEWIS H. KROKE, a citizen of the United States, residing at Dwight, in the county of Richland and State of North Dakota, have invented certain new and useful Improvements in Monkey-Wrenches; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My present invention relates to wrenches, and has for its especial object to provide a combined pipe-wrench and monkey-wrench of improved construction.

To the above ends the invention consists of the novel devices and combinations of devices hereinafter described, and defined in the claims.

The invention is illustrated in the accompanying drawings, wherein like characters indicate like parts in both views.

Figure 1 is a plan view of a wrench constructed in accordance with my invention; and Fig. 2 is a view corresponding to Fig. 1, but with one side plate of the wrench removed.

The wrench is made up principally of a pair of body members 1 and 2, the former of which is reduced at its other end to form a handpiece 3, and the latter of which telescopes through a suitable seat formed in said body member 2 and is provided with ratchet-teeth 4. The body member 1 is provided at its outer end with jaws 5 and 6, the latter of which is serrated. The member 2 is provided at its outer end with jaws 7 and 8, which cooperate, respectively, with the jaws 5 and 6 of the member 1. The jaws 5 and 7 cooperate as in an ordinary monkey-wrench, while the jaws 6 and 8 cooperate as in a pipe-wrench. As shown and preferred, the body member 1 is provided with a removable side 1^a, held in position by a screw 1^b. A spur-pinion 9, which meshes with the rack-teeth 4 of the member 2, is mounted between the side plates of the member 1 by means of a pin 9^a. The teeth of this pinion 9 are preferably slightly ratchet-shaped for a purpose which will presently appear. A movable handpiece 10, which cooperates with the handpiece 3, is pivoted at 10^a between the side plates of the body member 1, and to the inner end thereof is pivoted a

ratchet-pawl 11, which has one or more teeth that engage with the teeth of the wheel 9, and it is further provided with a rearwardly-projecting finger-piece 11^a, against which, as shown, a leaf-spring 12, secured on the handpiece 10, presses to yieldingly hold the teeth of the pawl 11 in engagement with the teeth of the wheel 9.

The operation is as follows: By pressing the thumb or finger on the finger-piece 11^a of the pawl 11 the said pawl may be raised out of engagement with the teeth of the wheel 9, and when it is so raised the plunger-like body member 2 may be very easily and quickly drawn out of the body member 1, so as to separate the cooperating jaws of the two members. Without raising the pawl 11 the member 2 may be quickly forced into the member 1, so as to close the cooperating jaws of the two members. Under this closing action or inward movement of the member 2 the teeth of the wheel 9 freely slip under the teeth of the pawl 11.

When the wrench is properly adjusted for application to a bolt, nut, pipe, or other article, the handpiece 10 is moved away from the handpiece 3, and by this movement the pawl 11 is caused to engage lower down or farther in with the teeth of the wheel 9. Then when the handpiece 10 is drawn or pressed toward the handpiece 3 the pawl 11 moving outward and acting on the wheel or pinion 9 causes the same to draw inward the plunger-like member 2, and thus tightly draws the jaws of the wrench onto the nut or other device which is being gaged.

The above-described wrench has the important advantage over most wrenches of this general character in that it may be very quickly adjusted from one extreme position to the other.

It will of course be understood that the device above described is capable of modification within the scope of my invention.

What I claim, and desire to secure by Letters Patent of the United States, is as follows:

1. In a wrench, the combination with a pair of telescoping jaw-equipped members, one thereof having rack-teeth, of a pinion mounted on the other member and engageable with said rack-teeth, and a lever pivoted to the

member which carries said pinion, and provided with a pawl which engages said pinion, substantially as described.

2. In a wrench, the combination with a pair
5 of telescoping jaw-equipped members, the inner member having rack-teeth, a pinion mounted on the outer member and engaging said rack-teeth, a lever pivoted to said outer member, and a spring-pressed pawl mounted
10 on said lever for engagement with said pinion and provided with a projection or finger-piece, which being pressed renders said pawl inoperative.

3. The combination with the jaw-equipped
15 members 1 and 2, the former having the hand-piece 3, and the latter telescoping into the former, and having the rack-teeth 4, the pinion 9 mounted on said member 1 and engaging said teeth 4, the lever 10 pivoted to said

member 1, and the spring-pressed pawl 11 piv- 20
oted to said lever 10 and provided with the finger-piece 11^a, substantially as described.

4. In a wrench, the combination with telescoping members having coöperating jaws, of
a lever pivoted to one member, a pawl-and- 25
ratchet device for transmitting motion from said pivoted lever to the other member, involving a pawl which is provided with a finger-piece by means of which it may be rendered inoperative, at will, substantially as de- 30
scribed.

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

LEWIS H. KROKE.

Witnesses:

ANDREW LYTEN,
OSCAR SJOQUIST.