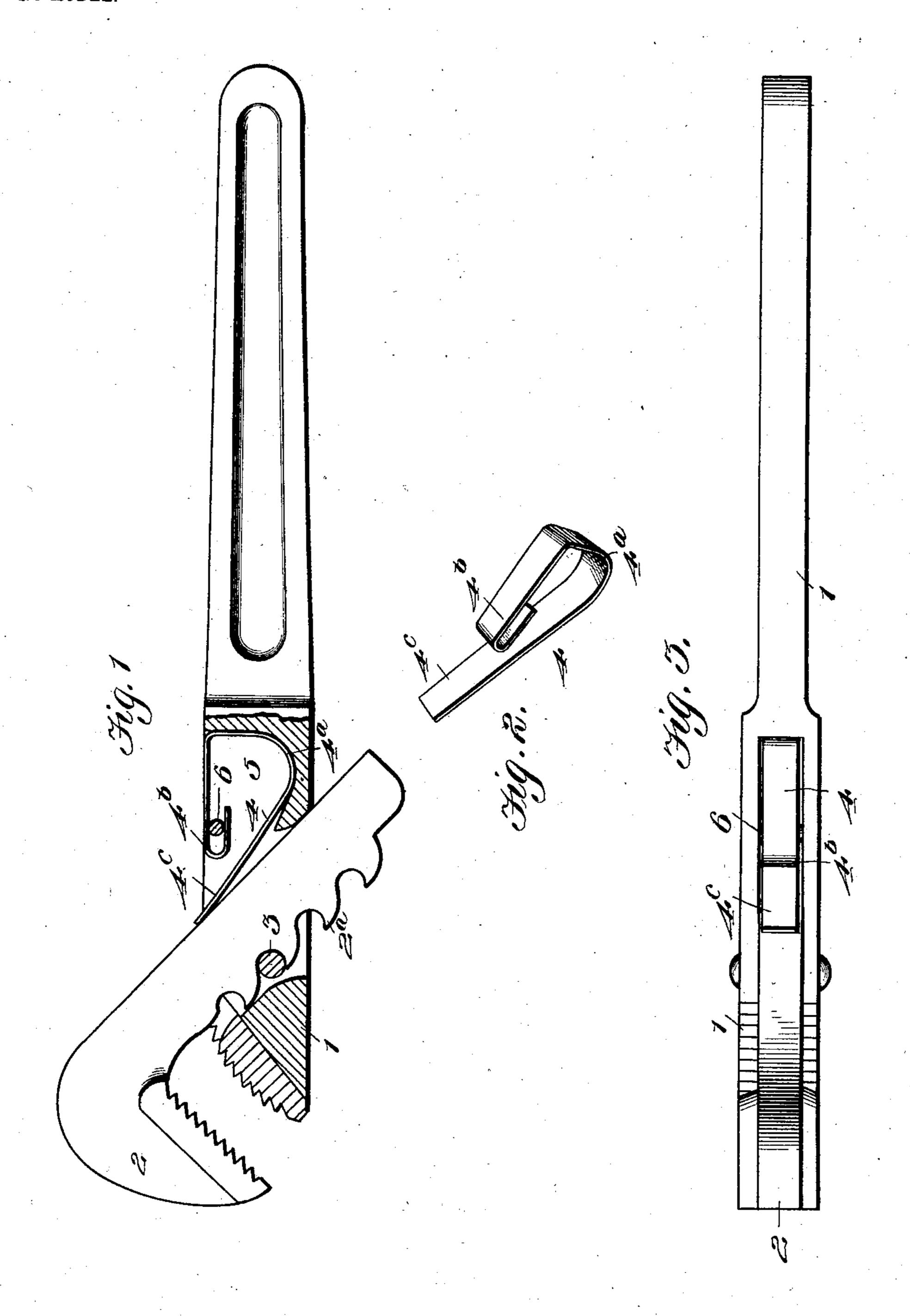
G. McKERCHER. WRENCH.

APPLICATION FILED OCT. 9, 1902.

NO MODEL



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UNITED STATES PATENT OFFICE.

GEORGE McKERCHER, OF JACKSON, MICHIGAN, ASSIGNOR TO THE McKERCHER WRENCH & TOOL COMPANY, OF JACKSON, MICHIGAN.

WRENCH.

SPECIFICATION forming part of Letters Patent No. 729,504, dated May 26, 1903.

Application filed October 9, 1902. Serial No. 126,512. (No model.)

To all whom it may concern:

Be it known that I, George McKercher, a citizen of the United States, residing at Jackson, in the county of Jackson and State of Michigan, have invented certain new and useful Improvements in 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 invention relates to improvements in wrenches, more especially the "pipe" type.

It has for its object to promote simplicity and efficiency in the use of the wrench or tool and to lessen cost of manufacture of the same.

It consists of the detailed construction and arrangement of parts substantially as hereinafter more fully disclosed, and specifically pointed out by the claims.

In the accompanying drawings, illustrating the preferred embodiment of my invention, Figure 1 is a side elevation with a portion of one jaw removed disclosing the movable-jaw-retaining spring and its seat. Fig. 2 is a detached view of said spring. Fig. 3 is a plan view of the wrench or tool.

Latitude is allowed herein as to changes in details which may come within the purview or spirit of my invention and the same yet re-

30 main intact and be protected.

In the practice of my invention I provide a fixed handled jaw 1 and a movable jaw 2, both of the general pattern or construction shown in my former Letters Patent, and there-35 fore in that respect need no further disclosure. Said movable jaw, also as in said Letters Patent, has its rack or ratchet portion 2^a engaging a retaining cross-pin or bolt 3, headed down preferably upon the outer surface of the 40 side or cheek, which, however, constitutes no characteristic feature of the present invention. Said movable jaw is removably held in place in said fixed jaw under the action of a spring 4, which also permits said movable jaw 45 to be slid notch by notch in effecting its adjustment or application to the article or pipe gripped. Said spring is preferably of flat or plate metal having the requisite resistancy |

to hold said movable jaw in effective position, also to permit the latter to be readily adjusted 50 according to circumstances. Said spring is preferably of the general outline or contour shown, having a looped portion 4a, adapted to be let into and suitably rested in a rearward extention of the bifurcated or slotted portion 55 5 of the stationary jaw. Said looped portion 4^a of said spring rests upon the bottom of said slotted extension in said fixed jaw and has its upper limb formed into an inturned or rebent terminal 4^b, engaging a second cross-pin 6^c 6, riveted or otherwise fixed to said stationary jaw, retaining its position as against upward displacement. Said spring has its lower limb extended upwardly and forwardly into an inclined terminal 4°, adapted to bear upon or 65 engage the back of the movable jaw, and thus retain the latter in effective engagement with the article or pipe gripped.

Having thus fully described my invention, what I claim, and desire to secure by Letters 70

Patent, is—

1. A wrench or tool comprising a fixed, and a movable, member, and a spring having looped portion, with its upper-limb terminal rebent and engaging a cross-pin of said fixed 75 member, and its lower-limb terminal of said spring upon said movable member, substantially as set forth.

2. A wrench or tool comprising a fixed, and a movable member, a spring having a looped 80 portion seated upon the bottom surface of a rearward extension of the movable-member-receiving slot, said spring looped portion having its upper-limb terminal rebent and engaging a cross-pin of said fixed member, and the 85 lower-limb terminal of said spring inclined upwardly and forwardly and bearing upon the back edge of said movable member, substantially as set forth.

In testimony whereof I affix my signature 90 in presence of two witnesses.

GEO. MCKERCHER.

Witnesses:

ROBERT LAKE, H. U. ULRICKSEN.