

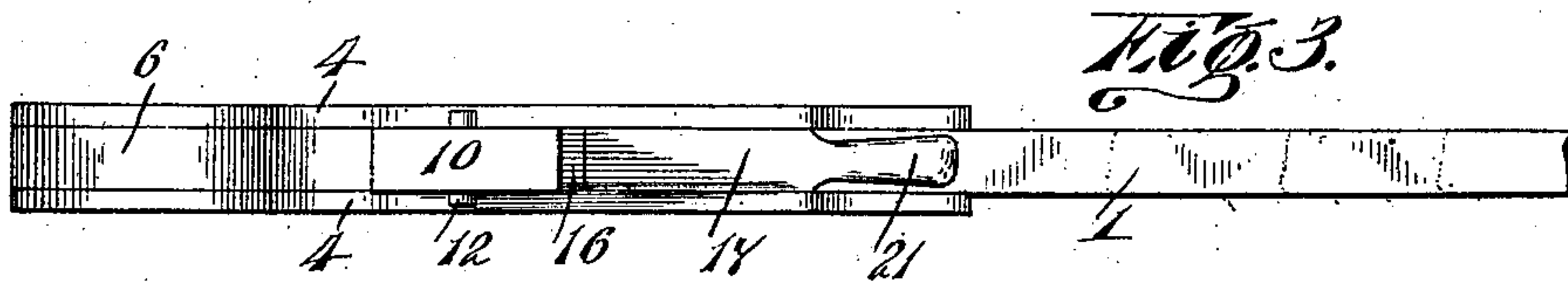
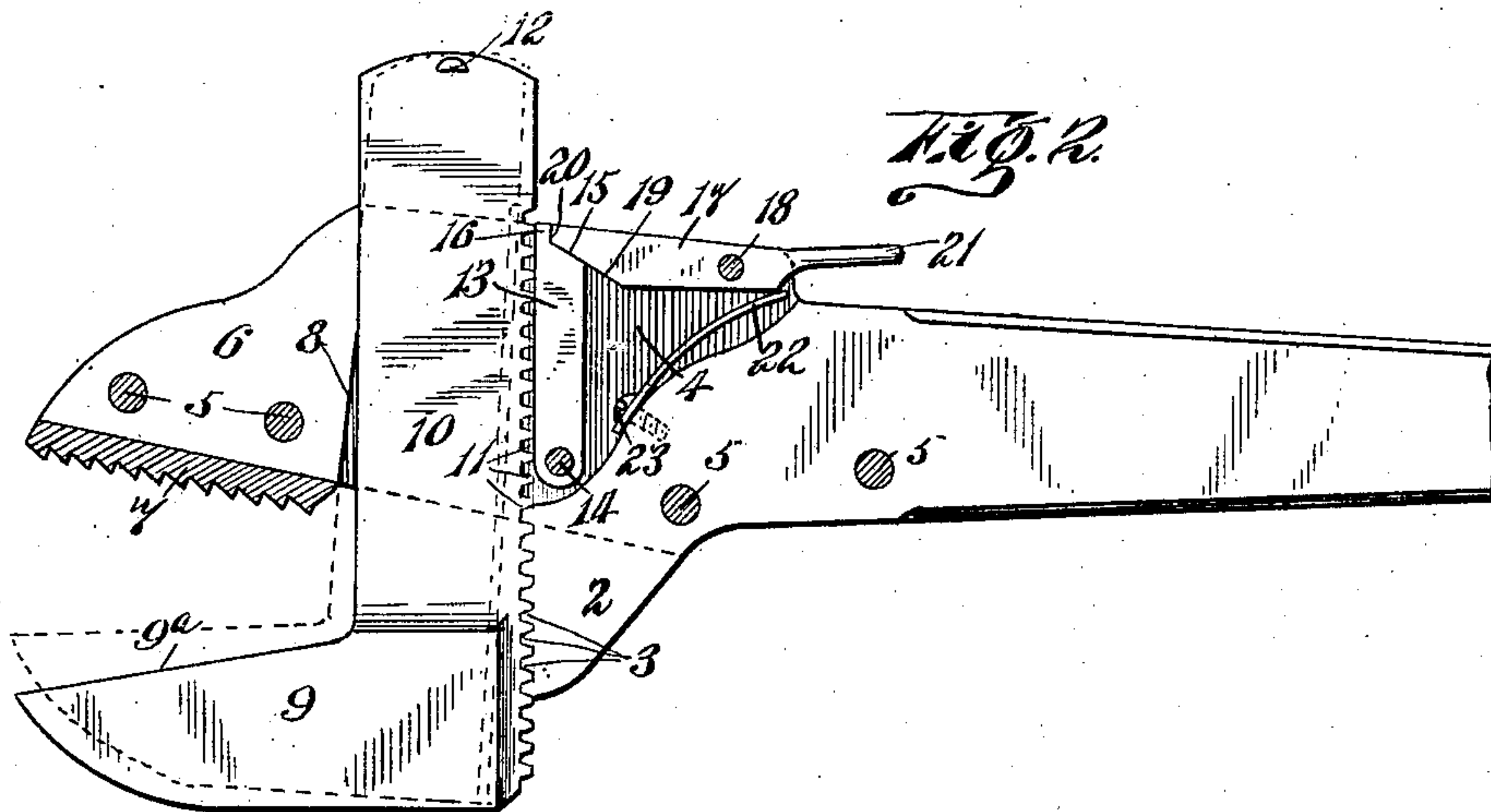
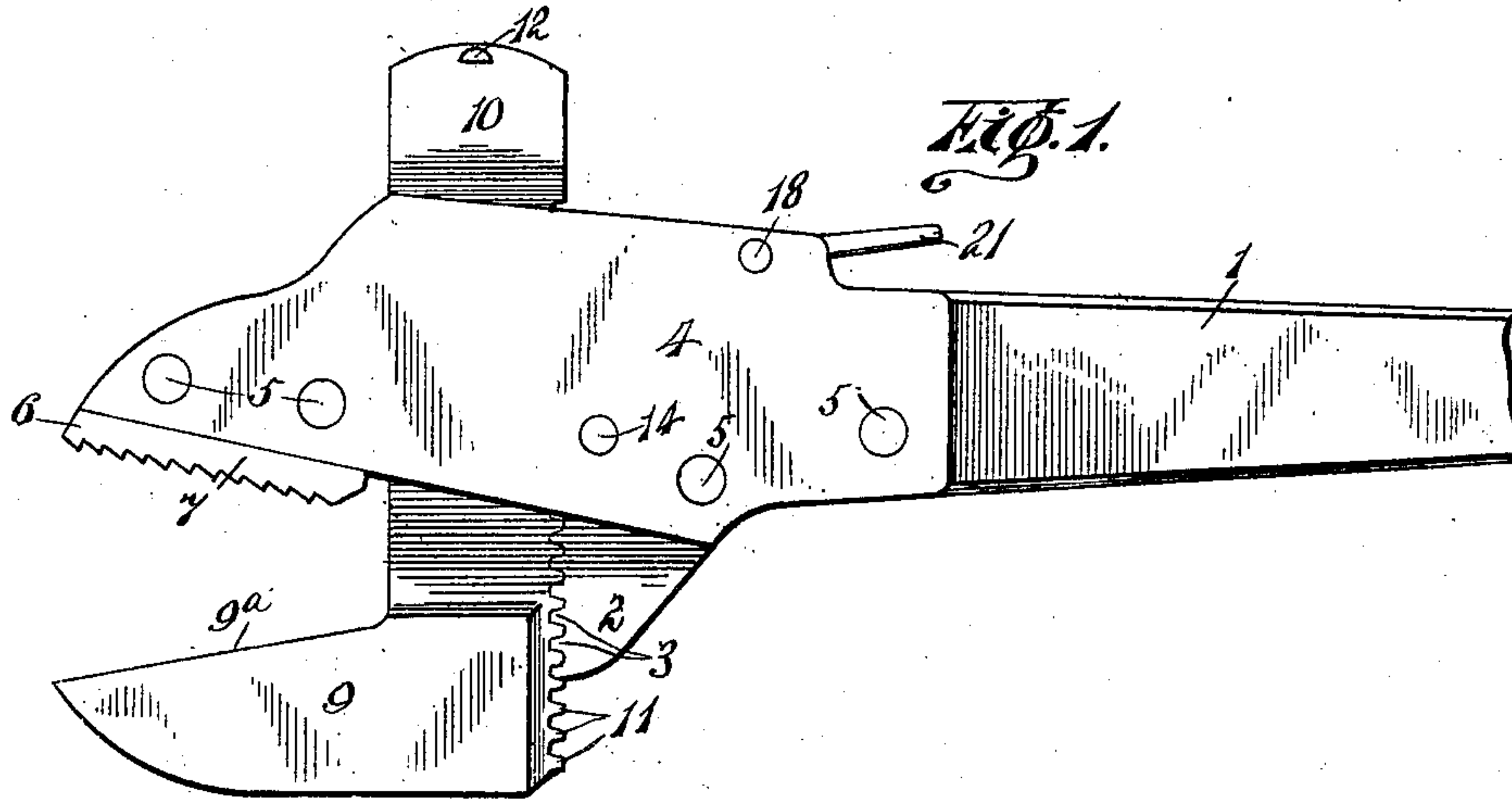
No. 861,449.

PATENTED JULY 30, 1907.

G. C. FERGUSON.

WRENCH.

APPLICATION FILED JULY 21, 1906.



Witnesses:

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# UNITED STATES PATENT OFFICE.

GEORGE C. FERGUSON, OF FREDERICTON, NEW BRUNSWICK, CANADA, ASSIGNOR OF ONE-EIGHTH TO FRED P. THOMPSON AND ONE-EIGHTH TO JOHN MCCOY, BOTH OF FREDERICTON, CANADA.

## WRENCH.

No. 861,449.

Specification of Letters Patent.

Patented July 30, 1907.

Application filed July 21, 1906. Serial No. 327,114.

*To all whom it may concern:*

Be it known that I, GEORGE C. FERGUSON, a subject of the King of Great Britain, residing at Fredericton, county of York, in the Province of New Brunswick, Canada, have invented certain new and useful Improvements in Wrenches; and I do hereby declare that the following is 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 wrenches; the object of my invention is to provide means for quickly releasing the movable jaw of a wrench; a further object is to provide a wrench in which the pressure against the movable jaw will be exerted against a solid part of the wrench and not against screw-threads or similar parts; a further object is to provide a wrench the locking members of which are within the head of the wrench; a further object is to provide a wrench adapted to fit a pipe or a nut; and, my invention consists of the construction, combination and arrangement of parts, as herein illustrated, described and claimed.

In the accompanying drawings, forming part of this application, I have illustrated one form of embodiment of this invention, in which drawings similar reference characters designate corresponding parts, and in which:

Figure 1 is a side elevation; Fig. 2 is a side elevation with one of the plates forming the head of the wrench removed; and Fig. 3 is a plan view.

Referring to the drawings, 1 designates a handle having an offset end 2 provided with teeth 3 on its vertical forward surface. Secured to the forward end of the handle 1 are side members 4, secured together by means of the rivets 5, and adapted to form the head of the wrench. Disposed between the outer ends of the side members 4 is a filling block 6, which is held in position by means of the connecting rivets 5, which block is provided with teeth 7 on its under surface, and its inner face 8 is disposed at an angle to the face of the shoulder 2, which is provided with the teeth 3.

A movable jaw 9 has its gripping face 9<sup>a</sup> at an obtuse angle to the line of the teeth 3, and is provided with a reduced extension 10, which is slidably disposed between the side members 4, and on one side is adapted to bear against the upper edge of the filling block 6, while its opposite side is provided with teeth 11, adapted to engage the teeth 3 of the shoulder 2 and lock the jaw 9 in any desired position within the range of adjustment of the tool. The upper end of the extension 10 is provided with a lug 12, adapted to limit the downward movement of the jaw by striking against the upper edges of the side members 4.

Pivoted to the side members 4, immediately behind the extension 10 of the movable jaw, is a block 13, secured on the pivot 14 and provided with an upper beveled face 15, terminating in a lug 16. A block 17 is pivoted at 18 to the side members 4, and provided with a beveled face 19 and a squared end 20, adapted to contact respectively with the beveled face 15 and the lug 16 of the block 13, and to maintain the same in the position shown in full lines in Fig. 2, in which position the teeth 11 of the movable jaw are kept in engagement with the teeth 3 of the handle. The block 17 is provided with a handle 21, adapted to overcome the tension of the flat spring 22, which latter is maintained in position by a screw 23 on the end of the handle 1. When tension of the spring 22 is overcome, the movable jaw 9 is permitted to swing to the position shown in dotted lines in Fig. 2, when it may be adjusted towards and away from the opposite jaw. It will be observed that the block 13 and the toothed face of the shoulder 2 are in alinement, so that the rear surface of the extension 10 has a solid bearing. It will be further observed that the face 8 of the filling block 6 is at such an angle that the extension 10 is free to rock away from the teeth 3 of the shoulder 2, when the block 13 is released by depressing the handle 21 of the block 17, so that immediate adjustment of the movable jaw may be obtained.

Having thus fully described my invention, what I claim as new and desire to secure by Letters Patent is:—

1. A wrench comprising the combination of a handle having a head, a movable jaw provided with an extension slidably disposed through the head, a pivoted block adjacent the slidable extension provided with a beveled surface and a square end, and a pivoted block adjacent the first block and provided with a beveled face and a squared end adapted to contact with the beveled surface and square end of said first-named block.

2. A wrench comprising the combination of a handle provided with teeth, a head secured to the handle, a movable jaw having an extension disposed through the head and provided with teeth adapted to engage the teeth on the handle, a block pivotally supported within the head adjacent the extension, a second block pivoted within the head adjacent the first block and adapted to bear on the same and provided with a projecting handle, and a spring adapted to maintain said blocks in one position.

In witness whereof I have hereunto set my hand in the presence of two witnesses.

GEORGE C. FERGUSON.

Witnesses:

THOS. PEPPERS,  
WILLIAM M. CLARK.