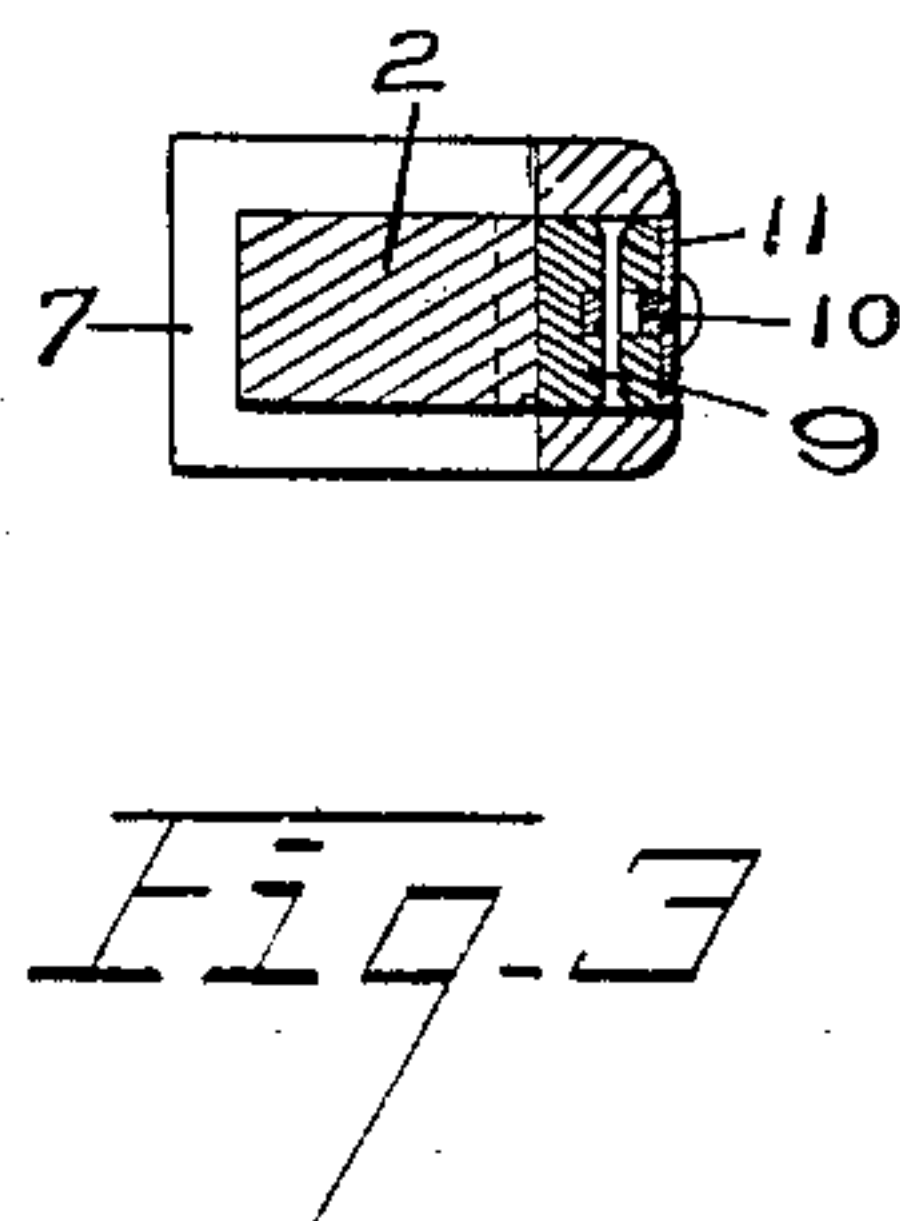
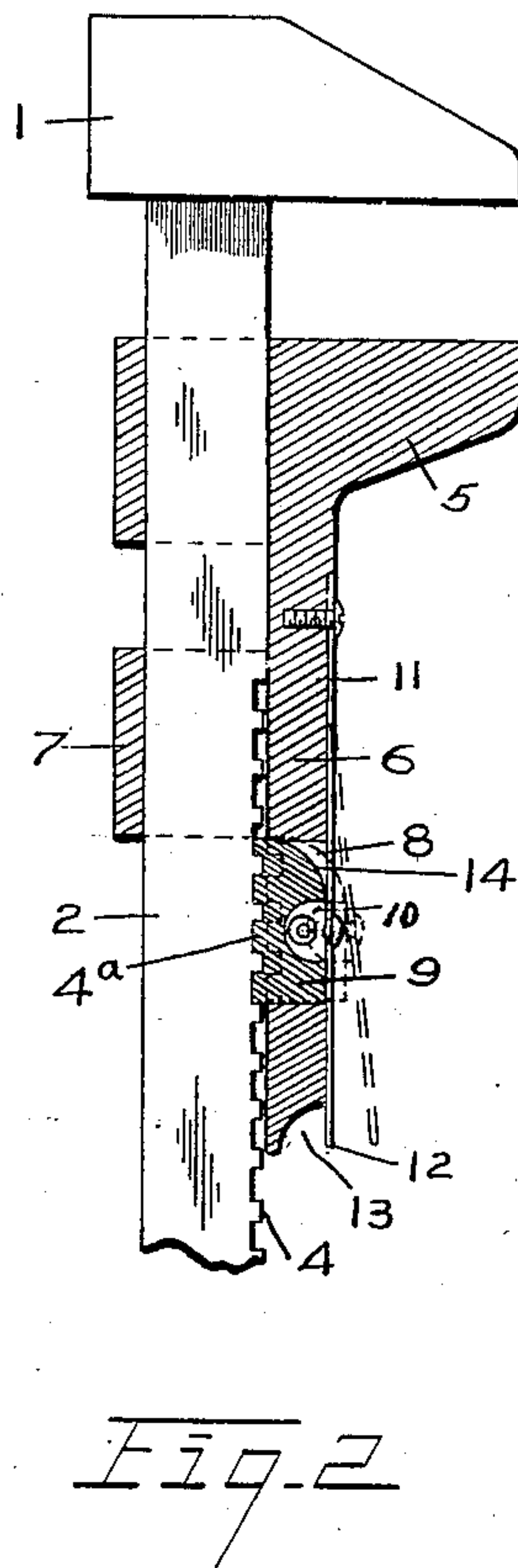
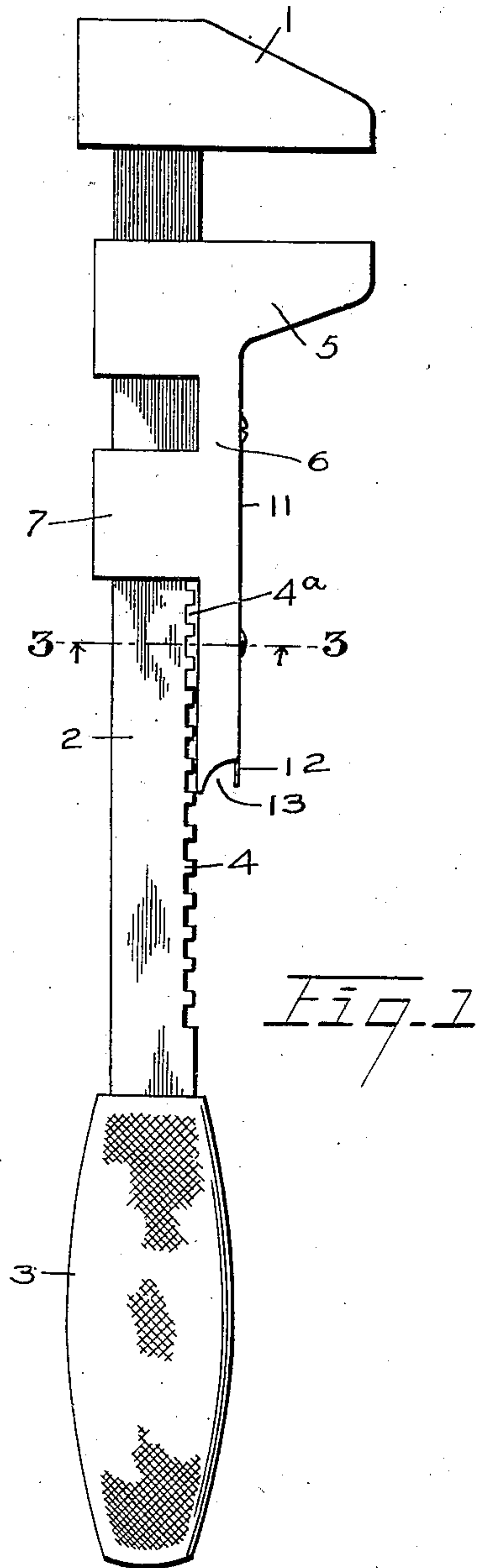


No. 863,408.

PATENTED AUG. 13, 1907.

P. H. LASLEY.
RATCHET WRENCH.

APPLICATION FILED DEC. 6, 1906.



WITNESSES:

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UNITED STATES PATENT OFFICE.

PERCY H. LASLEY, OF CLEVELAND, OHIO.

RATCHET-WRENCH.

No. 863,408.

Specification of Letters Patent.

Patented Aug. 13, 1907.

Application filed December 6, 1906. Serial No. 346,594.

To all whom it may concern:

Be it known that I, PERCY H. LASLEY, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented a certain new and useful Improvement in Ratchet-Wrenches, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings.

This invention relates to wrenches of the type known as ratchet wrenches, and has for its object the production of a wrench of this character which is simple in construction, economical in manufacture, and safe and reliable in operation.

In the accompanying drawings forming a part of this application, Figure 1 is a side elevation of my improved wrench. Fig. 2 is a transverse section through the wrench shown in Fig. 1,—said section being taken on a plane parallel with the paper, and Fig. 3 is a transverse section taken through Fig. 1 on the line 3—3.

In wrenches of this character, it is desirable that they be not only absolutely safe and reliable in operation but that they shall be easy of adjustment with a single hand of the operator, as it frequently happens that the wrench will be used in places where the operator is forced to use one hand in order to support himself and consequently has but one hand for manipulating the wrench.

In the wrench shown in the accompanying drawings, the ratchet may be released and the movable jaw of the wrench shifted by a single hand of the operator.

Taking up the detailed description by reference to the drawings, 1 represents the stationary jaw of the wrench, said jaw being made integral with or securely fastened to the stem 2, to which stem there is attached a handle piece 3. The forward edge of the stem 2 is provided throughout a portion of its length with square ratchet teeth 4, said teeth being spaced equidistantly for a purpose hereinafter specified.

Mounted to slide upon the stem 2 is the movable jaw 5 of the wrench, said jaw having a depending portion 6, which extends parallel with that edge of the stem 2 that carries the ratchet teeth. In order to strengthen the movable jaw and to provide a more extended guiding surface therefor, said jaw is provided with a member 7 that loops around said stem at a point some distance below the jaw 5.

Within a recess 8 in the depending portion 6 of the movable jaw below the member 7, I place a ratchet block 9, said block being provided with squared ratchet teeth 4^a which are adapted to be interlocked with the ratchet teeth 4 on the stem 2. This block is pivoted to an eye-piece 10 that is riveted, or otherwise secured, to a flat spring 11, which spring is secured to and is practically embedded in the forward edge of the depending portion

6 of the movable jaw. This spring projects at 12 for a slight distance beyond the lower end of said depending portion 6, which depending portion is cut away at 13 for a purpose hereinafter specified.

From the above description, it will be understood that, while the ratchet teeth of the block 9 are in engagement with the teeth 4 of the stem 2, the movable jaw will be held securely in position. If it be desired to move said jaw upon the stem, it is merely necessary for the operator to wedge his thumb or finger into the recess 13 and thereby push outwardly the lower end of the spring 12, which operation will remove the teeth of the block 9 from the teeth upon the stem, thereby leaving the movable jaw free for adjustment. While holding with his thumb or finger the spring in this position, it is an easy matter for the operator to force the movable jaw toward the jaw 1 and thereby secure the proper adjustment, after which by simply releasing the spring 12, the ratchet teeth will become engaged, which will hold the movable jaw in the desired position.

Fig. 2 shows in dotted lines the position of the spring 12 when it is thus pushed outwardly, and said figure also shows that the block 9 is rounded at its upper and forward edge 14, which rounded edge prevents binding of the block upon the depending portion 6, which binding would be liable to occur unless said block were rounded in this manner. Binding is also prevented by reason of the fact that the hole through the eye piece 10 is larger than the pivot pin passing therethrough which construction permits relative movement between the spring 11 and the block.

I claim:

1. In a wrench having a stem with a stationary jaw, a movable jaw mounted to slide upon said stem, said movable jaw having a depending portion, a flat spring secured at one end to said depending portion and having its opposite free end projecting beyond said portion whereby it may be engaged by the operator, a recess within the lower part of said depending portion, a ratchet member within said recess, said member being pivoted to said spring and teeth upon said member for engaging with the teeth upon the said stem.

2. In a wrench having a stem with a stationary jaw, a movable jaw mounted to slide on said stem, said jaw having a depending portion, a member carried by said depending portion and extending around the said stem for strengthening the movable jaw and for giving an extended bearing surface therefor, a recess in the movable jaw below the said member, a flat spring secured to said depending portion, said spring extending over the said recess and beyond the said depending portion, whereby it may be engaged by the operator, a block within the said recess, said block being pivoted to the said spring and having a rounded end for the purpose specified, and ratchet teeth on said block for engaging with the teeth on the stem.

3. In a wrench having a stem with a stationary jaw, squared ratchet teeth on said stem, a movable jaw mounted to slide on said stem, said jaw having a depending portion, a recess in said depending portion, a spring secured

to said depending portion and extending beyond the latter, whereby it may be engaged by the operator, a block within said recess, said block being pivoted to said spring and having one of its corners rounded so as to prevent binding, and squared ratchet teeth upon said block, said teeth being adapted to engage with the teeth upon the stem.

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4. In a wrench having a stem with a stationary jaw, ratchet teeth on said stem, a movable jaw mounted to slide upon said stem, said jaw having a depending portion with a recess therein, a spring secured at one of its ends to said depending portion and having its opposite end projecting beyond the said portion whereby it may be engaged by the operator, an eye-piece secured to the said spring, a ratchet member within the said recess, said member being pivoted through the said eye-piece, the hole through the eye-piece being larger than the pivot pin whereby relative movement is permitted between the member and spring, and teeth on the said ratchet member for engaging with the teeth on the said stem.

5. In a wrench having a stem with a stationary jaw, squared ratchet teeth on said stem, a movable jaw mounted to slide upon said stem, said jaw having a depending portion with a recess therein, a spring secured at one of its ends to said depending portion and having its opposite end projecting beyond the said portion whereby it may be engaged by the operator, an eye-piece secured to the said spring, a block within the said recess, said block being pivoted through the said eye-piece, the hole through the eye-piece being larger than the pivot pin whereby relative movement is permitted between the block and spring, and squared teeth on the said block for engaging with the teeth on the said stem.
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In testimony whereof, I hereunto affix my signature in the presence of two witnesses.

PERCY H. LASLEY.

Witnesses:

ALBERT H. BATES,
J. B. HULL.