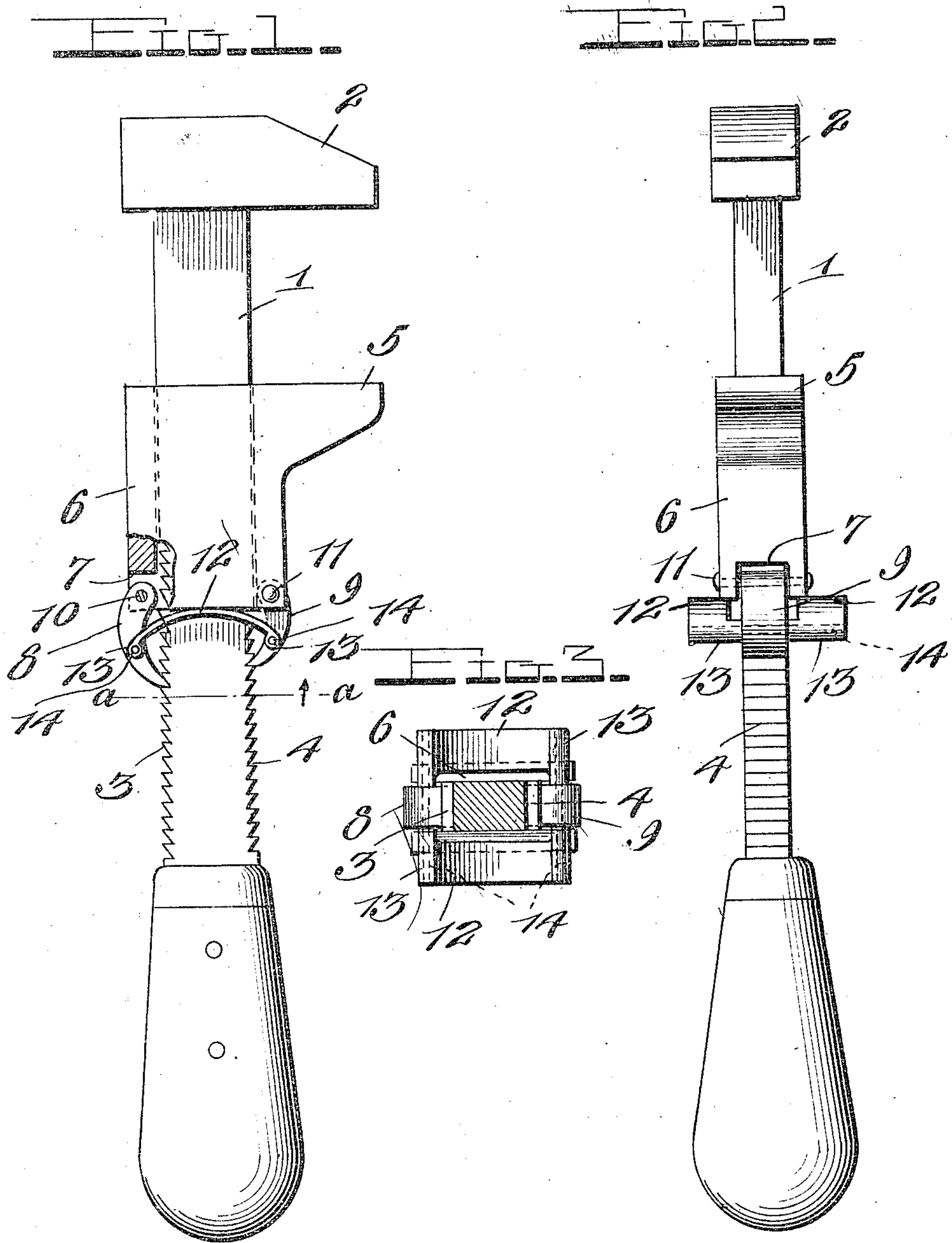


R. S. CLARK.
WRENCH.

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WRENCH.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, ROY S. CLARK, a citizen of the United States, residing at Anderson, in the county of Preston and State of West Virginia, have invented certain new and useful Improvements in Wrenches, of which the following is a specification, reference being had to the accompanying drawings.

This invention is an improved wrench, the object of the invention being to provide an improved device of this character in which the movable jaw and the shank of the wrench are provided with coacting devices to automatically lock the movable jaw in any adjusted position, and permit the ready operation of the jaw in either direction, the invention consisting in the construction, combination and arrangement of devices, hereinafter described and claimed.

In the accompanying drawings—Figure 1 is a side elevation of a wrench constructed in accordance with my invention, some of the parts being shown broken away and in section. Fig. 2 is a side elevation of the same at right angles to Fig. 1 and Fig. 3 is a detail transverse sectional view of the same on the plane indicated by the line *a-a* of Fig. 1.

The shank 1 of my improved wrench to which the fixed jaw 2 is attached, at one end, is provided on opposite sides with ratchet teeth 3, 4, one set of the ratchet teeth being slightly in advance of the set on the opposite side. The usual sliding jaw 5 is provided with a sleeve 6, which operates on the shank, and in the outer end of the said sleeve at opposite sides thereof, are recesses 7, for the reception of the inner ends of a pair of pawls 8, 9, which are respectively pivotally mounted as at 10, 11, and respectively engage the ratchet teeth 3, 4. The said pawls are connected together by springs 12, the ends of which springs are here shown as provided with eyes 13, engaged by studs 14, which project from the sides of the pawl. Any suitable means may be employed for connecting the ends of the springs to the pawls, and I do not desire to limit myself in this particular. The springs are curved

longitudinally and their arched portions preferably bear against the outer end of the sleeve 6 of the movable jaw 5. The tension of the springs on the pawls serve to close the pawls against the shank of the wrench and engage their free ends with the ratchet teeth 3, 4. Hence when the movable jaw is moved toward the fixed jaw, the springs permit the pawls to slide over the ratchet teeth and the springs close the pawls against the ratchet teeth so as to lock the movable jaw in any desired adjusted position.

In order to release the pawls, it is only necessary to press the central bowed portions of the springs 12 outwardly so that the springs are caused to tend to straighten and in doing so, they move the pawls outwardly in opposite directions, and disengage them from the ratchet teeth. Hence the springs in my improved wrench not only serve as engaging means for the pawls, but also serve as disengaging means therefor, so that they perform a double function.

One or more of the springs may be employed as may be desired and I do not desire to limit myself in this particular. Neither do I desire to limit myself to the precise construction and proportion of parts herein shown, as it is evident that modifications may be made within the scope of the appended claims.

I claim:—

1. In a wrench in combination with a shank having ratchet teeth on opposite sides, a jaw slidable on the shank, locking pawls carried by the jaw for engagement with the said ratchet teeth, and a curved spring connecting the said pawls together, serving to engage them with the ratchet teeth, and also enabling the pawls to be simultaneously moved from each other so as to disengage the ratchet teeth.

2. In a wrench of the class described, in combination with a shank having ratchet teeth at opposite sides, and also provided with a fixed jaw, a movable jaw on the said shank, having a sleeve, pawls pivotally connected to the said sleeve, and a longitudinally curved spring having its ends connected to the said pawls, and its central portion nor-

5 mally bearing against the outer end of said sleeve, said spring serving normally to engage the pawls with the ratchet teeth of the shank, and also serving, when its central portion is moved outwardly from the end of the sleeve to open the pawls and disengage them from the ratchet teeth.

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

ROY S. CLARK.

Witnesses:

JOHN J. DAILY,
G. M. LAYTON.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."
