J. SIPOS.

WRENCH.

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951,849. Patented Mar. 15, 1910.

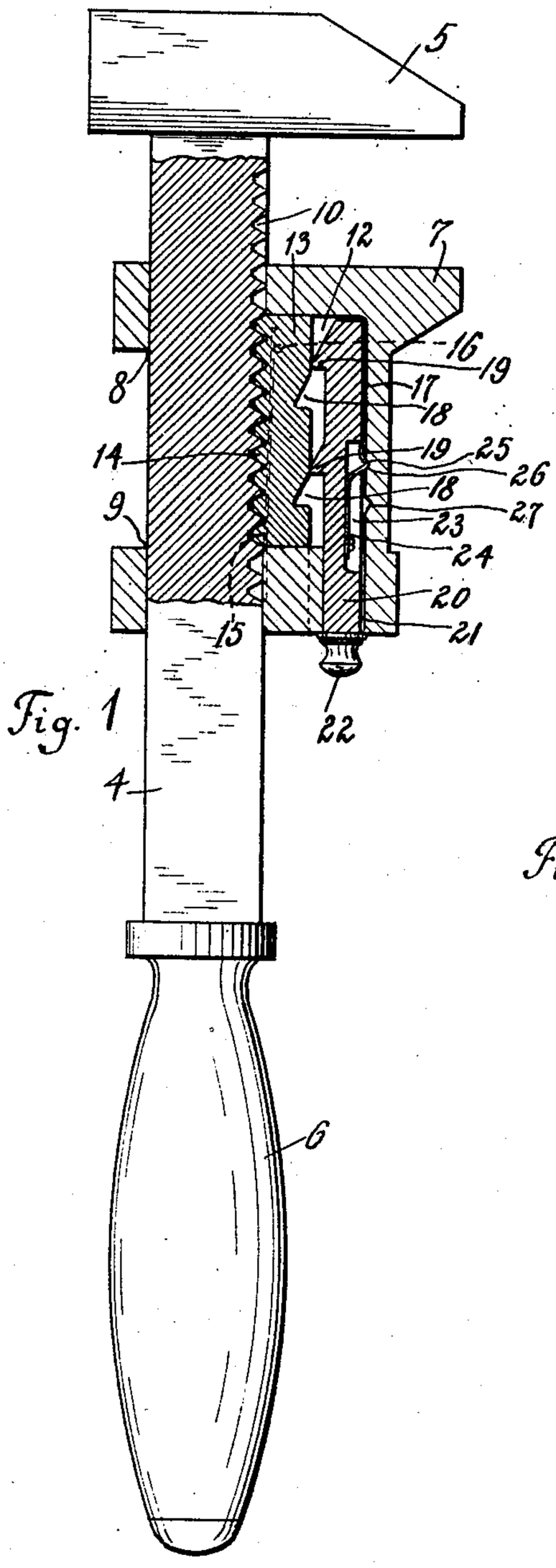

Fig. 1

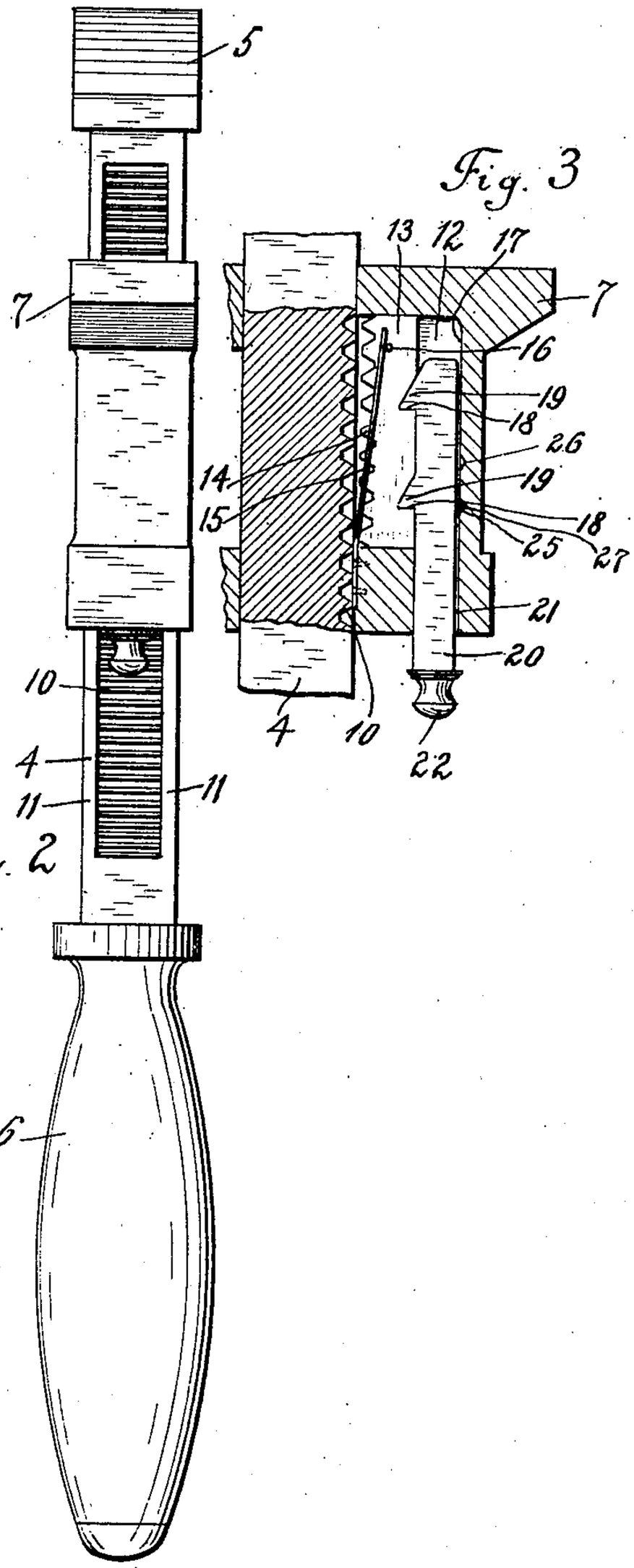

Fig. 2

Fig. 3

WITNESSES:

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JOSEPH SIPOS, OF SOUTH NORWALK, CONNECTICUT.

WRENCH.

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To all whom it may concern:

Be it known that I, JOSEPH SIPOS, a subject of the King of Hungary, and resident of South Norwalk, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Wrenches, of which the following is a specification.

The present invention relates to improvements in wrenches, and has for its object to provide a device of this character, the movable jaw of which can be quickly brought into any desired position relative to the fixed jaw of the same.

Another object of the invention is to provide a simple and inexpensive wrench, the movable jaw of which is provided with a locking means, coacting with means operatively connected with the fixed jaw, which locking means can be easily disengaged from each other, whereby said movable jaw is adapted to be shifted to any predetermined position and held there by engaging said coöperating locking means.

With these and other objects in view, which will appear as the nature of the invention is better understood, the same consists in the combination, construction and arrangement of parts hereinafter fully described, pointed out in the appended claims and illustrated in the accompanying drawings, in which:—

Figure 1 is a side elevation partly in section of a wrench constructed in accordance with the present invention, Fig. 2 is a side elevation of the same, and Fig. 3 is a view similar to Fig. 1, the locking means of the movable jaw being disengaged from its co-acting means upon the stem of the wrench.

In the drawings, the numeral 4 denotes the stem of the wrench, carrying upon one of its ends the fixed jaw 5 of the usual construction and of any suitable dimensions. The other end of the stem is provided with a handle 6, made, preferably, of wood and attached to said stem by any suitable means. The stem is usually rectangular in cross section to prevent the rotation of the movable jaw 7 thereon, which latter is provided with rectangular holes 8 and 9, in engagement with said stem so as to be slidable thereon in the direction of the longitudinal axis of said stem.

Upon one of its sides the stem 4 is provided with a rack 10, or in other words with a plurality of parallel teeth, which do not extend through the whole length of the sides of the stem, whereby ridges 11, 11 are formed upon said side, which contact with the walls of the holes in the movable wedge of the wrench. In the movable jaw is provided a recess 12, in which is slidably arranged a block 13, provided with teeth 14 upon its front face, which teeth are adapted to mesh with the rack 10. Resilient members 15, 15, fastened to the movable jaw 7 and engaging pins 16, 16 upon the block 13, tend to disengage the teeth of said block from said rack, or in other words tend to move said block toward the wall 17 of the recess 12. Upon the rear face of the block 14 are provided notches 18, 18, adapted to be engaged by the lugs 19, 19 of an actuating member 20, arranged in the recess 12 and protruding through a hole 21, which leads from said recess through the lower wall of the movable jaw, and being provided outside of said jaw with a knob 22, attached to said operating member in any suitable manner. The operating member 20 is provided with a pocket 23, in which is arranged a flat spring member 24, having a nose 25, adapted to engage the depressions 26 or 27, respectively, in the wall 17 of the recess 12. More particularly, the said nose engages the depression 26 when the operating member 20 is in its upper position, as shown in Fig. 1, and takes into the recess 27 when in its lower position, shown in Fig. 3 of the drawings. The operating member is, of course, held in these positions by the spring 24, but can be easily shifted from one into the other position by force.

The operation of the device is as follows: When the operating member is shifted into its lower position, illustrated in Fig. 3 of the drawings, the nose 25 of the spring 24 will engage the depression 27 in the rear wall of the recess 12, whereby the lugs 19 upon said operating member will come in alinement with the notches 18 in the block 13. The springs 15 are thus left free to act, forcing thereby the block backward and disengaging thus the teeth of the same from the rack 10. The movable jaw can thus be shifted to any desired position upon the stem 4. When the operating member is forced to its upper position, the lugs 19, 19 are disengaged from the notches 18, 18 in the block 13, and act then upon the rear face of the block, forcing the same against the operation of the springs 15 toward the rack 10,

causing the teeth of said block to mesh with the rack, whereby the movable jaw is held in a fixed position, inasmuch as the operating member 20 is held in its upper position by the spring 24, engaging the depression 26 in the wall 17.

It will be observed that many minor changes may be made in the construction and arrangement of the several parts of the device without departing from the spirit or scope of the invention; for instance, while herein a particular construction is shown and described to shift the block 13, it will be observed that any other suitable means could be employed, or instead of the teeth of the rack and the block, projections or lugs of suitable configuration could be made use of.

What I claim is:—

1. In a wrench, the combination with a stem, of a fixed jaw thereon, a movable jaw slidably arranged upon said stem, a rack upon one side of said stem, a block provided with teeth adapted to mesh with said rack loosely mounted upon said movable jaw and having notches in one of its faces, an actuating member provided with lugs adapted to force said block into engagement with said rack when said lugs are disengaged from said notches, and resilient means for disengaging said block from said rack when said actuating member is shifted so that its lugs are adapted to enter the notches of said block.

2. In a wrench, the combination with a stem, of a fixed jaw thereon, a movable jaw slidably arranged upon said stem, a rack upon one side of said stem, a block provided with teeth adapted to mesh with said rack loosely mounted upon said movable jaw and having notches in one of its faces, an actuating member provided with lugs adapted to force said block into engagement with said rack when said lugs are disengaged from said notches, resilient means for disengaging said block from said rack when said actuating bar is shifted so that its lugs are adapted to enter the notches of said block, and means for keeping the lugs of said actuating member in or out of engagement with the notches of said block at will.

Signed at South Norwalk, in the county of Fairfield and State of Connecticut this 11th day of November, A. D. 1909.

JOSEPH SIPOS.

Witnesses:
HERMAN QUITTNER,
JAMES PAUL.