

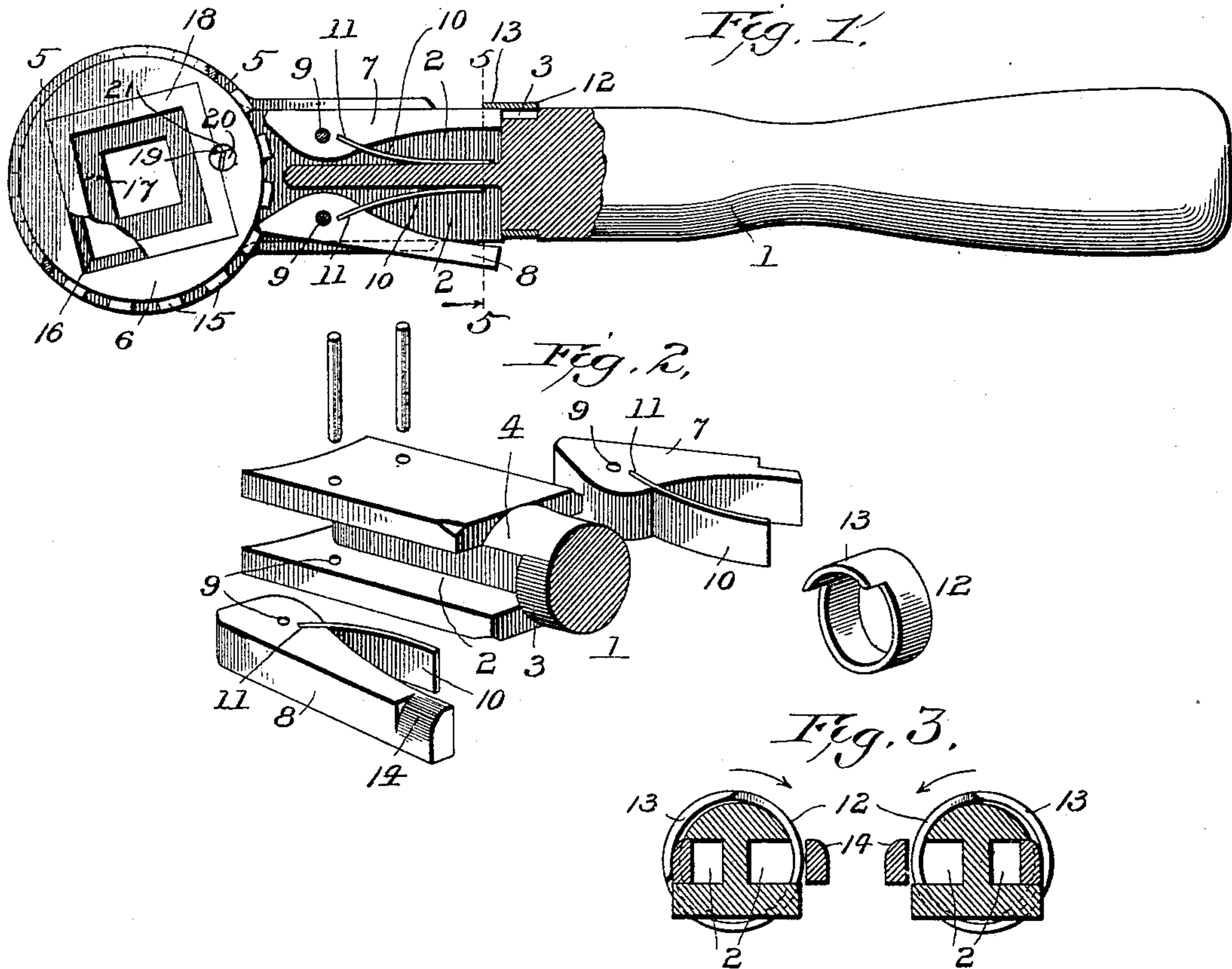
No. 630,986.

Patented Aug. 15, 1899.

J. L. NOTT.
WRENCH.

(Application filed Apr. 7, 1899.)

(No Model.)



Witnesses
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UNITED STATES PATENT OFFICE.

JOHN LAMMOTT NOTT, OF ROLLER, MARYLAND.

WRENCH.

SPECIFICATION forming part of Letters Patent No. 630,986, dated August 15, 1899.

Application filed April 7, 1899. Serial No. 712,079. (No model.)

To all whom it may concern:

Be it known that I, JOHN LAMMOTT NOTT, a citizen of the United States, residing at Roller, in the county of Carroll and State of Maryland, have invented certain new and useful Improvements in Reversible Ratchet-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 reversible ratchet-wrenches, the object being to provide a simple, inexpensive, and improved device of this character adapted for rapid and easy manipulation and for accommodating nuts of different sizes.

The invention embraces certain improved instrumentalities set forth in detail herein-after and recited in the appended claim.

In the accompanying drawings, Figure 1 is a front view showing the box in the head, parts being broken away to show the pawls; Fig. 2, an enlarged detail showing the locking-ring and adjacent portions of the handle and pawls; and Fig. 3 is a transverse section on line 5 5 of Fig. 1, showing two positions of the locking-ring.

The numeral 1 designates a handle having recesses 2 in its sides and a circumferential groove 3 at the ends of said recesses. Along one side of the handle this groove is extended forward at 4, this portion lying alongside the recesses instead of beyond their ends. Upper and lower head-retaining bands 5 are secured to the handle above and below the recesses, the rotatable ratchet-head 6 being held by them. The numerals 7 and 8 designate pawls pivoted at 9 to the handle and lying in the recesses. Leaf-springs 10 are secured to the pawls at 11, their rear ends being free and bearing against the bottoms of the recesses, thereby keeping the front ends of the pawls normally in engagement with the ratchet-teeth on the head 6. A locking-ring 12 is lo-

cated in the circumferential groove 3 and adapted to turn therein. This ring is of the same width as the said groove; but at one portion it is broadened, as shown at 13, at which point it extends into the groove 4, so that upon turning the ring this flange 13 can be made to ride over the end of either pawl (according as it is turned to the right or left) and disengage it from the rotatable head. To permit the easy engagement of the flange with the pawls, the latter are rounded somewhat at 14. When both pawls are engaged with the head, it cannot be turned in either direction, and when one pawl is disengaged it can be turned one way. The head is provided with ratchet-teeth 15, as usual, and has a square opening provided with a square countersink 16. This opening is adapted to accommodate one size of nut, and to accommodate nuts of smaller size I employ a box 17, adapted to fit the opening in the head and provided with a flange 18 to fit the countersink. This box has nut-openings of different sizes at its opposite ends and is provided with a notch 19 in its flange.

The numeral 20 designates a locking-screw on the head, which has a portion cut away at 21 to permit removal of the box and which on turning will enter the notch and lock the box.

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

In a ratchet-wrench, the combination with a rotatable head having an opening, of a nut-receiving box or head fitted in the opening and having a flange provided with a notch, and a screw threaded in the rotatable head and having its own head cut away and adapted to be turned to enter the notch and lock the box.

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

JOHN LAMMOTT NOTT.

Witnesses:

JACOB H. BLOCHER,
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