(No Model.)

O. C. WHITE.

WRENCH.

No. 390,422. Patented Oct. 2, 1888.

Fig. 1.

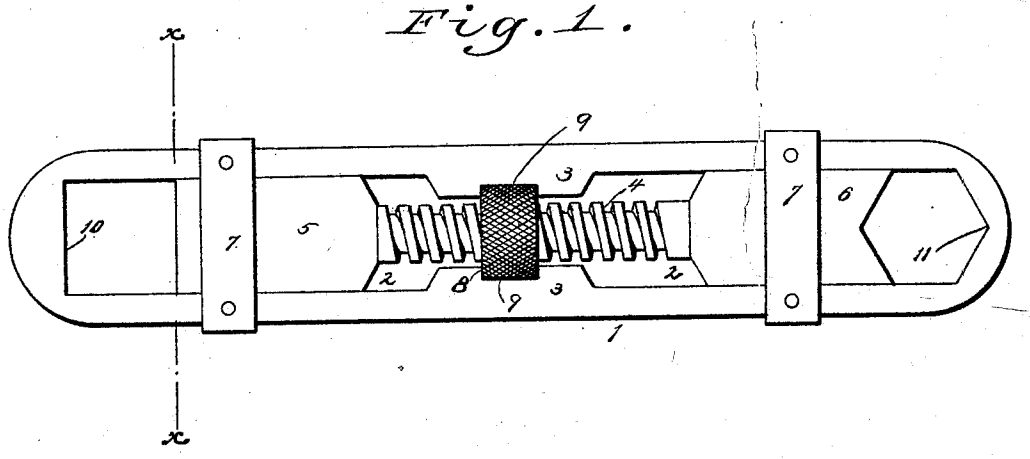
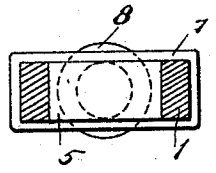


Fig. 2.



WITNESSES:
John W. Dawner
C. Sedgwick

INVENTOR
O. C. White
BY Munn & Co
ATTORNEY

N. PETERS, Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

OSCAR C. WHITE, OF WICHITA, KANSAS.

WRENCH.

SPECIFICATION forming part of Letters Patent No. 390,422, dated October 2, 1888.

Application filed May 2, 1888. Serial No. 272,560. (No model.)

To all whom it may concern:

Be it known that I, OSCAR C. WHITE, of Wichita, in the county of Sedgwick and State of Kansas, have invented a new and Improved Wrench, of which the following is a full, clear, and exact description.

This invention relates to wrenches, and has for its object to provide a wrench which can be used with nuts of various sizes and shapes.

The invention consists in a wrench constructed as hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures of reference indicate corresponding parts in both the views.

Figure 1 is a view of the invention; and Fig. 2 is a horizontal section thereof, taken on the line *x x* of Fig. 1.

In the construction of this invention the wrench consists of a plate, 1, formed with two openings or slots, 2, and intermediate projections, 3, between which is located a screw rod or shank, 4, having its ends extending into the openings 2, and one of said ends formed with a square-ended sliding jaw, 5, and the other end with a notched sliding jaw, 6. The jaws 5 and 6 are kept in place by the straps or keepers 7, secured to plate 1, and are operated by a thumb-nut, 8, located in slots 9 in the projections and engaging screw-rod 4.

The outer end of the opening 2 in which the jaw 5 is located is formed square, as at 10, by means of which, with the jaw 5, square-shaped nuts may be operated, and the outer end of the opening 2 in which the jaw 6 is located is formed with a notch, 11, by means of which, with the jaw 6, hexagonal nuts may be operated. Instead of the ends of the openings 2 and the jaws being constructed in the forms as just described, they may be made in any other shape desired, both ends being adapted for hexagonal nuts, if desired. By means of this construction it will be seen that either end of the plate 1 serves as a handle for the jaw operating at the opposite end, and that the jaw desired for use is easily adjusted by means of the thumb-nut 8, acting on the rod 4.

The wrench may be made of any suitable size and of iron or steel, and will be found very convenient where nuts of different sizes and shapes have to be manipulated.

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

1. A wrench consisting of a handle formed with lengthwise slots, a screw-rod with a jaw at each end located in the lengthwise slots of the handle, and an operating thumb-nut engaging the screw-rod, substantially as described.

2. A wrench consisting of plate 1, having openings 2, one of which has the square end 10 and the other the notched end 11, projections 3, with slots 9, in which is located thumb-nut 8, the screw-rod 4, engaging thumb-nut 8, and having at one end the square-ended sliding jaw 5 and at the other end the notched sliding jaw 6, and the retaining-straps 7, substantially as described.

OSCAR C. WHITE.

Witnesses:

ALVA J. APPLEGATE,

ARTHUR E. ALLEN.