

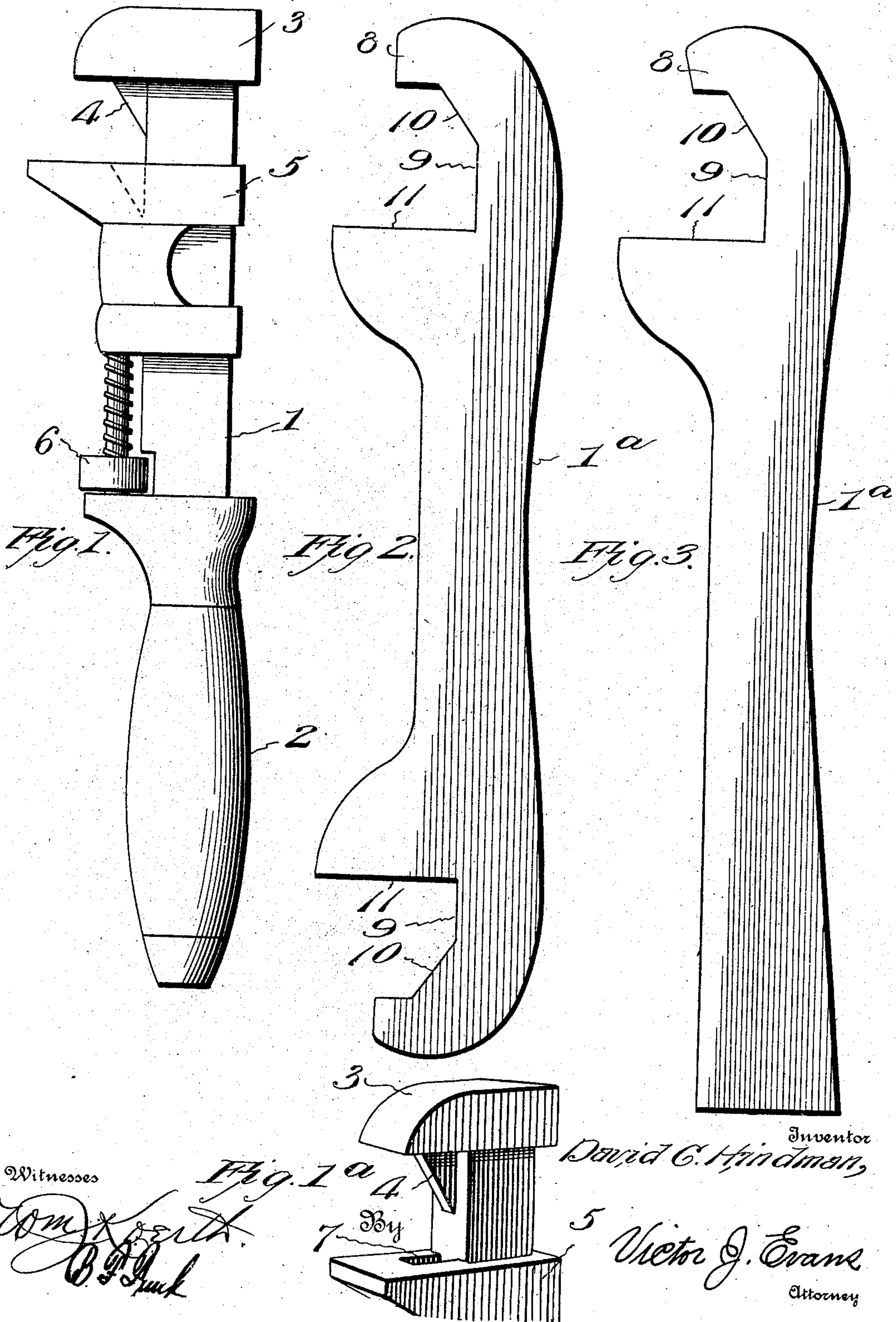
No. 717,400.

Patented Dec. 30, 1902.

D. C. HINDMAN.
WRENCH.

(Application filed Oct. 14, 1902.)

(No Model.)

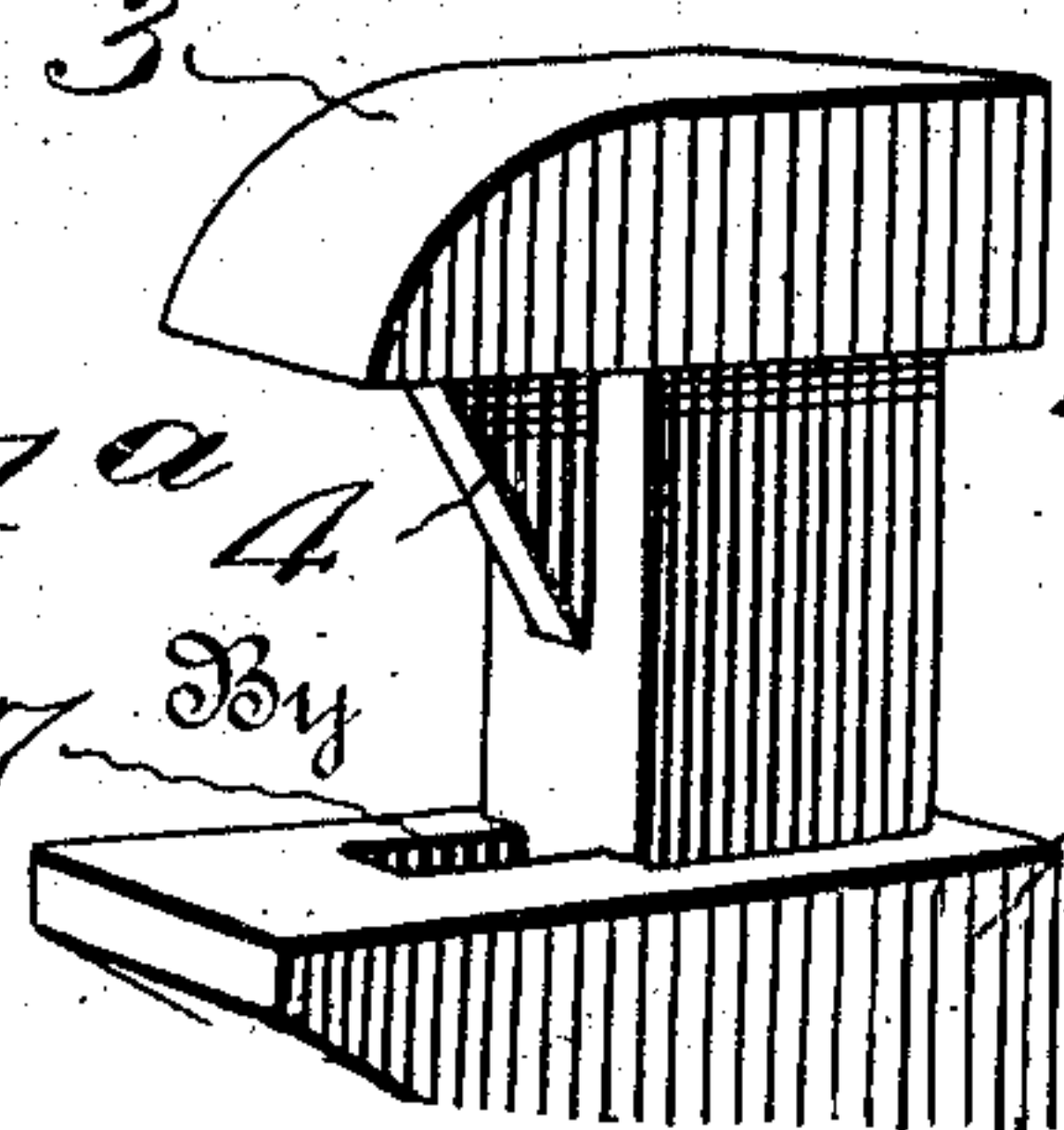


Witnesses

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Fig. 1a

By



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WRENCH.

SPECIFICATION forming part of Letters Patent No. 717,400, dated December 30, 1902.

Application filed October 14, 1902. Serial No. 127,263. (No model.)

To all whom it may concern:

Be it known that I, DAVID C. HINDMAN, a citizen of the United States, residing at Rushville, in the county of Schuyler and State of Illinois, have invented new and useful Improvements in Wrenches, of which the following is a specification.

This invention relates to wrenches; and the object thereof is to provide a wrench having a novel construction of jaw, whereby different forms of nuts or tabs can be engaged to be turned upon the bolt.

The peculiar manner of accomplishing the desired result will be described hereinafter and illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of a wrench constructed in accordance with my invention. Fig. 2 is a slightly-modified form, and Fig. 3 is a still further modified form. Fig. 1^a is a fragmentary perspective view of a portion of the wrench, illustrating the slot in the lower jaw for the reception of the angular plate.

The reference-numeral 1 designates the shank of a wrench, on one end of which is a handle 2. On the other end of the shank is a laterally-extending rigid jaw 3. Connected to the rigid jaw and the shank is an inclined rib 4, which in the preferred form is in the nature of a plate in the form of a right-angle triangle fitting into the right angle formed by the juncture of the rigid jaw with the shank. Slidably secured on the shank is a movable jaw 5, which can be operated by means of a screw 6, whereby the moving jaw can be adjusted toward or away from the rigid jaw. It will be noticed that the sliding jaw projects laterally beyond the extremity of the rigid jaw, the purpose of which will be explained presently. In order that the sliding jaw may be adjusted to abut against the rigid jaw, I provide a recess 7 in the sliding jaw, which corresponds to the form of the rib 4, above described. It will be noticed that the rib or plate 4 is of less thickness than the shank 1, so that it can fit into the recess 7 when the two jaws are brought together.

By providing the arrangement above described the engaging jaw is provided with a vertical wall, both walls being connected by

an inclined wall. The sliding jaw forms a lateral wall or surface for engagement with the end extending beyond the end of the rigid jaw, so that the nut can be readily grasped and a positive purchase had to prevent the sliding of the wrench. Three bearing-surfaces are thus provided, so that a better purchase can be obtained upon the nut than is possible with an ordinary wrench.

Another object of providing the plate is that the angles of the polygonal-sided nut will fit snugly in the angle formed by the plate and the rigid jaw, thus preventing the slipping of the wrench, and thereby round the angles, and thus reduce the efficiency of the wrench by destroying the engaging surface of the nut.

In the modified form shown in Fig. 2 I have illustrated a shank 1^a, provided with two opposite rigid jaws on the respective ends of the shank, each of which comprises a short bearing-surface 8 and a vertical bearing-surface 9, said bearing-surfaces being connected by an inclined bearing-surface 10 and a lateral bearing-surface 11, extending beyond the bearing-surface 8, the shape of the jaw being substantially like the form shown in the figure, except that it is not adjustable.

In Fig. 3 a still further modification is shown, the jaw being identical to that shown in Fig. 2, except that only one jaw is shown on the shank.

It will thus be seen that an efficient and durable wrench is provided, which can be manipulated and will effectively perform the service for which it is intended.

Having described my invention, what I claim is—

1. A wrench comprising a shank, a rigid jaw on the end of the shank and at right angles to the inner edge of the shank, a rib or plate intersecting the inner walls of the jaw and shank, the edge of the plate being arranged at an obtuse angle to the jaw and shank, and a laterally-projecting portion extending from the shank parallel with the rigid jaw and projecting beyond the extremity thereof.

2. A wrench comprising a shank, a laterally-projecting rigid jaw on the end of the

shank, a plate connected to the shank and rigid jaw, one edge of the plate extending diagonally across the space formed by the jaw and shank, said plate being of less thickness
5 than the jaw or shank, a sliding jaw on the shank provided with a recess corresponding to the plate so that the two jaws can be closed.

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

DAVID C. HINDMAN.

Witnesses:

JOHN S. BAGBY,
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