

(No Model.)

C. T. HAMMACK.
WRENCH.

No. 463,044.

Patented Nov. 10, 1891.

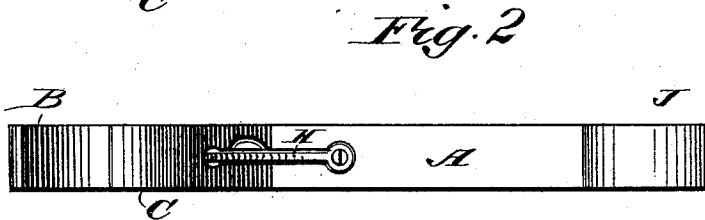
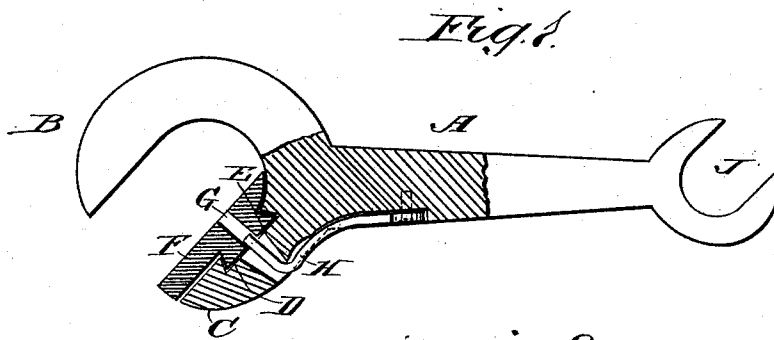


Fig. 3

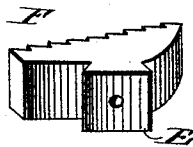
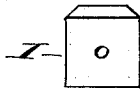


Fig. 4



WITNESSES:

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CICERO T. HAMMACK, OF BIRMINGHAM, ALABAMA.

WRENCH.

SPECIFICATION forming part of Letters Patent No. 463,044, dated November 10, 1891.

Application filed March 13, 1891. Serial No. 384,893. (No model.)

To all whom it may concern:

Be it known that I, CICERO T. HAMMACK, of Birmingham, in the county of Jefferson and State of Alabama, have invented certain new and useful Improvements in Wrenches, of which the following is a full, clear, and exact description.

The object of the invention is to provide certain new and useful improvements in wrenches, whereby the wrench can be readily changed for different kinds and sizes of work.

The invention consists of certain parts and details and combinations of the same, as will be hereinafter fully described, and then pointed out in the claims.

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

Figure 1 is a side elevation of the improvement, with parts in section. Fig. 2 is an inverted plan view of the same, and Figs. 3 and 4 are perspective views of auxiliary jaws.

The improved wrench is provided with a handle A, on one end of which are arranged opposite each other the two fixed jaws B and C, of which the jaw C is provided on its inner face with a transversely-extending dovetail D, adapted to be engaged by a correspondingly-shaped tongue E, formed on the under side of an auxiliary or false jaw F, used in conjunction with the opposite jaw B. The jaw F may be made in different thicknesses and smooth on the inner side, as shown in Fig. 1, or corrugated or toothed, as is illustrated in Fig. 3, so as to reduce the opening between the jaws B and C to adapt the wrench for different kinds and sizes of work. The face of the auxiliary jaw is parallel to the face of the opposite jaw for ordinary purposes and beveled or grooved for pipe and stud work.

In order to hold the auxiliary jaw F in place on the fixed jaw C, suitable means may be employed, such as set-screws, or, as shown in the drawings, a spring H, which is secured at one end on the under side of the handle A and engages with its free end, an opening or recess G in the said auxiliary jaw F. In case the wrench is used without the auxiliary jaws F a beveled plate I is engaged in the dovetail D and held therein by the

spring H, or other means, the inner surface of the said plate I being in line with the inner surface of the jaw C, so that the latter presents an unbroken straight surface on its inner face. Instead of the dovetail D and tongue E, other suitable devices may be employed to attach the false jaw or jaws to the respective fixed jaw or jaws. On the other end of the handle A may be arranged one or more open jaws J, in the usual manner. If desired, one or more of the said jaws J may be provided with auxiliary jaws in the manner described in reference to the fixed jaw C. It will be seen that by inserting one of the auxiliary jaws on the fixed jaw C the distance between the inner face of the said auxiliary jaw and the inner face of the fixed jaw B is less than the distance between the two fixed jaws B and C, so that the wrench can now be used for smaller-sized work.

By having a series or set of such auxiliary jaws the wrench can be readily adapted to all classes and kinds of work.

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

1. The combination, with a wrench having two fixed jaws and provided with a dovetail recess in one of the said jaws and with an opening extending through the jaw to the recess, of an auxiliary jaw provided with a dovetail tongue fitting in the recess and with an opening, and a fastening device projecting through the opening of the recessed jaw into the opening of the auxiliary jaw, substantially as described.

2. The combination, with a wrench having the fixed jaws B C and provided with the dovetail recess D in the jaw C and with an opening leading from the recess through said jaw, of the auxiliary jaw F, provided with the tongue E and opening G, and the spring H, having one end secured to the handle and its free end projecting into the opening of the auxiliary jaw, substantially as herein shown and described.

CICERO T. HAMMACK.

Witnesses:

W. C. DENNIS,
JOE HEALY.