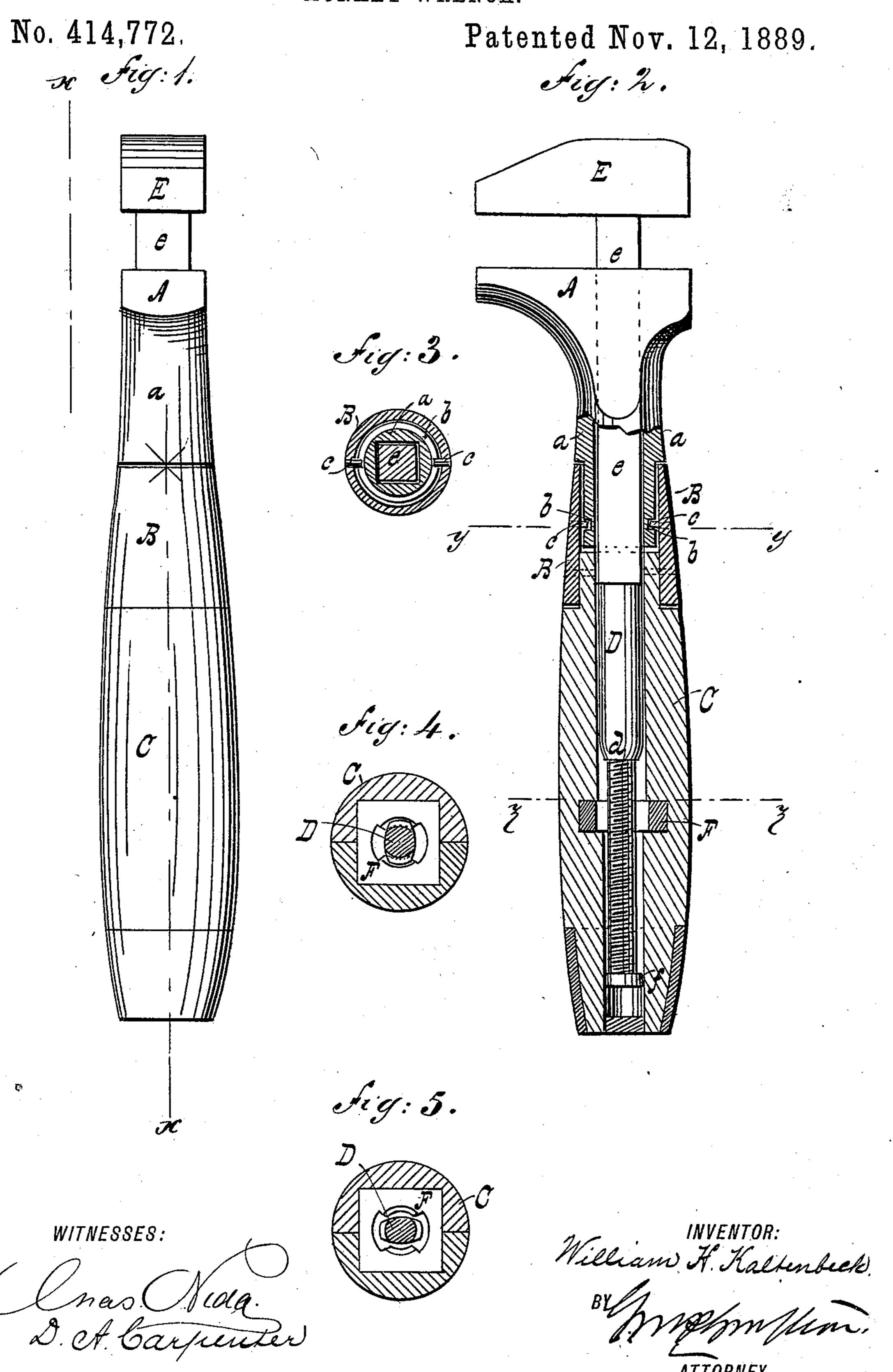
## W. H. KALTENBECK. MONKEY WRENCH.



## United States Patent Office.

WILLIAM H. KALTENBECK, OF STAMFORD, NEW YORK.

## MONKEY-WRENCH.

SPECIFICATION forming part of Letters Patent No. 414,772, dated November 12, 1889.

Application filed June 21, 1889. Serial No. 315,067. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. KALTEN-BECK, of Stamford, Delaware county, New York, have invented a certain new and useful Improvement in Monkey-Wrenches, of which I declare the following to be a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

This invention is in the nature of an improvement in monkey-wrenches; and the invention consists of a monkey-wrench having its several parts constructed and combined in the manner herein described, shown, and

15 claimed.

In the accompanying sheet of drawings, Figure 1 is a front view of the wrench; Fig. 2, a sectional view in the plane x x, Fig. 1; Fig. 3, a cross-section in the plane y y, Fig. 2; 20 Figs. 4 and 5, cross-sections in the plane z z, Fig. 2, showing the parts in different relative positions.

Similar letters of reference indicate like

parts in the several views.

The purpose of this invention is to facilitate the adjustment of the loose jaw of a monkey-wrench, so that the wrench may be instantly adapted to a nut of any size. To that end I construct my wrench as follows: 30 The fixed jaw A is provided with a prolongation a, which has an annular recess b turned therein near its lower end. Surrounding the lower part of the prolongation a is a metal sleeve B, which is held in place by pins c c, 35 that enter the recess b of the prolongation, and in this sleeve B is fitted a wooden handle C, which is fastened to the sleeve by pins, as indicated by dotted lines in Fig. 2. The handle is hollow, and in it is inserted the 40 tang D of the movable jaw E. The tang is elliptical in cross-section for a portion of its length, as shown in Figs. 4 and 5, the broad sides being smooth and the narrow sides being provided with screw-threads d. The tang 45 extends upward through the recess in the handle C, its upper portion being squared, as shown in Figs. 2 and 3, and the squared part e passes through a correspondingly-shaped mortise in the fixed jaw A. In the handle is l

| placed a nut F, with threads that correspond 50 to the threads on the tang D, and through this nut the tang passes. To the end of the tang is secured the block or stop f.

Now, when my wrench is constructed substantially in the manner described, it is operated in this wise: When the handle C is turned so that the threads in the nut F are brought opposite to the unthreaded sides of the tang D, then there is nothing to hinder the pulling out or pushing in of the adjust-60 able jaw E. The jaw being in that way adjusted to the nut, is instantly fixed in position by again turning the handle until the threads in the nut F register with the threads on the tang D, and then, as is obvious, the adjust-65

able jaw can neither be pushed in or out of the handle, but becomes fixed, grasping the nut between it and the fixed jaw A. It will be noticed that, aside from the ra-

pidity of the adjustment in the manner de-70 scribed, the squared upper part e of the tang D in its mortise affords a firm and solid bearing to withstand the wrenching force applied when the wrench is in use, and also to withstand effectively the concussion received on 75 the back of the jaws when they are used as

a hammer.

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

The combination of the fixed jaw A, having the prolongation a, the jaw being mortised and the prolongation being also mortised longitudinally, the sleeve B, attached to and arranged to turn upon the prolongation a, the 85 handle containing the nut F, provided with sectional screw-threads, and the movable jaw E and tang D, the tang passing through the fixed jaw and the prolongation a into the handle and having within the handle the 90 part with an elliptical cross-section, and sectional screw-threads on its narrow edges to coact with the threads in the nut, substantially as and for the purpose described.

WILLIAM H. KALTENBECK.

In presence of—B. B. Bouton,
J. G. Crowley.