R. C. BOSWELL.

COMBINATION TOOL.

APPLICATION FILED JULY 13, 1918.

1,308,694

Patented July 1, 1919.

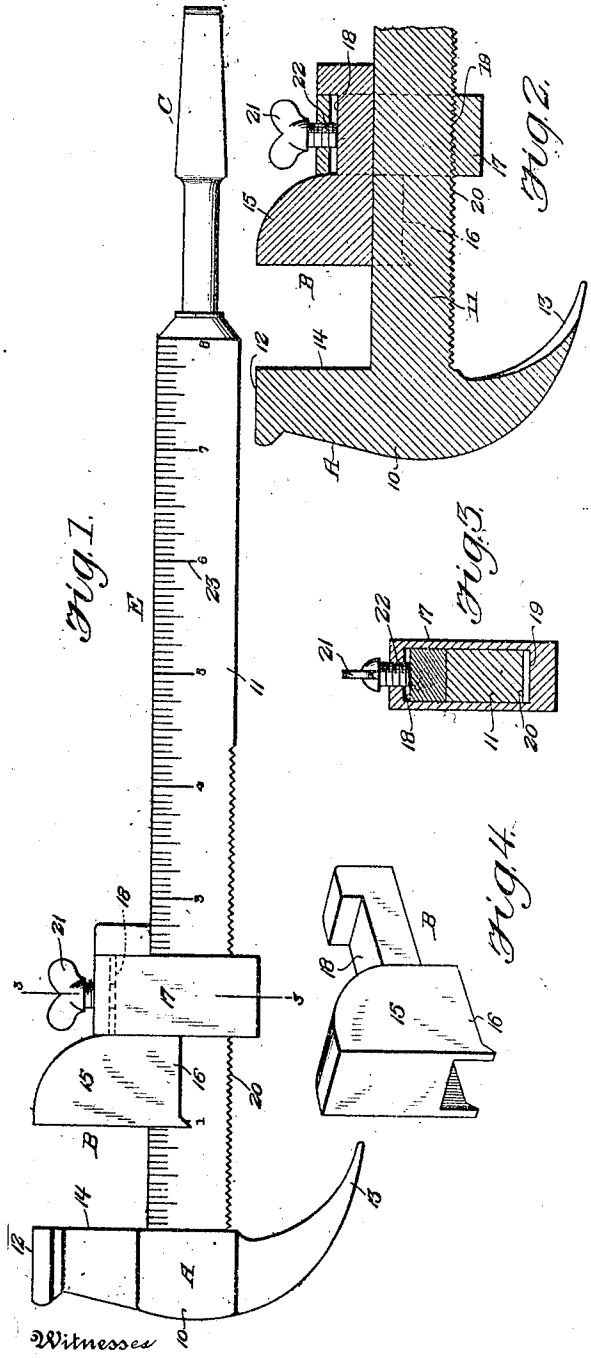


Fig. 1.

Fig. 2.

Fig. 3.

Fig. 4.

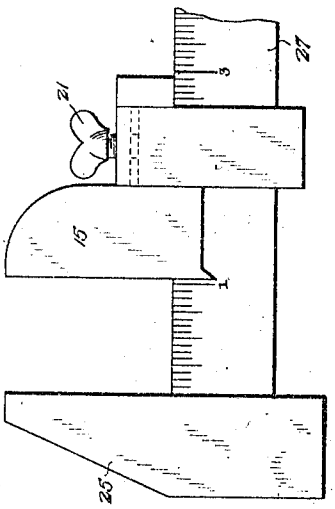


Fig. 6.

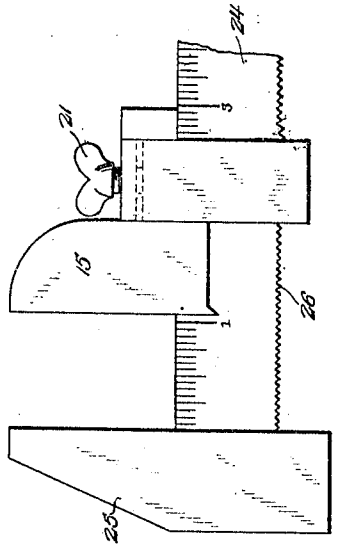


Fig. 5.

Witnesses

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UNITED STATES PATENT OFFICE

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COMBINATION-TOOL.

1,308,694. Specification of Letters Patent. Patented July 1, 1919.

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To all whom it may concern:

Be it known that I, ROSCOE C. BOSWELL, a citizen of the United States, residing at Washington, District of Columbia, have invented new and useful Improvements in Combination-Tools, of which the following is a specification.

This invention relates to tools and aims to provide a tool in which is combined a wrench, a hammer, a screw-driver, and a rule, the parts being so arranged as to provide a convenient, efficient and economically constructed article which may be manufactured and sold at a moderate cost.

A primary object of the invention is to provide a wrench having a novel form of movable jaw which is held upon the shank by means of a sliding collar engageable around said shank and within a transversely disposed groove or seat formed in the movable jaw, the interior of the collar having transverse teeth or serrations engageable with similar teeth or serrations formed on one edge of the shank, and a set-screw carried by the collar and engageable with the movable jaw, which may be tightened to cause the engagement of the teeth to hold the jaw against movement.

The invention also consists of the following novel construction, combination and arrangement of parts to be hereinafter more fully described and illustrated in the accompanying drawings, in which:—

Figure 1 is a perspective view of a tool embodying the present invention;

Fig. 2 is a fragmentary central longitudinal sectional view illustrating the manner of mounting the movable jaw upon the shank;

Fig. 3 is a transverse sectional view on the line 3—3 of Fig. 1;

Fig. 4 is a detail perspective view of the movable jaw detached from the tool;

Fig. 5 is a side elevation showing the movable jaw employed in the construction of a wrench; and

Fig. 6 is a fragmentary side elevation showing the modified form of wrench in which the teeth or serrations are omitted.

Referring to the drawings in detail and especially to Figs. 1 to 4 inclusive, there is illustrated a combination tool, which includes a hammer A, a wrench B, a screw-driver C and a rule E. The hammer which includes a head 10, is secured upon one end of a shank or handle 11 and provided with a striking surface 12 and a claw 13. The inner or lower face of the hammer is flattened as shown at 14, to form a stationary jaw of the wrench B. The movable jaw 15 is slidably mounted upon one edge of the shank or handle 11 and provided with side wings 16, which engage over each of the adjacent side edges of the said shank or handle. The movable jaw is held in sliding engagement with the shank or handle by means of a collar 17, which surrounds the said shank or handle and is engaged in a transverse groove or seat 18 formed in the movable jaw. The collar 17 is provided upon the interior thereof with teeth or serrations 19, which are engaged with similar teeth or serrations 20 formed on one edge of the shank or handle 11, and is further provided with a set-screw 21 engaged with a threaded opening 22 and adapted to bear against the movable jaw 15 for the purpose of causing an interlocking engagement of the teeth or serrations 19 and 20 to prevent movement of the jaw 15.

Upon the opposite end of the handle or shank 11 is located the screw-driver C, and the said shank or handle is further provided with graduations 23 divided into inches and fractions thereof, so that the said shank or handle provides a rule and jaws 14 and 15 in connection therewith forming a gage as will be readily apparent.

In Fig. 5 the movable jaw 15 is shown applied to the shank or handle 24 of an ordinary wrench, which has secured upon one end a stationary jaw 25, the edge of the shank being provided with teeth or serrations 26, which are engageable with the teeth or serrations 19 of the collar 17 as previously explained.

In Fig. 6 the construction shown is similar to that described in connection with Fig. 5, except that the teeth or serrations upon the shank 27 are dispensed with, the jaw 15 being held in its opposite position through binding engagement caused by the screw 21.

Various other changes may be made in the form, proportions and minor details of construction, and the right is reserved to make such changes.

Having described the invention, what is claimed is:—

1. A wrench embodying a shank, a stationary jaw carried thereby, a jaw slidably mounted upon said shank, guiding flanges

carried by the movable jaw and engageable upon each side of the shank, a slidable collar surrounding both the shank and slidably-mounted jaw for holding the latter upon the shank, and means carried by the collar for holding the jaw against movement.

2. A wrench embodying a shank, a stationary jaw carried thereby, a jaw slidably mounted on said shank, said slidable jaw comprising a reduced neck with a head and an enlarged extremity at its opposite ends, the junctures of the neck with the head and the enlarged extremity providing shoulders, a collar surrounding the shank and sliding jaw and engaging with said shoulders, and means carried by the collar for holding this jaw against movement.

In testimony whereof I affix my signature.

ROSCOE C. BOSWELL