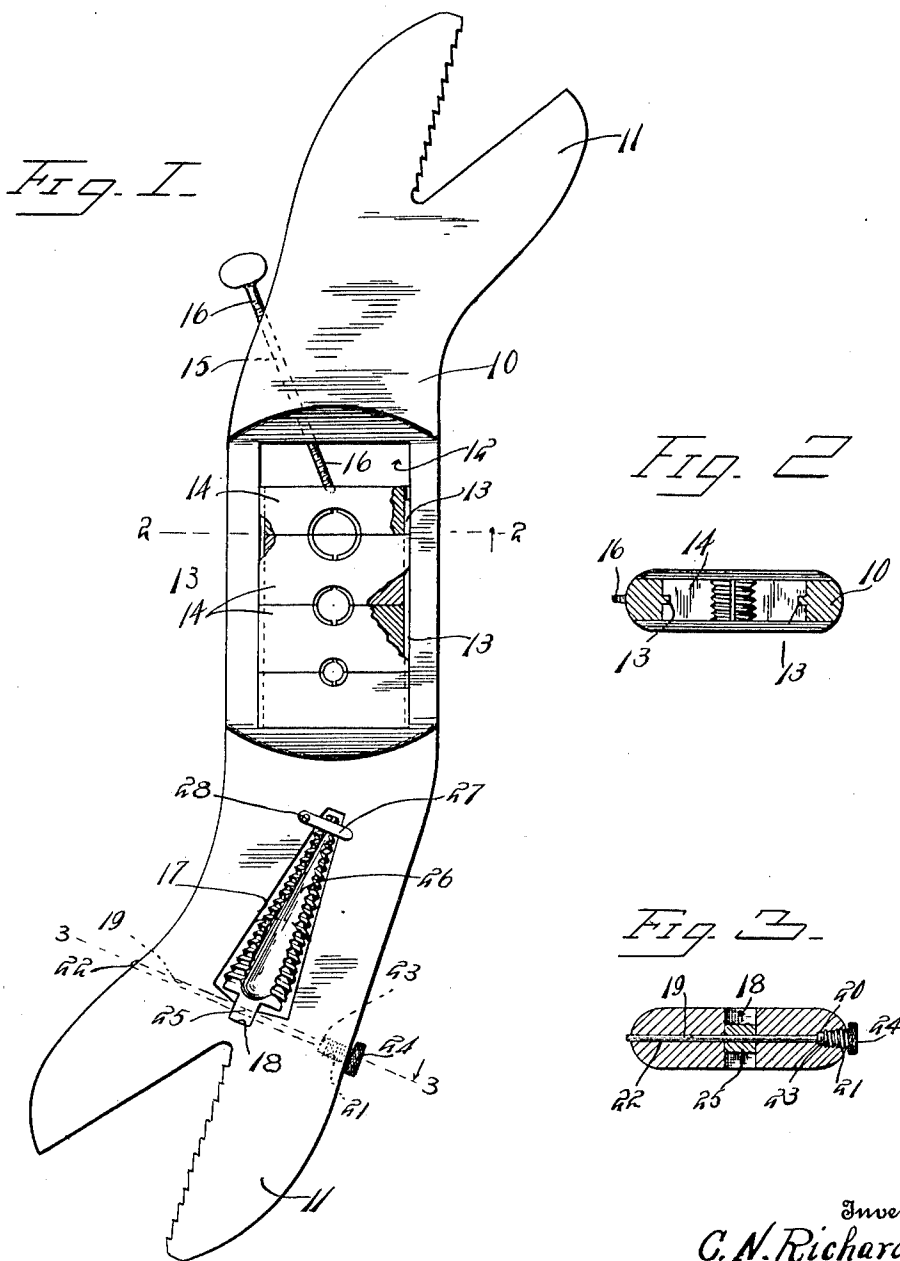


C. N. RICHARDSON.
COMBINATION TOOL.

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1,012,442.

Patented Dec. 19, 1911.



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COMBINATION-TOOL.

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To all whom it may concern:

Be it known that I, CHARLIE N. RICHARDSON, a citizen of the United States, residing at Boyd, in the county of Wise, State of Texas, have invented certain new and useful Improvements in Combination-Tools; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to combination tools and its principal object is to provide a tool adapted for use by pipe fitters and other mechanics, which shall combine itself to a number of separate tools among which are included a die-stock and tap attached thereto so as to be foldable into the body of die-stock when not in use but which may be extended at right angles to the body to lie in operative position.

The invention consists in certain novel details of construction and combinations of parts hereinafter fully and specifically set forth in the claim.

In the accompanying drawings, like characters of reference indicate like parts in the several views, and Figure 1 is a plan view of a combination tool constructed in accordance with this invention. Fig. 2 is a section on the line 2—2 of Fig. 1. Fig. 3 is a section on the line 3—3 of Fig. 1.

The numeral 10 indicates the body of this tool and this body is provided at opposite ends with wrench jaws 11 thus being in the form of an S-wrench. Centrally disposed of this body is an opening 12 having ribs 13 formed on the side walls and this opening is adapted to receive the ordinary grooved sectional dies 14 such as are commonly used with die plates and stocks of this description. These ribs 13 terminate short of one end of the opening so that ready insertion and assembly of the dies 14 is permitted. In order to hold the dies securely in place the body is provided with a perforation 15 extending angularly there-through and this perforation receives a thumb screw 16 the point of which bears against the assembled dies 14. In the end of the body opposite the screw 16 there is provided a recess having a tapering portion

17 and this recess terminates in a slotted end 18. Extending through the body transversely of this slotted portion is an opening 19 having an enlarged end 20 the outer portion of which is provided with screw threads 21. In the opening 19 is held the body of a pin indicated at 22 and this pin is provided with a head 23 held within the enlarged portion 20. A screw 24 serves to retain the pin within the opening as clearly shown in Fig. 3. Pivottally mounted on the pin is the shank of a tap, the shank being indicated at 25 and the body of the tap at 26. This shank is so arranged as to fit closely between the sides of the slot 18 so that when the point of the tap is raised from the recess 17 and positioned at right angles to the body 10 the tap may be used for threading nuts and the like without danger of twisting off the pin, the side walls taking all stress incident to the thread cutting operation. In order to retain the tap within the recess when the latter is not in use a suitable fastening is provided here shown as a small clip 27 pivoted to the body of the tool by means of a pin 28 and so arranged that it may be swung over the point of the tap or away therefrom according as may be desired to retain the tap in the recess or to raise the same therefrom.

In the operation of this device the pipe wrench is used in the ordinary manner incident to such wrenches and the dies used in like manner, the tap being held within the recess during such use by the retaining means. When, however, it is desired to use the tap the swiveling plate 27 is swung aside and the tap raised to stand perpendicular to the body 10. The tap is used, when in this position, in the common manner incident to the use of such a tool.

There has thus been provided a simple and efficient device of the kind described and for the purpose specified.

Having thus described the invention, what is claimed as new, is:—

In a combination tool, a body portion provided with a recess having a slot running from one end thereof and having a pin receiving opening extending transverse the body through said slot, said opening having an enlarged and threaded terminal, a pin

provided with a head held in said opening
and terminal, a screw held in the threaded
portion of the terminal to retain the pin in
position, and a member having a shank
5 closely fitting within the slot, said member
being adapted to lie within the recess when
in inoperative position.

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

CHARLIE N. RICHARDSON.

Witnesses:

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J. L. VARMAN.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."
