

D. W. KINSEL & P. WOGOMAN.
COMBINATION TOOL.
APPLICATION FILED APR. 21, 1909.

965,198.

Patented July 26, 1910.

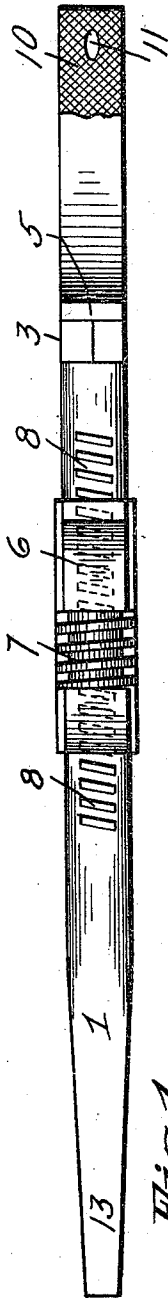


Fig. 1.

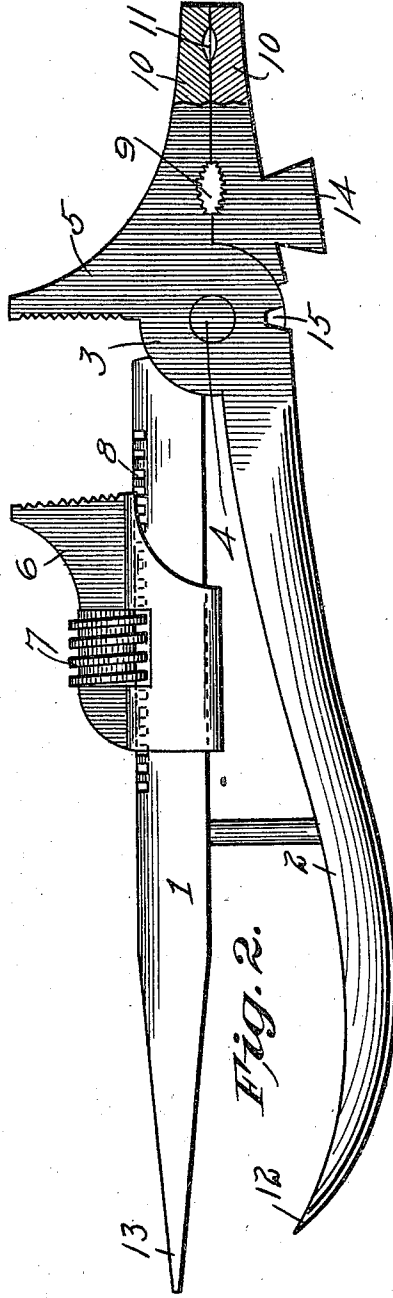


Fig. 2.

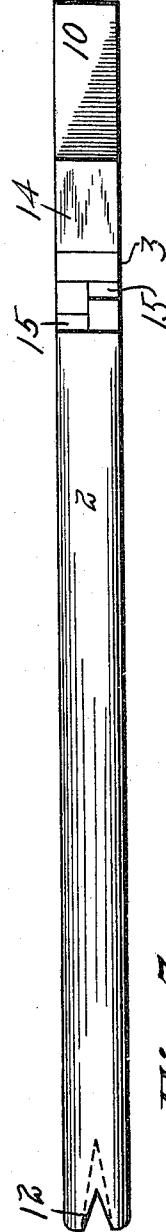


Fig. 3.

Witnesses

M. Silber.

C. M. Theobald.

Inventors
David W. Kinsel and
Perry Wogoman.

By

R. J. M. Carter
Attorney

UNITED STATES PATENT OFFICE.

DAVID W. KINSEL AND PERRY WOGOMAN, OF BROOKVILLE, OHIO.

COMBINATION-TOOL.

965,198.

Specification of Letters Patent.

Patented July 26, 1910.

Application filed April 21, 1909. Serial No. 491,248.

To all whom it may concern:

Be it known that we, DAVID W. KINSEL and PERRY WOGOMAN, citizens of the United States, residing at Brookville, in the county of Montgomery and State of Ohio, have invented certain new and useful Improvements in Combination-Tools; and we do 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, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

Our invention relates to new and useful improvements in combination tools.

The object of the invention is to provide a tool of the above character having the new and useful features hereinafter described and claimed.

In Figure 1 an edge view of the tool is shown, with a portion broken away to show the wire nail pulling cavity in the end of the other member. Fig. 2 is a side elevation, with the ends broken away and appearing in section. Fig. 3 is a view of the side or edge opposite that shown in Fig. 1.

In the detailed description of the invention similar reference characters indicate corresponding parts.

The grip portions or handles 1 and 2 have each a circular head 3 which engage each other and are united by a pivot 4. Extending from the handle 2 at a right angle and across the plane of the handle 1 is a stationary jaw 5 of a nut wrench; the movable jaw 6 of the nut wrench is supported upon the handle 1 and is movable therealong to vary the width of opening between said jaws 5 and 6. This movement of said jaw 6 is obtained by means of an exteriorly screw-threaded adjusting member 7 which is supported in said adjustable jaw 6 and engages the teeth 8 in the outer surface of said handle 1. The said adjustable jaw 6 may be quickly moved along the handle 1 to the requisite position relative to the fixed jaw 5. Owing to the fixed jaw 5 being extended from the headed portion of the handle 2, it will be seen, that in opening the handles 1 and 2, the fixed jaw 5 will have some movement toward the adjustable jaw 6, which

will have a material effect in increasing the pressure upon the nut or other device held between the jaws 6 and 5. The handle 1, as well as the handle 2, beyond the pivot 4, combine in providing a small pipe or nipple wrench 9 which may be utilized for detaching gas burners or other small devices, and the extreme end 10 of said members combine in providing pliers which are useful in a variety of ways and for many purposes. In the adjacent faces of the plier end of the implement, are provided cavities 11 which lie in proximity to the extreme end of the tool and are utilized for extracting wire nails which are formed in the manufacture thereof with semi-rounded heads and which are difficult of extraction by the usual tack or nail puller, such as is shown at the extreme end 12 of the handle 2. The said handle 2 is also provided with a hammer 14 lying immediately in advance of the headed portion of said handle, and the handle 1 is likewise provided with a screw driver 13. Edges of the headed portions of the two handles are provided with cutting edges 15 or rather with recesses for the reception of wires which may be cut thereby.

I claim:

In a combination tool, the combination of two handle members having heads which are pivotally connected, one of said handle members being provided with teeth in its outer side and a movable jaw with means engaging said jaw to move it along said handle, the other of said handle members terminating in a fixed jaw extending across the plane of the handle member having the movable jaw and cooperating therewith in providing a nut wrench which lies on one side of the pivot which connects said heads, the fixed jaw so extended having a movement toward the adjustable jaw in opening said handles, and whereby the pressure exerted between the jaws is increased, substantially as shown and described.

In testimony whereof we affix our signatures, in presence of two witnesses.

DAVID W. KINSEL.
PERRY WOGOMAN.

Witnesses:

MATTHEW SIEBLER,
C. M. THEOBALD.