

No. 626,285.

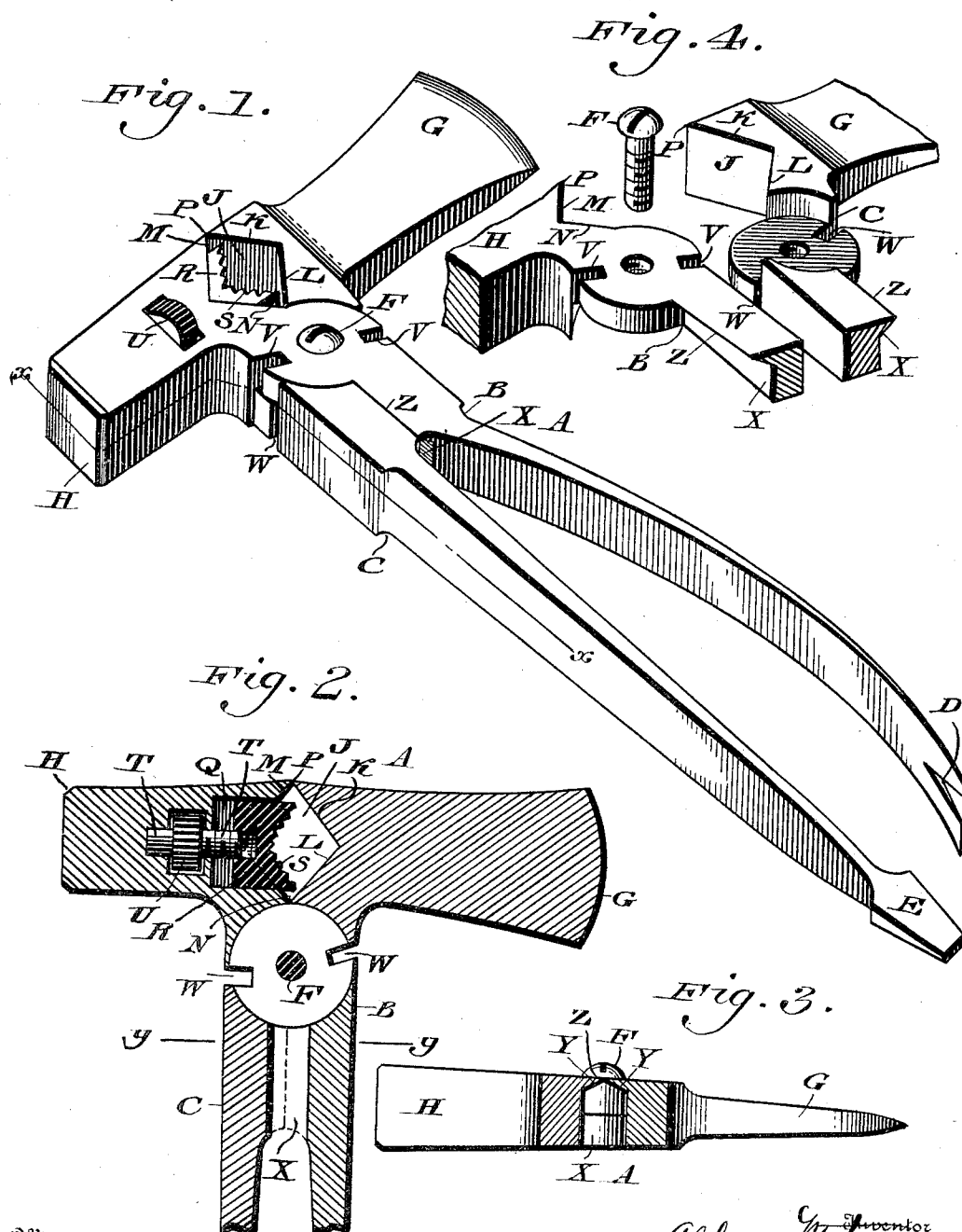
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A. METZGER.

WRENCH ATTACHMENT FOR COMBINATION TOOLS.

(Application filed July 30, 1898.)

(No Model.)



Witnesses

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UNITED STATES PATENT OFFICE.

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WRENCH ATTACHMENT FOR COMBINATION-TOOLS.

SPECIFICATION forming part of Letters Patent No. 626,285, dated June 6, 1899.

Application filed July 30, 1898. Serial No. 687,272. (No model.)

To all whom it may concern:

Be it known that I, ALFRED METZGER, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Wrench Attachments for Combination-Tools, which improvement is fully set forth in the following specification and accompanying drawings.

My invention relates to an improvement in a combination-tool; and it consists of two stocks having pivoted handles carrying the same, the inner end of each stock having a recessed face, a jaw having a gripping-face opposite to the recessed face of the other stock, a threaded stem connected with said jaw, and an operating-head on said stem, one of said stocks having openings therein for said jaw, stem, and head and said jaw having its sides, top, and bottom incased by the adjacent walls, said stock and jaw thus producing a wrench attachment for a combination-tool of great strength, practicability, and convenience.

Figure 1 represents a perspective view of a wrench attachment for a combination-tool embodying my invention. Fig. 2 represents a partial section on line *xx*, Fig. 1. Fig. 3 represents a section on line *yy*, Fig. 2. Fig. 4 represents a perspective view of the different sections or members of the tool in separated position.

Similar letters of reference indicate corresponding parts in the figures.

Referring to the drawings, A designates a combination-tool, the same consisting of the sections or handles B and C, the lower end of the section B being provided with the tack or nail extractor D, while the section or member C is provided with the screw-driver E.

F designates the pivotal connection of the two sections, the extremity of the section C nearest its fulcrum or pivotal connection being provided with the hatchet-head G, while the section B is provided with the hammer-head H.

J designates a diamond-shaped opening in the juxtaposed faces or stocks of the portions G and H, which are formed by the walls K and L, which are located in the portion G, and the walls M and N, which are located in the portion H, the abutting edges P of said

walls K and M being adapted to serve as wire cutters or nippers.

Q designates a recess in the portion or head H, in which the jaw R is movably mounted, said jaw being provided with the serrated or roughened face S.

By locating the major portion of the movable jaw in its recess it will be apparent that the same is secured in a solid and rigid manner, and by causing said jaw to be moved in substantial alinement with the hammer and hatchet portion or at substantially a right angle to the handle members greater effectiveness is attained, as is evident. Furthermore, the recess Q extends from the angular or depressed face or walls K L of the opening J into the solid portion of the stock, in the longitudinal direction of the same, so that said jaw, excepting its outer serrated face S and immediate front portion, is inclosed by the top, bottom, opposite side, and rear walls of said recess, so that when the jaw is in service the side, top, and bottom walls of said recess act as braces to receive some of the strain imparted to the jaw and prevent the latter from breaking out of the recess, while, on the contrary, strengthening said jaw, owing to the sheath and brace afforded to the same by the walls in question. The rear wall of the recess incloses the back of the jaw and prevents the entrance of dirt thereto, and the body of the recess is in the main so inclosed and concealed that the fingers of the hand are prevented from entering the joint between said jaw and the several walls of the recess and being caught or pinched therein.

T designates a threaded stem engaging a threaded seat in the jaw S and rotatably mounted in the head H, said stem having a head U, which projects through the head H and is preferably milled or knurled, whereby it will be readily apparent that the jaw R can be readily adjusted according to requirements.

The walls of the recesses V and W constitute a wire-cutter, while that of the recess X and the edge Z constitute nippers.

The jaw R can be readily adjusted according to requirements by the manipulation of the milled head U, which latter and the stem T may be inserted in position in any suitable manner.

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

1. In a combination-tool, a pair of handles
5 pivoted together and having separate stocks
on the upper ends thereof, the inner portions
of said stocks having depressed faces there-
in, one of said stocks having a recess ex-
tending into the same from the face thereof
10 in the longitudinal direction of the stock, in
combination with a jaw freely occupying said
recess, and movable in the longitudinal di-
rection of the stock, a stem fitted in a threaded
seat in said stock and connected with said
15 jaw and an operating-head on said stem ap-
pearing at the side of said stock, said jaw
excepting its face portion being inclosed and
concealed by the top, bottom, opposite side

and rear walls of said recess, and braced by
said top, bottom and opposite side walls. 20

2. In a combination-tool, two stocks, pivot-
ally-connected handles carrying the same, the
inner end of each stock having a recessed
face, in combination with a jaw having a
gripping-face opposite to the recessed face of 25
the other stock, a screw-threaded stem con-
nected with said jaw, and a rotary screw-
threaded head on said stem, one of the stocks
having openings therein for said jaw, stem
and head, and said jaw having its sides, top 30
and bottom inclosed by the walls of the open-
ing it occupies.

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Witnesses:

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