(No Model.)

O. EVANS.

WRENCH.

No. 598,287. Patented Feb. 1, 1898.

FIG. 1.

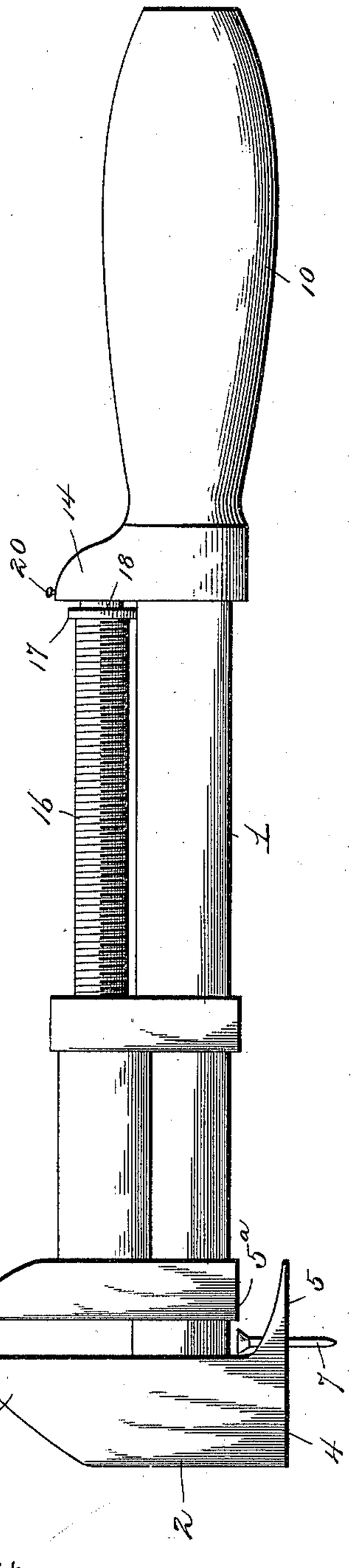


FIG. 2.

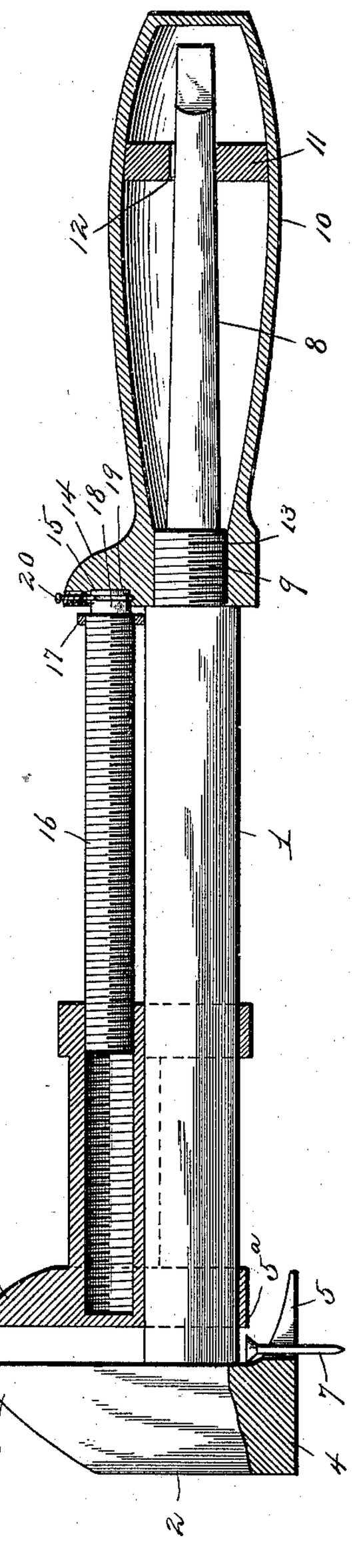
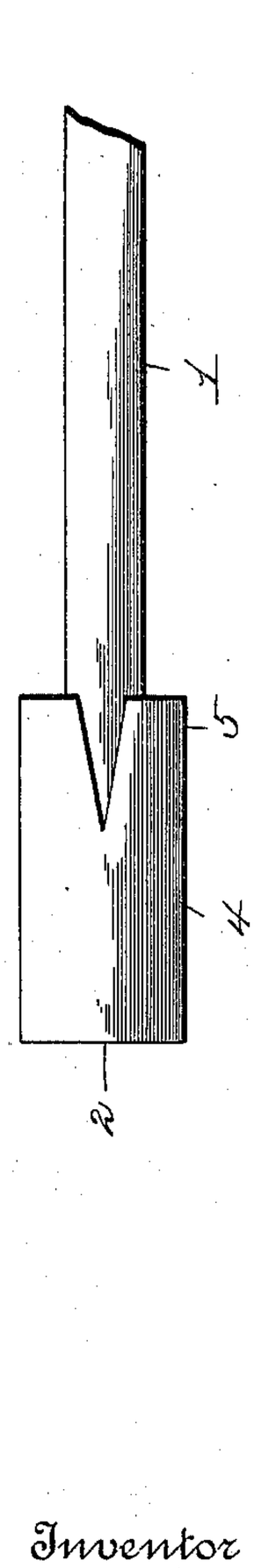


FIG. 3.



Witnesses
Harry L. Ames.
Victor J. Evans

Inventor
Ole Evans.
By John Wedderburn
Attorney

UNITED STATES PATENT OFFICE.

OLE EVANS, OF KERKHOVEN, MINNESOTA.

WRENCH.

SPECIFICATION forming part of Letters Patent No. 598,287, dated February 1, 1898.

Application filed April 16, 1897. Serial No. 632,363. (No model.)

To all whom it may concern:

Be it known that I, OLE EVANS, a citizen of the United States, residing at Kerkhoven, in the county of Swift and State of Minnesota, have invented certain new and useful Improvements in Wrenches; 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.

My invention relates to certain new and useful improvements in combination-tools, the object being to provide a tool of this character of simple and novel construction combining in a simple implement a wrench, hammer, nail-claw, and screw-driver.

To the accomplishment of this end the invention consists in a wrench provided with a fixed jaw serving in addition to its usual function as a hammer-head and nail-claw, a sliding jaw having an adjusting-screw, a shank formed with a screw-driver at one extremity thereof, and a movable handle designed to receive and inclose the said screw-driver.

The invention further consists in the novel constructions, combinations, and arrangements of the parts relatively to each other whereby a coaction between said parts is insured in the operation.

In the accompanying drawings, illustrating the invention, Figure 1 is a side elevational view showing the device in use as a nail-extractor. Fig. 2 is a longitudinal sectional view. Fig. 3 is a plan view looking toward the hammer and nail-claw extremity of the fixed jaw.

Like numerals designate corresponding members throughout the several figures of the drawings.

Referring to the drawings, the numeral 1 designates the shank of the wrench, provided at one end with a fixed jaw 2, having a clamping projection 3 extending from one side of the shank and a hammer-head extension 4 extending from the other side thereof. This hammer-head is provided with an inwardly-projecting nail-claw 5. The movable jaw 6 slides, as usual, upon the shank 1 relatively to the fixed jaw 2 and is provided with a clamping projection 3^a, acting in conjunction with the clamping projection 3 of the fixed jaw, said clamping projection having its heel end 5^a designed to assist the nail-claw in the extraction of a nail. By this operation, as shown in Fig. 1, the nail-claw 5 is engaged with the nail 7 and the movable jaw 6 adjusted so as to cause the heel end 5^a thereof to abut against and confine the head of the nail and prevent the same from working out of the claw.

The wrench-shank is formed at its opposite extremity from the fixed jaw with a screw-driver 8 and a threaded boss or projection 9 at the point of junction of the shank and screw-driver. The handle 10 of the tool is hollowed or provided with a central chamber having a cross-bar 11, formed with a guide-opening 12 therein to receive and sustain the outer extremity of the screw-driver 8. The inner end of this handle is provided with a screw-threaded opening 13, adapted to engage the threaded boss or projection 9, and a bearing-lug 14, projecting from one side thereof, said lug being formed on its inner face with a socket 15.

The sliding jaw 6 is operated by means of an adjusting-screw 16, one end of which operates in a threaded opening therein. The other or inner end of the screw operates in a guide-collar 17, projecting from the shank, and is formed with a reduced smooth-surfaced extremity 18, which fits within the socket 15 of the bearing-lug 14 and is provided with a circumferential groove 19. The lower end of a spring-confining pin 20, operating in an opening in the said bearing-lug, enters the said groove 19 and confines the adjusting-screw and handle together, this construction preventing longitudinal movement of the adjusting-screw while permitting it to revolve.

In Fig. 3 the tool is shown adapted for use as a screw-driver. In accomplishing this the spring-pin 20 is released from the said screw and the hollow handle 10 unscrewed from the threaded boss 9, leaving exposed the screw-driver 8, which may then be employed.

My invention provides a simple and effective construction of device embracing in a single implement a variety of tools designed for different uses, the construction being such that the tool may be manufactured at a small cost.

Having thus described my invention, what

I claim as new, and desire to secure by Letters Patent, is—

In combination-tools, the combination of a wrench having a shank provided at one end with a fixed jaw and at the opposite end thereof with a screw-driver extension and a threaded boss at the inner end of the screw-driver, a sliding jaw movable on said shank, an adjusting-screw having one end operating in a threaded opening in said sliding jaw and the opposite end thereof reduced and formed with a circumferential groove, and a removable handle designed to inclose the said screw-driver and formed with a threaded opening to engage the threaded boss thereon and a socket for the reception of the said reduced end of the adjusting-screw, and provided with a pin or fastening device connected with the handle and projecting into the groove in the reduced end of the adjusting-screw, substantially as described.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

OLE EVANS.

Witnesses:
O. B. BACKLUND,
J. F. MILLARD.