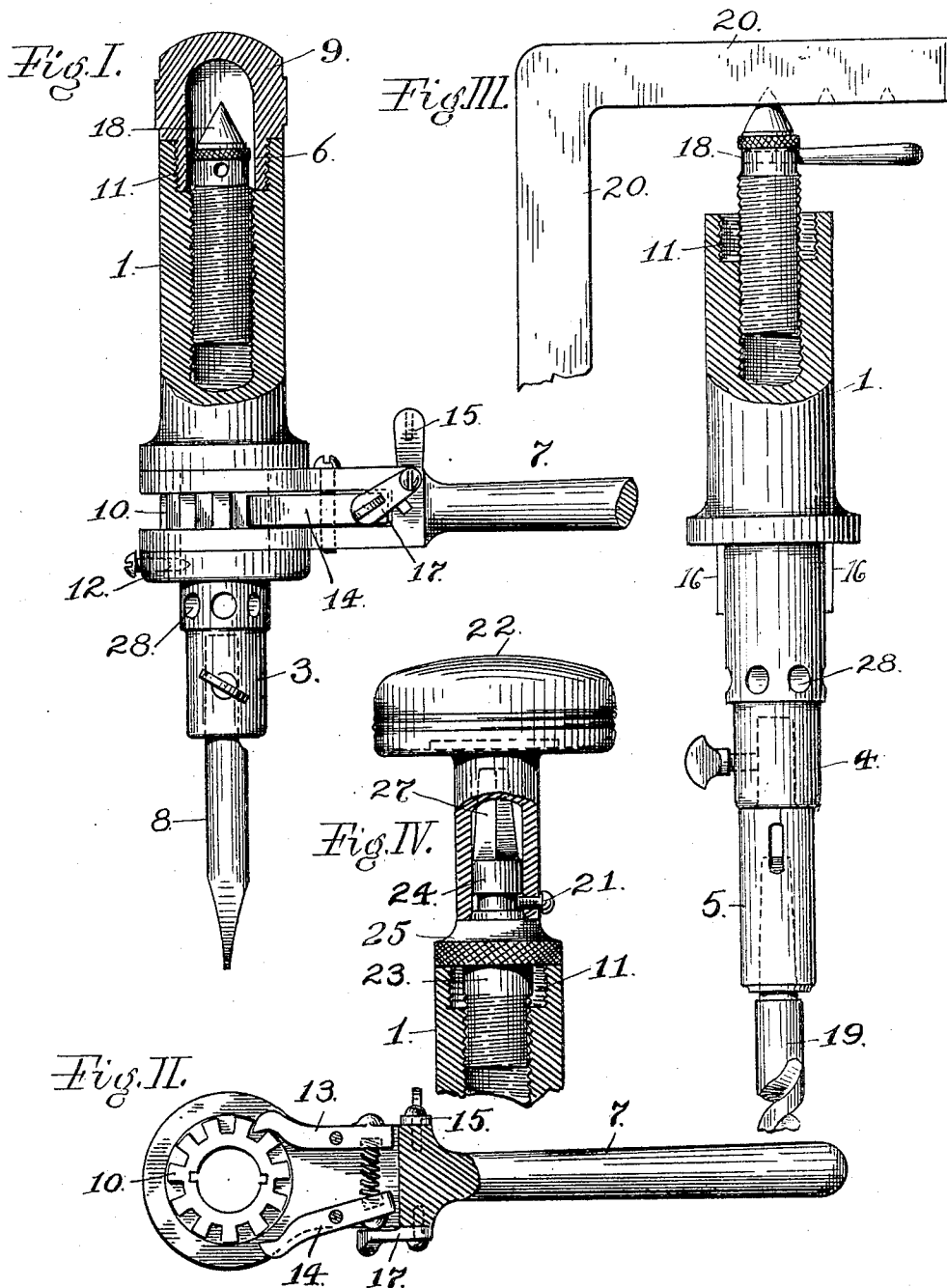


No. 807,534.

PATENTED DEC. 19, 1905.

J. S. BARNES.
COMBINATION IMPLEMENT.
APPLICATION FILED MAR. 17, 1905.



Witnesses:

St. Anteverde.

Elmer Wickes.

Inventor:

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by J. Richards & Co. Attys.

UNITED STATES PATENT OFFICE.

JOHN S. BARNES, OF SAN FRANCISCO, CALIFORNIA.

COMBINATION IMPLEMENT.

No. 807,534.

Specification of Letters Patent.

Patented Dec. 19, 1905.

Application filed March 17, 1905. Serial No. 250,597.

To all whom it may concern:

Be it known that I, JOHN S. BARNES, a citizen of the United States of America, residing at San Francisco, county of San Francisco, and State of California, have invented certain new and useful Improvements in Combination Implements; and I hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification.

This invention relates to a new and useful mechanical implement having various functions or uses, as hereinafter described, and illustrated by the drawings forming a part of this specification.

My improvements consist of a main member, hereinafter described as a "stock," with a ratchet-lever and other motions, adapted to receive various tools—such as drills, screw-drivers, and the like—requiring rotary motion and means for holding, changing, and applying such implements in use.

The object of my invention is to combine in one implement of small and convenient size a number of different offices or functions, adapting such implement to be, with its separate tools, carried about in a small case by mechanics who erect and repair work outside of a regular works.

Referring to the drawings herewith, Figure I is a side view, partially in section, of the stock having a ratchet-lever applied thereto arranged for operating a screw-driver for heavy screws. Fig. II is a top view of the ratchet-lever removed from the stock. Fig. III is also a side view of the stock, showing it as employed for drilling, but with the ratchet removed. Fig. IV shows the top portion of the stock arranged for hand use in turning and pushing implements, also for applying a common bit stock or brace to operate the same.

The stock or main member 1 of the implement consists of a shell, preferably with a central bore extending through its length, internally screw-threaded at the top and at the bottom provided with the usual tapering socket to receive chucks 3, 4, and 5, as shown in Figs. I and III.

In Fig. I the implement, except as to the ratchet-lever 7, is shown provided with a detachable cap 9, that serves as a guard and cover for the end of the implement. This cap is held by a threaded nipple 6 in a screw-threaded recess 11 in the stock 1 and adapts

the implement for hand-support. This arrangement of the implement (shown in Fig. I) is intended for loosening or driving large wood-screws or slotted machine-screws and the like, the ratchet-lever 7 furnishing sufficient force for such purpose.

The ratchet-lever 7 is of the usual construction, with a central shell 10 held by the keys 16 and supported by a collar 12. This ratchet-lever 7 is provided with right and left spring-pawls 13 and 14, that are engaged and disengaged, respectively, by the pivoted detents 15 and 17, as shown in Fig. II.

In Fig. III the same stock is shown arranged for metal-drilling, with the ratchet-lever 7 removed. 18 is the usual screw point or center by which the stock 1 and drill 19 are advanced toward the work, 20 being a common cramp or any suitable fixed support for the stock 1.

In Fig. IV is shown the top of the same stock 1 provided with a broad head 22, adapted for applying pressure, also to turn the stock and implements therein when only a light force is required. This cap 22 is made hollow, so as to receive or cover when required a member 24, provided with an extension 23, squared at the top 27 to receive a bit stock or brace by which any of the tools can be operated when the cap 22 is removed. Said cap 22 is held to member 24 by a set-screw 21. 25 is a knurled collar on member 24, forming a limiting stop or shoulder adapted to take a seat on top of stock 1 when the bit-stock is applied to turn the tool. 23 is a screw-threaded nipple by which the member 24 is secured to the stock 1. The socket 5 can be used at any distance from the stock 1 by the usual extension-pieces. The holes 28 are to receive a spanner lever or pin to be used temporarily when the ratchet-lever 7 is detached.

To span distances greater than is indicated by the drawings, extensions of solid or tubular form can be inserted at either end of the main stock 1, replacing the chuck 4 and center 18, and by the respective lengths of such extensions the ratchet-lever can be disposed at any desired point or distance from the work. In this manner it will be seen that by a few simple substitutions my improved invention can be used for driving screws, drilling, boring, and other operations in wood and metal.

Having thus described the nature and objects of my invention, what I claim as new, and desire to secure by Letters Patent, is—

An implement comprising a main stock

having a screw-threaded bore at top, a removable screw-threaded pivot or centering point to fit the same, a removable screw-cap to protect said pivot-point, a socket-way at bottom to receive interchangeable rotatory tools and chucks, and a removable ratchet-lever to turn the stock, substantially as specified.

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

JOHN S. BARNES.

Witnesses:

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