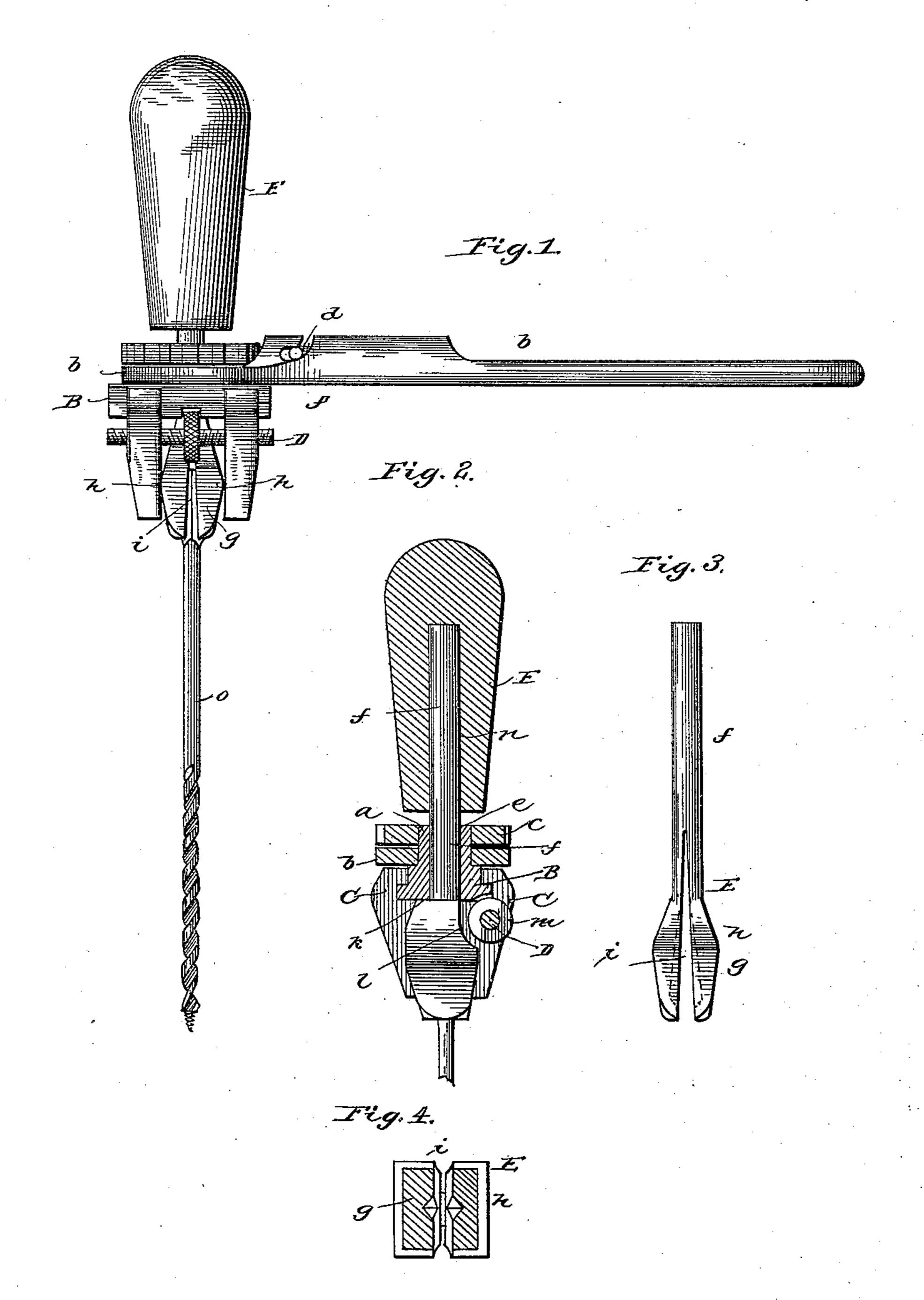
(No Model.)

## C. H. MYERS.

COMBINED RATCHET WRENCH AND BORING BIT.

No. 446,075.

Patented Feb. 10, 1891.



Witnesses! Harry S. Rohrer.

26 Midaker:

Charles H. Myon By Shoutine Reinthel Hymn Attorneys;

## United States Patent Office.

CHARLES H. MYERS, OF PHELPS, ASSIGNOR, BY MESNE ASSIGNMENTS, TO THE KEYSTONE MANUFACTURING COMPANY, OF BUFFALO, NEW YORK.

## COMBINED RATCHET-WRENCH AND BORING-BIT.

SPECIFICATION forming part of Letters Patent No. 446,075, dated February 10, 1891.

Application filed June 21, 1890. Serial No. 358,363. (No model:)

To all whom it may concern:

Be it known that I, CHARLES H. MYERS, a citizen of the United States, residing at Phelps, in the county of Ontario and State of New York, have invented certain new and useful Improvements in a Combined Ratchet-Wrench and Boring-Bit; 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 combination-tools, and has for its object certain improvements in construction, which will be hereinafter described, and particularly pointed out in the claims.

In the accompanying drawings, which form part of this specification, Figure 1 represents a side elevation of my invention; Fig. 2, a vertical transverse section through the wrenchhead, showing the bit-holder in side elevation; Fig. 3, a side elevation of the bit-holder detached, and Fig. 4 a cross-section of the head of the bit-holder.

Reference being had to the drawings and the letters thereon, A indicates a wrench provided with a bar B, upon which the jaws C C are supported, and are moved laterally thereon by a screw D, engaging with both jaws. The bar B is provided with an upward extension a, which extends through the front end or head of the handle b of the wrench, and has secured to its upper end a ratchet-wheel c, with which a spring-actuated and reversible dog d engages. Through the extension a is an aperture e, into which the shank f of the boring-bit holder is inserted.

The bit-holder E is provided with a head g, the sides of which are in planes which coincide with the planes of the jaws C C, and are clamped thereby at the enlarged portion h of

the head. The head is split at i and cut out to form a seat for the head of the boring-bit, which is clamped. Upon the holder is a shoulder k, which rests upon the lower side 45 of the bar B, and a recess l to accommodate the middle disk m upon the screw D.

F indicates a removable wooden handle to be held by one hand of the operator, and is provided with an aperture n, in which the 50 shank f of the holder E revolves while the boring-tool o and the holder are being operated.

The bit-holder may be readily applied to and removed from the wrench for boring pur- 55 poses and the wrench used for its primary purposes when not in use for boring.

Having thus fully described my invention, what I claim is—

1. A wrench provided with laterally-mov- 60 able jaws and an aperture in the head of the wrench, in combination with a boring-bit holder having a cylindrical shank, a split head the sides of which are in planes coincident with the movable jaws of the wrench, 65 and a detachable handle for the bit-holder, substantially as described.

2. A wrench provided with laterally-movable jaws and an aperture in the head of the wrench, in combination with a boring-bit 70 holder having a cylindrical shank, an enlarged split head the sides of which are in planes coincident with the movable jaws of the wrench, a shoulder, and a detachable handle for the bit-holder, substantially as de-75 scribed.

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

CHARLES H. MYERS.

Witnesses:

D. C. Reinohl, James J. Johnston.