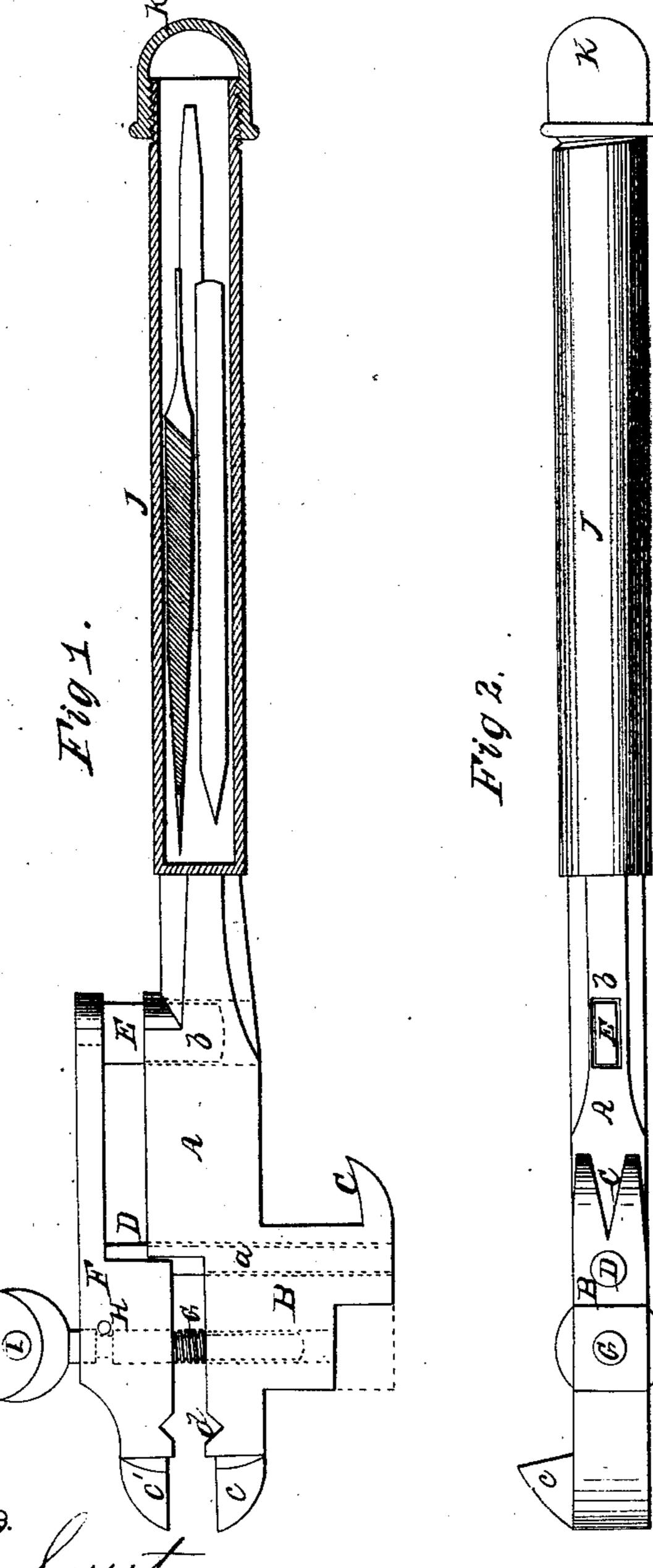
Mrench.

Nº69,575. Pate

Patented Det.8, 1867



Witnesses. Sunt Sustained

Inventor. John Mill

Anited States Patent Pffice.

JOHN MOTT, OF DANVILLE, CALIFORNIA.

Letters Patent No. 69,575, dated October 8, 1867,

IMPROVED IMPLEMENT OR WRENCH.

The Schedule referred to in these Petters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, John Mott, of Danville, county of Contra Costa, State of California, have invented a certain new and improved Combination-Wrench; and I do hereby declare the following description and accompanying drawings are sufficient to enable any person skilled in the art or science to which it most nearly appertains to make and use my said invention or improvements without further invention or experiment.

The object of my invention is to provide an improved wrench which shall combine in one implement a wrench easily adjustable to any sized or shaped nut, a hammer, and a claw for extracting nails, while the handle is made

hollow, and serves as a receptacle for such tools as may be found most convenient or necessary.

This wrench may be made of cast or wrought iron, or steel, according to the quality and price desired, and of various sizes for different grades of work. The body or stationary jaw to which the handle attaches, has a projection below, forming the hammer, and having the claw connected to it. Through this lower jaw are made two vertical openings or slots, through which two guides or supporting bars pass; these bars being sufficiently separated to give firmness to the upper jaw to which they are attached, and to insure it an up and down motion parallel with the lower jaw. A screw passes through the two jaws either before or between the two guides, the female screw being cut in the lower jaw, while a collar or pin insures the motion of the upper jaw as the screw turns.

To more fully explain my invention, reference is had to the accompanying drawings, forming a part of this specification, of which-

Figure 1 is a side elevation and section of the handle.

Figure 2 is a bottom view.

Similar letters indicate like parts in each of the drawings.

A is the body or lower jaw, which has the projection B below to serve as a hammer. This projection may be carried down full to the lowest level as shown by the red lines. The claw C is placed behind the face of the hammer, so as to give a convenient leverage in drawing nails. D and E are guides or supporting bars firmly attached to the upper jaw, and moving through the lower jaw in slots, as shown in the dotted lines a b. The bar E is flat or oval, and the shape of D may be round. By this means the jaws are kept perfectly parallel to each other, and the necessary strength obtained, the size of course being increased according to the size and strength of the wrench desired. The upper jaw F, to which the guides are fastened, moves up and down parallel to the lower jaw, and is operated by the screw G, which works in a thread, which may be cut in either the upper jaw or in the lower jaw, as shown. I prefer a square thread, cut broad enough so that the screw will not become jammed by wrenching. The upper part of the screw has a groove turned in it, and a pin, H, passes through the jaws, thus retaining it in place, allowing it to turn at the same time. By this screw the jaws are opened and closed. A lever may be used in the hole I so as to give greater power. The ends of the jaws c c' are made pointed at one end, so that the pointed ends may be conveniently used where it would be impossible to use the larger parts. The opening d may be used on square nuts or on nail heads. The handle J is made hollow, and has a cap, K, to keep it closed. Within this handle may be placed a file, cold-chisel, and punch, as represented, or any other tools to be used in connection with the wrench.

By constructing a wrench in this manner I have an implement which will be found extremely convenient, especially to farmers and those who do not find it convenient to carry about a number of tools.

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

The above-described wrench or implement, constructed and arranged to operate as and for the purposes set forth.

In witness whereof I have hereunto set my hand and seal.

JOHN MOTT. [L

Witnesses:

C. W. M. SMITH, GEO. H. STRONG.