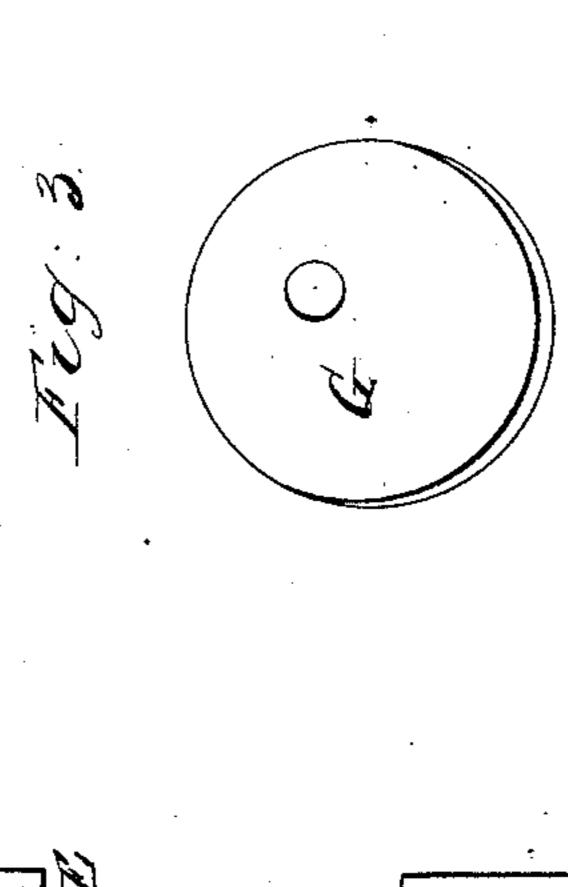
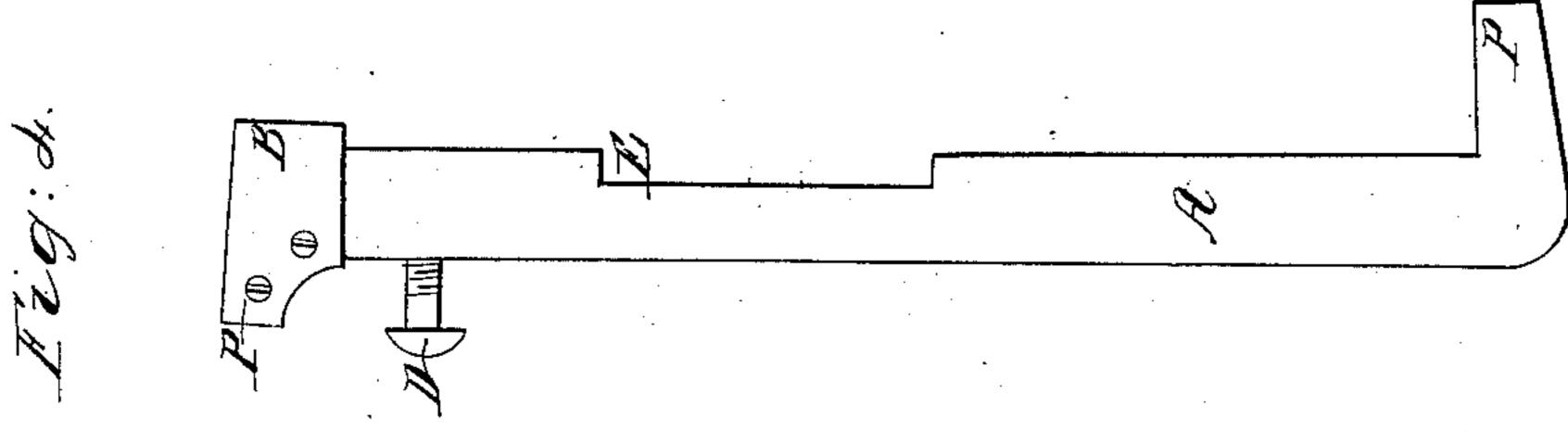
# J. E. Cont.

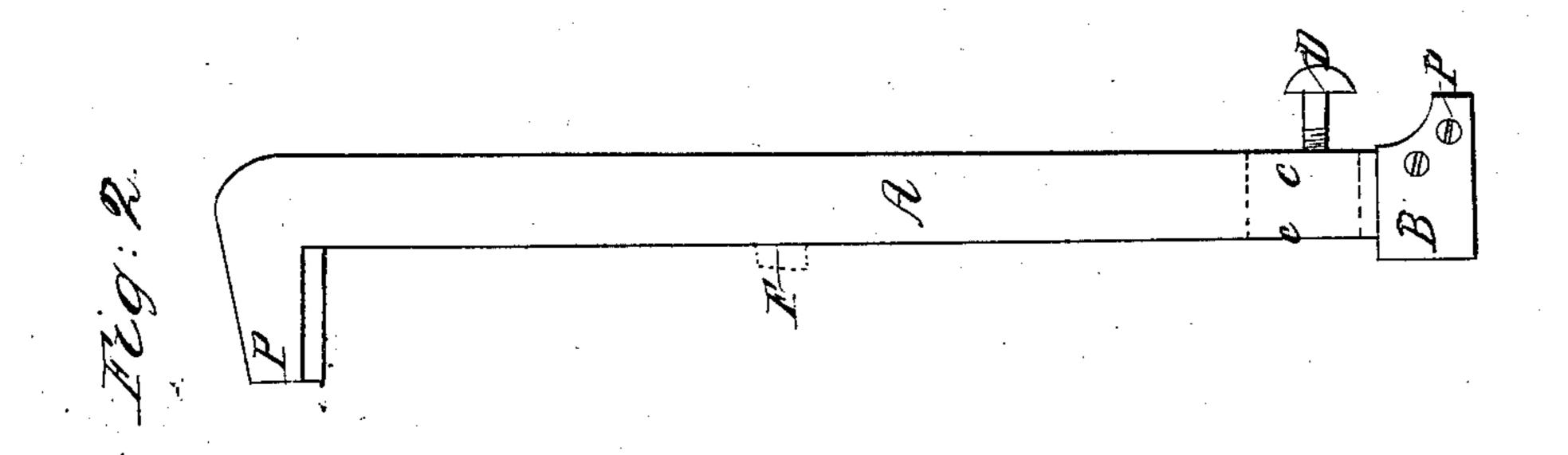
# Mench.

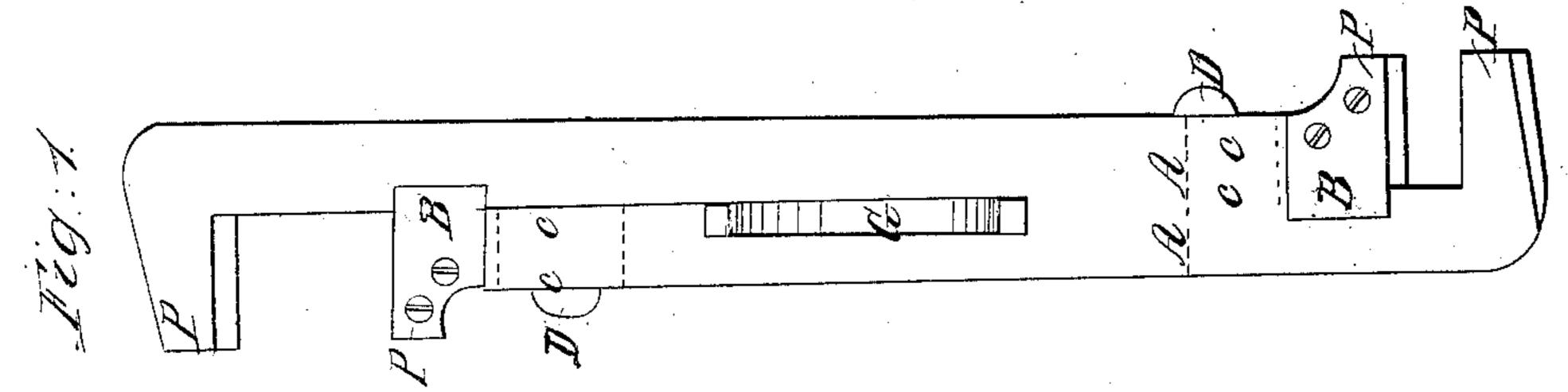
11963,481.

Patented Ann. 2, 1867.









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# Anited States Patent Effice.

### JAMES E. CRONK, OF POUGHKEEPSIE, NEW YORK.

Letters Patent No. 63,481, dated April 2, 1867.

#### IMPROVED WRENCH.

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

### TO ALL WHOM IT MAY CONCERN:

Be it known that I, James E. Cronk, of Poughkeepsie, in the county of Dutchess, and State of New York, have invented a new and useful improvement in Wrenches; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, in which the same letters have reference to the same parts in each.

Figure 1 represents a side view of the wrench put together ready for use. Figures 2, 3, and 4 represent the several parts of the wrench, detached.

This invention consists in a novel mode of constructing wrenches wherein one or both parts are impelled forward or backward by means of an eccentric attached to one part and working in a slot or recess in the other part.

In this example of my invention I have shown it applied to a double-jaw wrench, that is to say, a wrench

with jaws at either end, but it can be applied also to a single-jaw wrench.

The letters A A designate the bars of the wrench, placed next to each other and held together by means of set-screws D D, which work in slots C C, one of said slots being made in each bar, at its inner end, as clearly shown in the drawing. Each bar has right-angled projections P P at its ends, which form the jaws of the wrench. The inner end of each bar A has hips B B, that embrace the sides of the opposite bar and keep the bars in line with each other and guide them in the working of the wrench. One of the bars A has a recess, E, cut on its inner face to receive the wheel G, which turns on a pin, F, that projects from the other bar, the hole in the wheel which receives the said pin being made at one side of its centre, as shown in fig. 3, so that said wheel is eccentric in its revolutions.

When one desires to operate the wrench it is only necessary to turn the wheel G, which projects on either side of the wrench, so that it can easily be worked. As the wheel is revolved its periphery is brought against the shoulders of recess E, and that side of the wheel which has the greater radius causes the bars to move upon each other in opposite directions so as to enlarge or lessen the space between the several jaws of the wrench, as required for different-sized nuts, &c. The periphery of the wheel may, if desired, be notched or roughened to increase friction between it and the shoulders of the recess, and consequently cause the wheel the better to remain stationary in the slot or recess E after adjustment.

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

The combination of the eccentric-wheel G, the pin F, projecting from one part, A, of the wrench, and the recess or slot E in the other part A, substantially as shown.

JAMES E. CRONK.

Witnesses:

W. A. PALMER,

A. M. BRUSH.