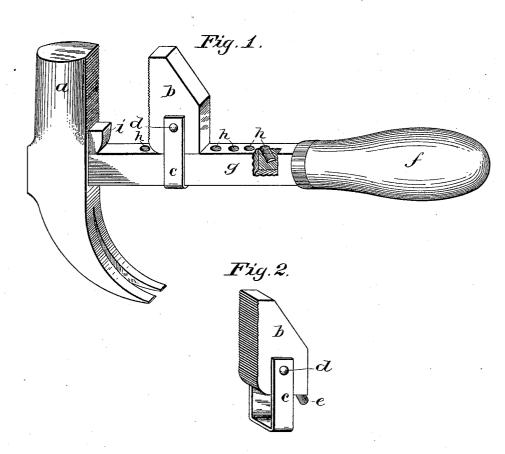
(No Model.)

J. T. MATTHEWS. WRENCH.

No. 513,271.

Patented Jan. 23, 1894.



Witnesses

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JAMES THOMAS MATTHEWS, OF SHELBYVILLE, INDIANA.

WRENCH.

SPECIFICATION forming part of Letters Patent No. 513,271, dated January 23, 1894. Application filed March 18, 1893. Serial No. 466,742. (No model.)

To all whom it may concern:

Be it known that I, JAMES THOMAS MAT-THEWS, a citizen of the United States, residing at Shelbyville, in the county of Shelby 5 and State of Indiana, have invented a new

- and useful Improvement in Wrenches, commonly known as Monkey-Wrenches, of which the following is a specification.
- My invention relates to an improvement in 10 wrenches, and consists in the features hereinafter specified in the claim.

The objects claimed for my invention are: economy in time; greater facility in manipulating my wrench over similar implements;

- 15 and also always having at hand an implement combining the functions of the wrench and hammer. I point out these objects by means of the figures shown in accompanying drawings.
- Figure 1:— in the annexed drawings illustrating my invention represents in perspective my invention as completed and in position to operate on a nut or pipe. Fig. 2:— represents the movable jaw sliding on the

25 main shaft of the wrench. Similar letters refer to similar parts throughout the several views.

"a" Fig. 1 represents the main body or hammer part of the wrench, molded with a per-

30 fectly square face on its inner side. The lower portion may be made in the form of a hatchet or claw hammer.

In the annexed drawings illustrating my invention "b" Fig. 1 is the horizontal movable

- 35 jaw. "c" represents a band or loop, fastened to the movable jaw by a hinge at "d" and passes around the main shaft of the wrench, and holds in position the movable jaw "b." "h" "h" "h" "h" are parallel diagonal re-
- 40 ceiving notches, for the purpose of receiving a correspondingly inclined and downward protruding dowel, shown at "e" in Fig. 2, being attached to the under side of the movable jaw "b" Fig. 2.

In the annexed drawings illustrating my in- 45 vention Fig. 2 represents a perspective view of the movable jaw, with its protruding dowel "e," and hinge band or loop "c," showing its hinge "d" as the same materially appears.

The shank of the wrench is constructed of 50 iron being made a right prism, containing the parallel and oblique dowel holes "h" "h" "h" Fig. 1, and the movable hand-hold or handle, "f" Fig. 1, may be so constructed as to be easily and readily taken off and put on 55 again, in order that the movable jaw may be at any time quickly taken off by slipping the same the entire length of the main shaft of handle.

The working portion or hammer part of my 60 invention has a peculiar protuberance at the point in the head contiguous to the entrance of the shank to said head, as shown at "*i*" in Fig. 1. The purpose of the protuberance "*i*" is to act as a kind of fulerum on which the 65 movable jaw works as a lever in lifting the dowel pin from the inclined apertures along the front side of the shank. Said protuberance is made of sufficient size to leave space above in which the movable jaw "b" Fig. 1 70 can be tilted over at the top sufficiently far to withdraw the dowel pin "e" Fig. 2 from the dowel holes "h" "h" "h" Fig. 1.

What I claim as my invention is-

A wrench, comprising the shank "g" with 75 a handle "f" at one end and a fixed head "a" at the other end, said shank provided with inclined apertures along its front sides, in combination with the movable jaw "b" and the pivoted loop "c;" said movable jaw being provided with an inclined dowel pin adapted to engage said apertures and having a rounded corner above said pin, substantially as described.

JAMES THOMAS MATTHEWS. Witnesses:

TELLESS BROOKS CARTER, SAMUEL ROBINSON.