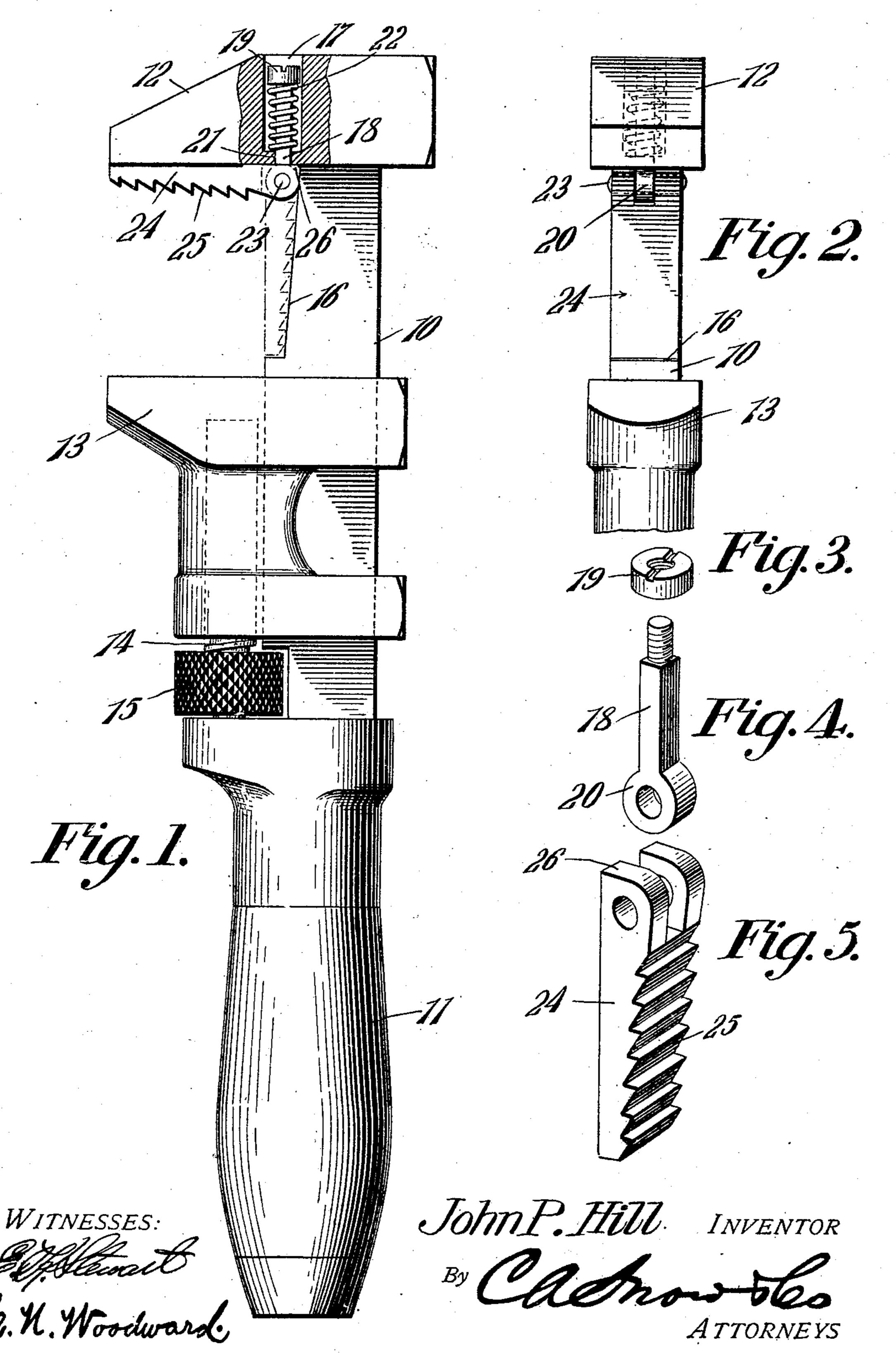
J. P. HILL.

PIPE JAW ATTACHMENT TO WRENCHES.

APPLICATION FILED JULY 25, 1906.



## UNITED STATES PATENT OFFICE.

JOHN PETER HILL, OF PHELPS, NEW YORK, ASSIGNOR OF ONE-HALF TO WILLIAM A. WHITE, OF PHELPS, NEW YORK.

## PIPE-JAW ATTACHMENT TO WRENCHES.

No. 841,248.

Specification of Letters Patent.

Patented Jan. 15, 1907.

Application filed July 25, 1906. Serial No. 327,712.

To all whom it may concern:

Be it known that I, John Peter Hill, a citizen of the United States, residing at Phelps, in the county of Ontario and State of New York, have invented a new and useful Pipe-Jaw Attachment to Wrenches, of which the following is a specification.

This invention relates to improvements in wrenches, and has for its object to provide a simply-constructed pipe-engaging jaw movably connected to the wrench and adapted to be withdrawn into a recess therein when not required.

Another object of the invention is to provide a simply-constructed pipe-jaw attachment to wrenches and yieldably supported in operative or inoperative position.

With these and other objects in view, which will appear as the nature of the invention is better understood, the invention consists in certain novel features of construction, as hereinafter fully described and claimed.

In the accompanying drawings, forming a part of this specification, and in which corresponding parts are designated by like characters of reference, is illustrated the preferred form of the embodiment of the invention capable of carrying the same into practical operation.

In the drawings, Figure 1 is a side elevation, partly in section, of a wrench with the improvement applied and having the pipe-jaw attachment in open or operative position. Fig. 2 is a front view of the upper part of the same with the pipe-jaw in closed or inoperative position. Fig. 3 is a perspective view of the plunger-nut. Fig. 4 is a perspective view of the plunger-rod, and Fig. 5 is a perspective view of the pipe-engaging jaw, these parts being on an enlarged scale.

In the improved implement is comprised a stock 10, having a handle 11 at one end and a stationary jaw 12 at the other end and a movable jaw 13, slidable upon the stock and operative by a screw 14 and thumb-disk 15, these parts being of the usual construction.

In the improved implement the stock 10 is provided with a recess 16 adjacent to the stationary jaw, and the stationary jaw is provided with a socket or cavity 17 adjacent to the stock and the recess therein. Movably disposed in the socket 17 is a plunger device

comprising a rod 18, threaded at one end to receive a nut 19 and enlarged at the other end, as at 20, and with a transverse aperture 55 through the enlargement. The rod 18 is square or otherwise irregular in transverse section and operates through a correspondingly irregular-shaped aperture 21, leading into the socket, so that while the rod is free 60 to move within the socket it will not rotate therein. Surrounding the rod 18 within the socket 17 is a spring 22, bearing beneath the nut 19 and holding the plunger-rod yieldably in position. Swinging from the enlarged 65 end of the plunger member by a pin 23 is a supplemental jaw 24, preferably having one face inclined and provided with spaced transverse grip-teeth 25 to constitute a pipeengaging jaw. The pivoted end of the pipe- 70 jaw 24 is formed square at one side, as at 26, to bear against the stationary jaw 12 both in its open and closed position, and thus be yieldably supported by the spring in both of its two positions. Thus when the pipe-jaw 75 is in open or operative position, as in full lines in Fig. 1, the spring acts to hold it yieldably in that position, and then when the pipe-jaw is disposed in the recess 16 or in inoperative position the spring also holds it in 80 that position, as shown in dotted lines in Fig. 1. The recess 16 is just large enough to receive the pipe-jaw 24, so that when disposed therein the rear face will be flush with the face of the stock. Thus when the pipe- 85 jaw is in withdrawn or inoperative position it will offer no obstruction to the operation of the movable jaw or to the use of the wrench in the usual manner.

When the jaw-wrench member is in with- 90 drawn position, the teeth 25 are protected from contact with the nut or other object upon which the wrench is employed.

What is claimed is—

1. The combination with a wrench having 95 a recess in its stock, of a pipe-jaw swinging from said wrench and adapted to be withdrawn into said recess when in inoperative position, and a spring operating to hold said pipe-jaw yieldably in operative and inoperative position.

2. In a wrench, a stationary jaw having a socket and a stock having a recess, a spring-controlled plunger movable in said socket,

and a pipe-engaging jaw swinging from said plunger and yieldably maintained thereby in

operative or inoperative position.
3. The combination with a wrench having 5 a recessed stock, and a rigid jaw upon the stock; of a supplemental jaw pivotally connected to the wrench and within the recess, said supplemental jaw adapted when in in-operative position to rest within the recess, no and when in operative position to bear

against the fixed jaw, and means within the fixed jaw for holding the supplemental jaw in either operative or inoperative position.

In testimony that I claim the foregoing as my own I have hereto affixed my signature 15

in the presence of two witnesses.

JOHN PETER HILL.

Witnesses:

S. S. Partridge, E. T. Bender.