(No Model.)

F. SCHMEMANN.

WRENCH.

No. 297,640. Patented Apr. 29, 1884.

Fig. 1.

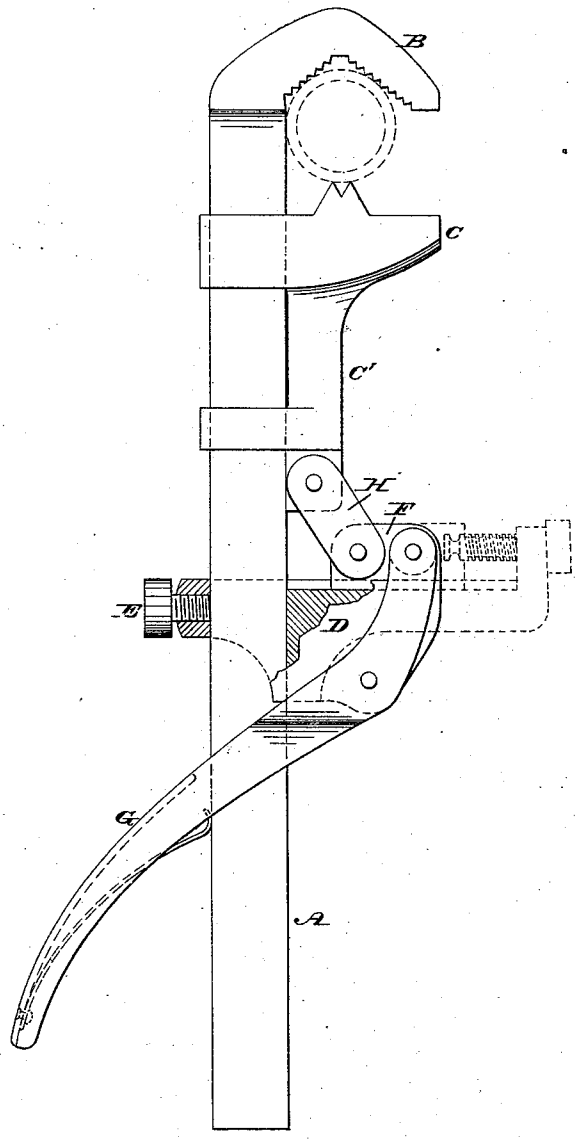
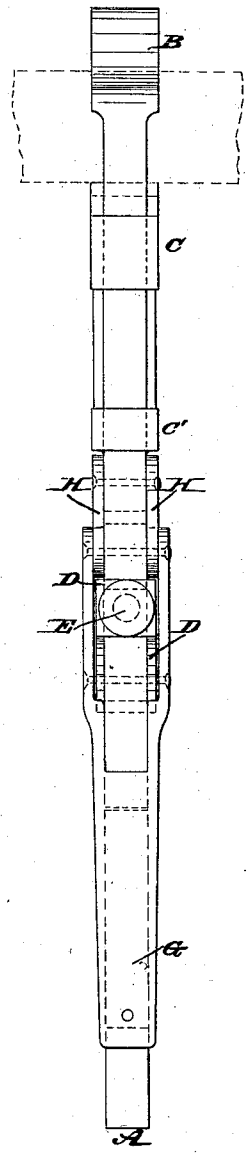


Fig. 2.



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FRIEDRICH SCHMEMANN, OF PHILADELPHIA, PENNSYLVANIA.

WRENCH.

SPECIFICATION forming part of Letters Patent No. 297,640, dated April 29, 1884.

Application filed November 8, 1883. (No model.)

To all whom it may concern:

Be it known that I, FRIEDRICH SCHMEMANN, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Wrenches, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 is a side elevation, partly broken away, of a wrench embodying my invention. Fig. 2 is a side elevation at a right angle to Fig 1.

Similar letters of reference indicate corresponding parts in the several figures.

My invention consists of a wrench having a movable jaw, which is primarily adjusted to the nut, pipe, &c., to be grasped, and afterward forcibly clamped thereagainst, whereby the wrench reliably engages with said nut, &c., and is prevented from slipping therefrom, as will be hereinafter fully set forth.

Referring to the drawings, A represents the bar of the wrench, B the fixed jaw thereof, and C the movable jaw which slides on said bar.

D represents a slide, which is fitted on the bar A below the jaw C, and carries a screw, E, which is adapted to tighten against the back of the bar A and render the slide immovable thereon.

On the portion of the slide opposite to the screw E is fitted a block, F, which is adapted to slide to and from the bar A, and guided by means of flanges on the sides of said block.

Pivoted to the outer end of the block F is a lever, G, having its fulcrum on the slide D, and extending downwardly below the same, so as to be moved to and from the bar A.

Pivoted to the sides of the block F are links H, which are also pivoted to the guide-piece C' of the movable jaw of the wrench, whereby, by the action of the block F, said jaw may be moved to and from the fixed jaw, and consequently the nut, pipe, &c., between the two jaws B C.

The operation is as follows: The screw E is loosened and the slide D raised to engaging contact with the nut, pipe, &c., to be grasped, the block F being at the outer end of said slide. The screw E is then tightened against the bar A, rendering the slide immovable. The handle of the wrench is now grasped and the lever G forced toward the bar A, thus advancing the block F, and by means of the links H moving the sliding jaw to full extent against the nut, &c., thus increasing the bite of the jaws and powerfully holding the nut, &c., and preventing it from slipping, the strain on the movable jaw being imparted to the slide. The lever G is then let go or moved from the bar A, whereby the movable jaw is released sufficiently to permit the wrench to take a fresh hold on the nut, &c. The lever is again operated to advance the movable jaw, the result being similar to that hereinbefore stated.

In lieu of the lever G, I may employ a screw, (shown in dotted lines, Fig. 1,) the same being fitted to a piece rising from the end of the slide and journaled to the block F, whereby provision is made for operating said block similar to the lever G.

The wrench may be provided with a handle of any suitable construction.

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

1. A wrench having a movable jaw and an adjustable slide, both fitted on the bar, a screw for holding said slide, a movable block supported on said slide, a pivoted link connecting said block and the movable jaw, and means for operating said block, substantially as and for the purpose set forth.

2. In a wrench, a bar, fixed jaw, and movable jaw, in combination with an adjustable slide fitted on said bar and having a holding-screw, a movable block, means for operating said block mounted on said slide, and a link connecting said block and the movable jaw, substantially as and for the purpose set forth.

FR. SCHMEMANN.

Witnesses:

JOHN A. WIEDERSHEIM,

A. P. GRANT.