

(No Model.)

J. WILLIAMSON.
PIPE WRENCH AND CUTTER.

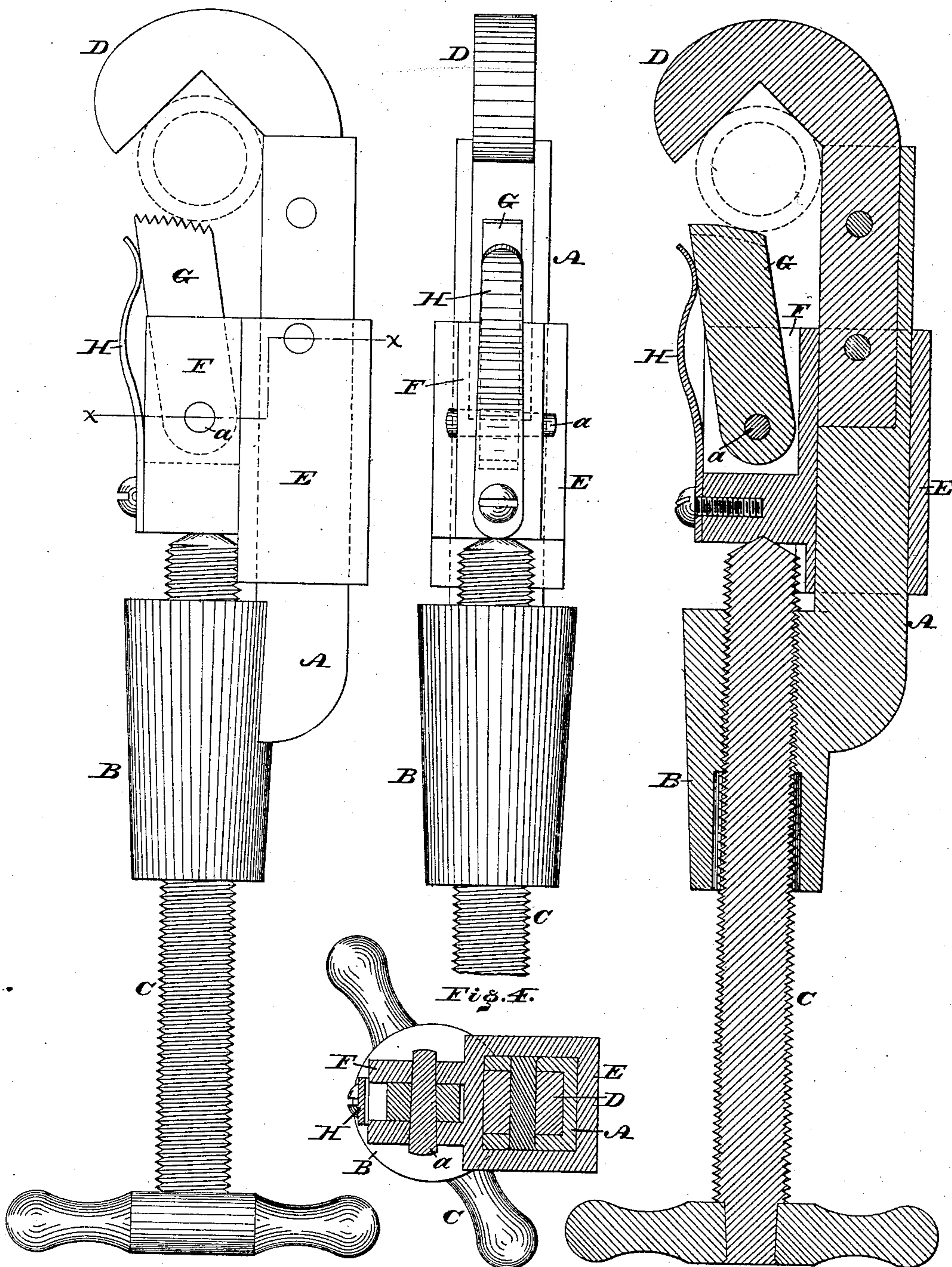
No. 328,270.

Patented Oct. 13, 1885.

Fig. 1.

Fig. 2.

Fig. 3.



WITNESSES:

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UNITED STATES PATENT OFFICE.

JOHN WILLIAMSON, OF CAMDEN, NEW JERSEY.

PIPE WRENCH AND CUTTER.

SPECIFICATION forming part of Letters Patent No. 328,270, dated October 13, 1885.

Application filed December 30, 1884. Serial No. 151,582. (No model.)

To all whom it may concern:

Be it known that I, JOHN WILLIAMSON, a citizen of the United States, residing in the city and county of Camden, State of New Jersey, have invented a new and useful Improvement in Pipe Wrenches and Cutters, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 represents a side elevation of a pipe wrench and cutter embodying my invention. Fig. 2 represents a side elevation of a portion thereof at a right angle to Fig. 1. Fig. 3 represents a longitudinal section thereof. Fig. 4 represents a section in line *x x*, Fig. 1.

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

My invention consists of a pipe wrench and cutter having a stationary jaw, a movable jaw, means for operating the movable jaw, and means for securing the stationary jaw, all as will be hereinafter fully set forth.

Referring to the drawings, A represents an arm, one end of which has formed with or secured to it a boss, B, through which is passed the handle C of the tool, the same being threaded, and engaging with threads on the inner walls of said boss. Connected with the other end of said arm A is the stationary jaw D of the tool, the inner face of which is V-shaped or angular, so that the pipe, &c., to be grasped may be properly seated in said face.

Fitted in the arm A is a slide, E, which is in the form of a tube, and freely encircles said arm and also the portion of the stationary jaw which is connected with said arm. Projecting from said slide, on the side toward the stationary jaw, is a forked piece, F, to whose side walls is pivoted the movable jaw G of the tool, and against whose base bears the point of the screw-handle C.

Secured to the piece F is a spring, H, which bears against the jaw G for forcing the same in an inward direction.

The working-face of the jaw G is serrated, as in Fig. 1, for clamping the pipe, &c., or

sharp, as in Fig. 3, for cutting purposes, the pivot-pin *a* being readily removable, so that a jaw of either character may be applied to the piece F.

It will be seen that when a pipe, &c., is fitted in the face of the jaw D the handle is rotated so that the jaw G is advanced to said pipe, &c., and tightened thereagainst, and when the tool is operated the pipe, &c., is properly clamped by the jaw, as in Fig. 1, or held by the jaw G, as in Fig. 3, the jaw G being prevented from slipping, owing to the holding action of the threaded handle C. The release of the movable jaw is accomplished by properly operating the threaded handle, as is evident.

The side of the arm A toward the jaw G is recessed to receive the shank of the jaw D, said shank being riveted to the walls of the recess, it being noticed that the walls of the recess embrace three sides of the shank, and the slide E embraces said walls as well as the fourth side of the shank, thus providing a strong connection for the shank with the arm A at the place of strain, the encircling slide also serving as a brace at the joint of said parts. This construction also permits the jaw to be made of highly-tempered steel, and should the same break or become fractured it may be removed and replaced, it being noticed that when the jaw is removed the slide E may be fitted on the arm A from above, the dimensions of the boss preventing the same from below.

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

The arm A, having a recessed portion, in combination with the jaw D, fitting in said recessed portion and detachably attached to said arm A, sliding sleeve E, provided with recessed piece F, having pivoted jaw G, substantially as and for the purpose set forth.

JOHN WILLIAMSON.

Witnesses:

JOHN A. WIEDERSHEIM,
A. P. GRANT.