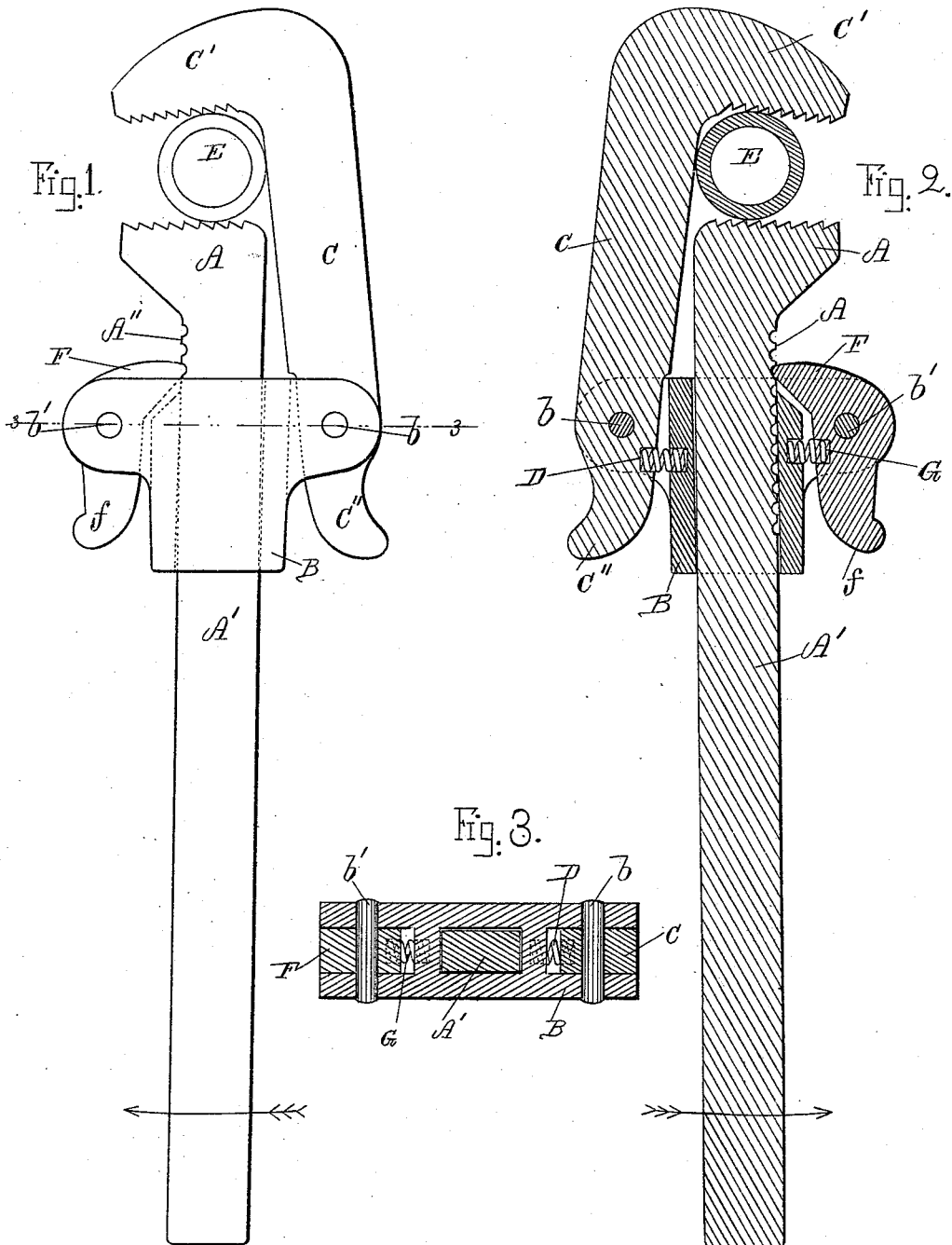


(No Model.)

H. M. GLINES.  
PIPE OR NUT WRENCH.

No. 525,320.

Patented Aug. 28, 1894.



Witnesses.

*Lainitz, W. Koller.*  
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Inventor.

*Humphrey M. Glines*  
by *Wm. Andrew Smith*

# UNITED STATES PATENT OFFICE.

HUMPHREY M. GLINES, OF BOSTON, MASSACHUSETTS, ASSIGNOR OF ONE-HALF TO HOMER F. LIVERMORE, OF SAME PLACE.

## PIPE OR NUT WRENCH.

SPECIFICATION forming part of Letters Patent No. 525,320, dated August 28, 1894.

Application filed June 18, 1894. Serial No. 514,875. (No model.)

*To all whom it may concern:*

Be it known that I, HUMPHREY M. GLINES, a citizen of the United States, and a resident of Boston, in the county of Suffolk and State of Massachusetts, have invented new and useful Improvements in Pipe and Nut Wrenches, of which the following, taken in connection with the accompanying drawings, is a specification.

10 This invention relates to improvements in pipe and nut wrenches and it is carried out as follows, reference being had to the accompanying drawings, wherein—

15 Figure 1, represents a side elevation of my improved pipe and nut wrench. Fig. 2, represents a vertical longitudinal section thereof; and Fig. 3, represents a cross section on the line 3—3 shown in Fig. 1.

20 Similar letters refer to similar parts wherever they occur on the different parts of the drawings.

The invention consists of a stationary, preferably serrated, jaw A forming an integral part of the stationary shank or handle A' 25 having a serrated surface A'' on a portion of its upper front edge as shown. On said shank A' is vertically adjustable the box B to the rear forked extension of which is pivoted at b, the movable shank C having a preferably serrated jaw C' at its upper end as 30 shown.

The movable shank C has an extension C'' at its lower end below the pivot b and between said extension C'' and the box B is arranged a preferably coiled spring D for the 35 purpose of automatically closing the movable jaw C' against the stationary jaw A and the pipe E when the shank A' is turned in the direction of the arrow shown in Figs. 1 and 2.

40 The sliding block B is adapted to be locked in any desired position relative to the serrated shank A' by means of a pawl F pivoted to the forward forked end of the sliding block B at b' as shown: said pawl is automatically 45 made to interlock with the teeth on the serrated surface A'' of the shank A' by means of a preferably coiled spring G interposed between the block B and a downwardly extend-

ing thumb piece f on said pawl F as shown in Figs. 1 and 2. 50

In using this my improved wrench the nut or pipe that is to be grasped is placed between the jaws A, C' and the operator expands the jaw C' from the jaw A and releases the sliding block B from the serrated shank 55 A' by pressing inwardly on the parts C'' and f after which the block B is pulled downward until the pipe or nut is grasped and held between said jaws C' A and locked in said position by releasing the pressure on the projection f. 60

By turning the shank or handle A' in the direction of the arrow shown in Figs. 1 and 2 the movable jaw C' as it swings on its pivot b causes a powerful grip to be exerted on the 65 nut or pipe held between the jaws by which such nut or pipe may readily be turned in the desired direction. The grip is instantly released from the nut or pipe the moment the shank or handle A' is turned in the opposite 70 direction.

Having thus fully described the nature, construction, and operation of my invention, I wish to secure by Letters Patent and claim—

The herein described pipe or nut wrench 75 consisting of the handle A' provided with serrated edge A'' and having the rigid lower jaw A integral with said handle, the sliding box B adjustable on said handle, the movable spring pressed shank C pivotally mounted 80 on one side of said box and having the jaw C' and thumb piece C'', and the spring pressed pawl F pivotally mounted on the other side of the box in position to interlock with the serrations A'' of the handle beyond one end 85 of the box and provided with a thumb piece f, substantially as and for the purposes set forth.

In testimony whereof I have signed my name to this specification, in the presence of 90 two subscribing witnesses, on this 13th day of June, A. D. 1894.

HUMPHREY M. GLINES.

Witnesses:

ALBAN ANDRÉAN,  
KITTIE M. HANSON.