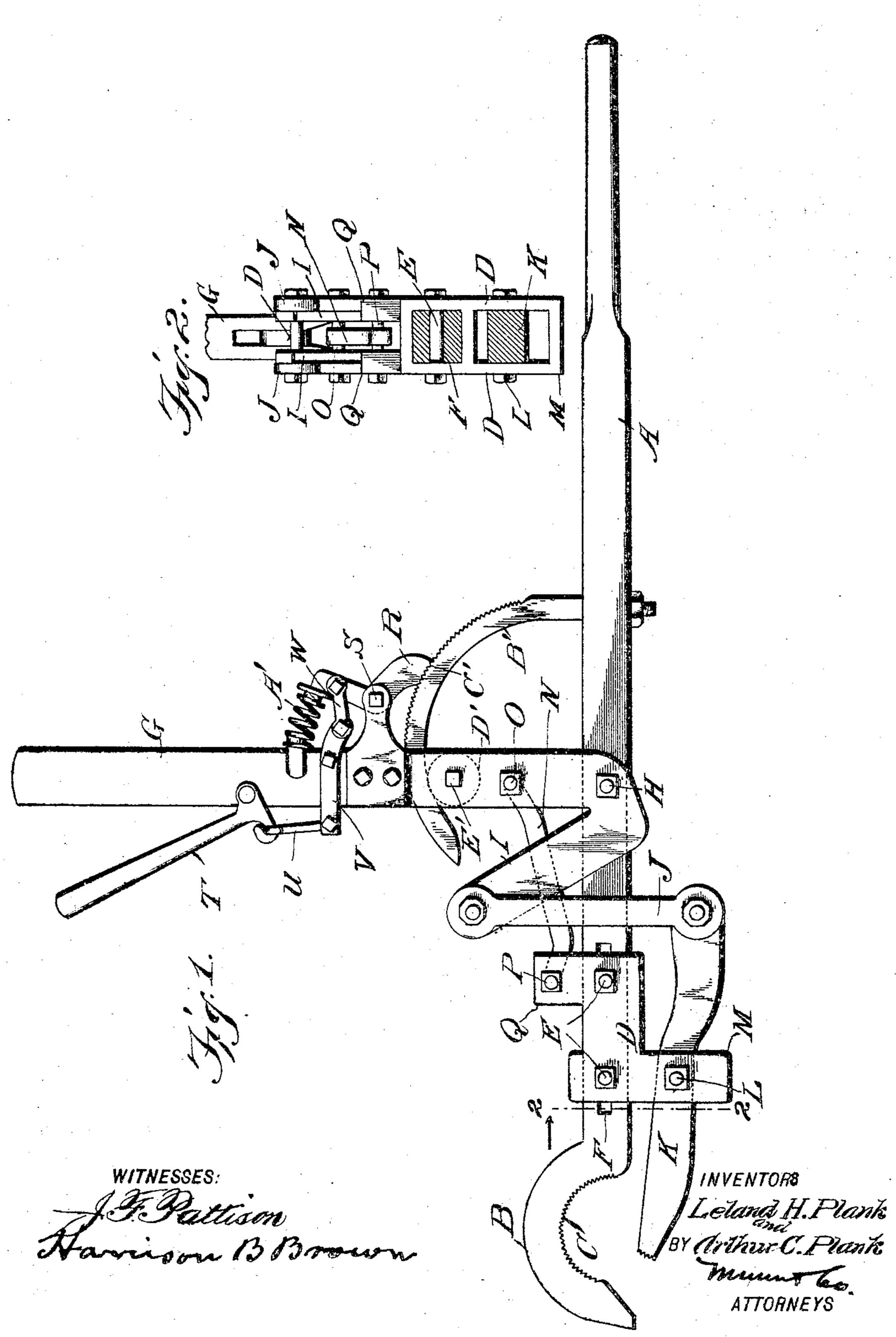
L. H. & A. C. PLANK. PIPE WRENCH.

APPLICATION FILED MAY 23, 1904.

NO MODEL.



United States Patent Office.

LELAND H. PLANK AND ARTHUR C. PLANK, OF ROCHESTER, MINNESOTA.

PIPE-WRENCH.

SPECIFICATION forming part of Letters Patent No. 767,237, dated August 9, 1904.

Application filed May 23, 1904. Serial No. 209,260. (No model.)

To all whom it may concern:

Be it known that we, LELAND H. PLANK and ARTHUR C. PLANK, citizens of the United States, residing at Rochester, in the county of 5 Olmstead and State of Minnesota, have invented a new and Improved Pipe-Wrench, of which the following is a specification.

Our invention relates to new and useful improvements in this class of wrenches, and has 10 for its object the provision of means novel in character whereby the tool is rendered not only quick in action to improved degree over all similar devices known to use, but in being adapted for adjustment and more effective 15 gripping of the pipe.

The invention consists of the special construction, arrangement, and combination of parts hereinafter fully described, shown in the accompanying drawings, and pointed out 20 in the claims.

In the drawings, Figure 1 is a view showing our improved pipe-wrench in side elevation and ready for use. Fig. 2 is a transverse sectional view taken on the line 22 of Fig. 1 25 with a portion of the jaw-adjusting lever shown broken away.

In carrying out our invention we employ a handle A, having a curved forward end forming one jaw B, with teeth C on its inner or 30 engaging side. On the handle portion we arrange a sliding block D, limited as to movement by bolts E, extended therethrough and also through an elongated slot F, located in the handle portion, as shown.

A lever G is provided, the same being bolted to the handle at H and having an angular or laterally-extending arm I connected, by means of a link J, to the rear end of the pivotallyacting dog or clamping-jaw K of the wrench.

It will be noticed that the clamping-jaw K has oscillating support on a bolt L, extending through a depending open extension M on the sliding block D. The lever G is also connected with the sliding block D by means of 45 a link N, extending from a securing-bolt O to a similar bolt P on an upper extension Q of the block D. In connection with the lever G we use locking means consisting of a suitable pawl or dog R, pivotally supported at S 5° and worked by a lever T through the link U, I

oscillating lever V, and the link W, substantially as shown in Fig. 1.

The pawl or dog R is rendered yielding through means of a suitably-supported spring A' and adapted for locking engagement with 55 a curved arm B', fixedly secured to the handle A.

The arm B' and the dog or pawl R may have suitable engaging teeth C', and the free end of the curved arm has bearing upon a roller 60 D', with suitable support, as E', and shown by dotted lines in Fig. 1.

The operation of our improved pipe-wrench will be understood from the above description, and therefore it is sufficient only to say 65 that when the dog or pawl R is released from engagement with the curved arm B' the block D may be adjusted through means of the link N by simply throwing the lever G, as will be understood. When the block is adjusted for 70 proper holding action of the engaging end of the oscillating jaw K and the dog or pawl reëngaged with the curved arm B', the parts are in position for unscrewing action of a pipe in the jaws B K and the latter jaw per- 75 mitted slight yielding action by slight compression of the spring A' against the dog or pawl through the lever G and the intermediate connections between it and the rear end of the oscillating jaw K.

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

1. The combination in a wrench, of a handle portion having a fixed jaw at its forward end, 85 an adjustable block on the handle portion, an oscillating jaw having support on said block, a lever pivoted to the handle portion, and links connecting the latter with the adjustable block and said oscillating jaw, substantially as de- 90 scribed.

2. The combination in a wrench, of a handle portion having a fixed jaw at its forward end, an adjustable block on the handle portion, an oscillating jaw having support on said block, 95 a lever pivoted to the handle portion, links connecting the latter with the adjustable block and said oscillating jaw, and means whereby the said lever may be secured to an adjustment, substantially as described.

IOO

3. The combination in a wrench, of a handle portion having a fixed jaw at its forward end, an adjustable block on the handle portion, an oscillating jaw having support on said block, a lever pivoted to the handle portion and having a lateral extension at its pivoted end, a link connecting said oscillating jaw with the free end of said lever extension, a similar link connecting the adjustable block and said lever, a yielding dog and also means whereby it may

be worked, on the lever, and a curved arm on the handle portion, wherewith said dog is adapted for holding engagement, substantially as described.

> LELAND H. PLANK. ARTHUR C. PLANK.

Witnesses:
Carl I. Svenning,
E. M. Sathre.