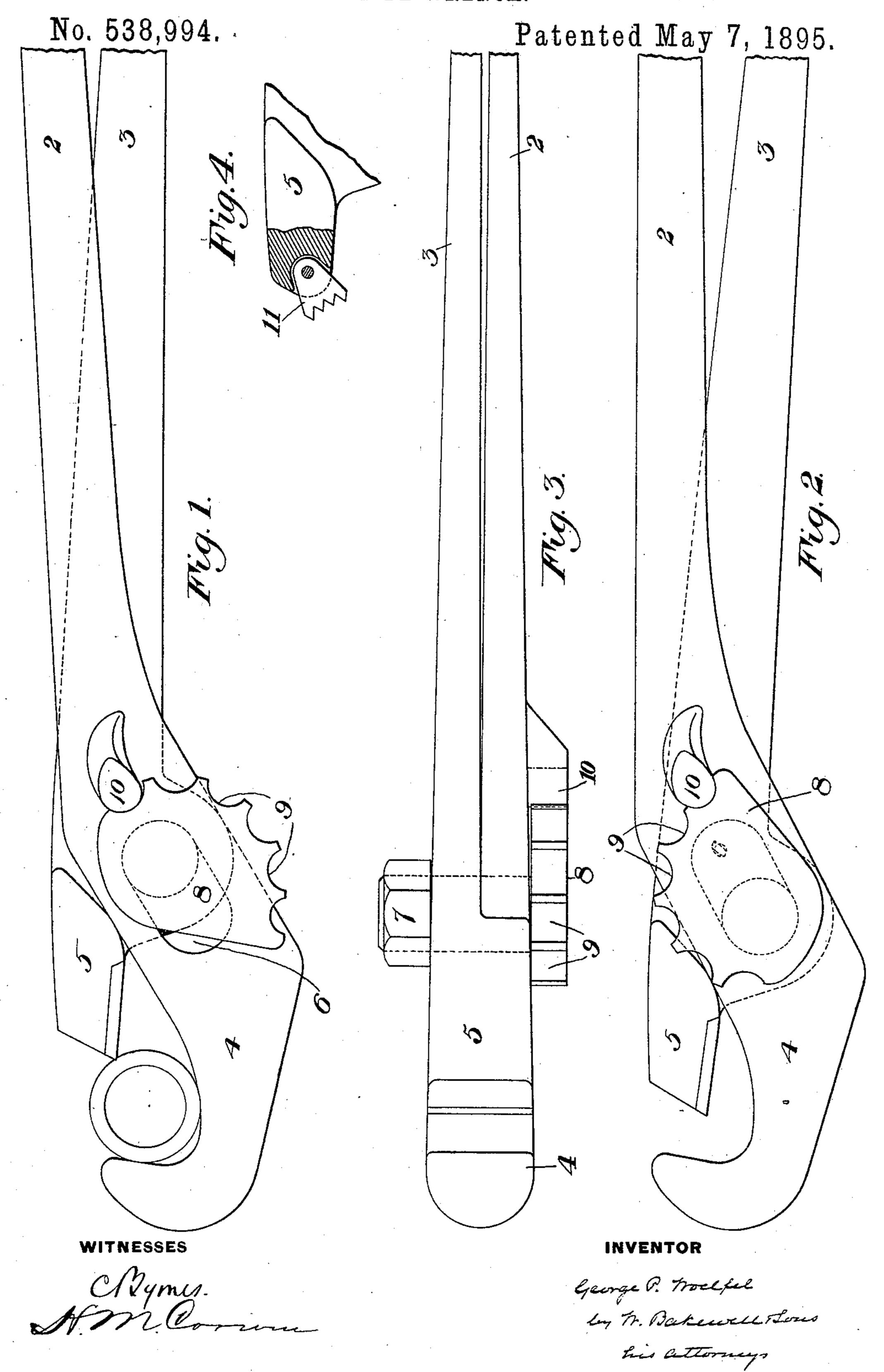
## G. P. WOELFEL. PIPE WRENCH.



## United States Patent Office.

GEORGE P. WOELFEL, OF SPRING GARDEN, ASSIGNOR TO JOSIAH BINDLEY,

## PIPE-WRENCH.

SPECIFICATION forming part of Letters Patent No. 538,994, dated May 7, 1895.

Application filed July 28, 1894. Serial No. 518,841. (No model.)

To all whom it may concern:

Be it known that I, GEORGE P. WOELFEL, of Spring Garden, in the county of Allegheny and State of Pennsylvania, have invented a new 5 and useful Improvement in Pipe-Wrenches, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side elevation of my improved ΙO wrench shown clamped upon a large pipe. Fig. 2 is a side elevation of the same adjusted to fit a small pipe. Fig. 3 is a top plan view of Fig. 2, and Fig. 4 is a detail view, herein-

15 after referred to.

My invention relates to the class of adjustable pipe wrenches, and is designed to provide a wrench which can be easily and quickly adjusted to pipes of different sizes, without 20 the loosening of nuts, screws or other holding devices.

In the drawings, 2 and 3 are the usual levers, terminating in the hook-jaw 4 and the bit 5, respectively. The lever 2 is provided 25 with a longitudinal slot 6 through which projects the pivot-pin of the lever 3, this pin being provided with the securing nut 7. At the other end of the pivot pin is rigidly secured the cam plate 8, having along one edge a se-30 ries of recesses 9, each at a different distance from the pivot pin, and with these recesses a lug 10 secured to the lever 2 is adapted to engage, thus holding the jaws in their respective positions, but allowing their free swing-35 ing upon the pivot pin. The lug 10 is preferably cast integral with the lever 2 and is shaped to fit snugly in the recesses of the cam plate.

As the jaw 5 is liable to score and cut the l

pipe being acted upon, I prefer to use in place 40 of it the jaw of Fig. 4, wherein a plate 11 is pivoted in a recess at the end of the jaw, this plate being provided with a concave serrated edge which adjusts in place upon the pipe

and prevents cutting of the same.

The operation is apparent. When it is desired to adjust the wrench, by pulling down upon the lever 2 the cam-plate is disengaged and then rotating this plate to the desired point the lever 2 is pushed up and the lugen- 50 gages a recess in the plate, holding the levers in the adjusted position.

The advantages of the device result from its simplicity, the few number of parts, and the doing away with securing nuts or screws 55 which must be loosened and turned up to se-

cure the levers. I claim—

1. A pipe wrench having two pivoted levers, an elongated slot in one lever through 60 which passes a cylindrical pivot pin of the other lever, and a cam-plate upon the pivot pin arranged to be engaged by a lug upon the slotted lever; substantially as described.

2. A pipe wrench having two pivoted le- 65 vers, an elongated slot in one lever through which passes a cylindrical pivot pin of the other lever, a cam plate rigidly secured to the pivot pin and provided with recesses, and a lug upon the slotted lever arranged to engage 70 said recesses; substantially as described.

In testimony whereof I have hereunto set

my hand.

GEORGE P. WOELFEL.

Witnesses:

W. B. CORWIN, H. M. CORWIN.