M.Beaher,

1/10/2012. Paterite ol/May 1, 1860. 17-28,053. Fig. 1. Treventor Jun F. Bucher by atty Thos T. Everett Witnesses.

UNITED STATES PATENT OFFICE.

WILLIAM F. BEECHER, OF CHICAGO, ILLINOIS.

PIPE-WRENCH.

Specification of Letters Patent No. 28,053, dated May 1, 1860.

To all whom it may concern:

Be it known that I, Wm. F. Beecher, of the city of Chicago, in the State of Illinois, have invented certain new and useful Im-5 provements on Pipe-Wrenches; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings and to the letters and marks thereon.

My invention is more specially designed for gas pipe, though it may be used for grasping and holding or turning solid rods, or tubes or cylinders, for whatever purpose

they may be required.

15 Of the drawings forming part of this specification Figure 1, is a side view of a wrench having my improvements, and Fig. 2, a longitudinal section of the same.

In both of these figures the same letters

20 are used to indicate like parts.

The body (a), handle (b), and hook (c), are shown as constructed of one piece of metal, and for which I use iron, of which I also make the other parts of the wrench 25 except the thumb or tongue (d), which I prefer to make of steel. The thumb (d) it will be perceived has a recessed face (e) which gives to it two sharp edges (f, f). It is attached to a block piece (g), by a pin (h) upon which it turns and can therefore readily have either of its edges placed so as to be the grasping edge when the one edge has become dulled, and it also allows of the one edge being smooth and the other toothed or serrated, if it be deemed desirable so to make them. Underneath the thumb is a set screw (i) fitting into the block so that the thumb may be regulated, be elevated or lowered, to grasp the pipe at any desired

place. A spring (j) is above the thumb 40 and affixed by a screw (k) to the upper side of the block, the tendency of which is to force the thumb upon the pipe grasped. This spring may be turned off from the thumb whenever desirable. The block piece 45 (g) has clutches (l) which work in grooves (m) in the body of the wrench as the block piece is moved backward or forward to adapt the thumb to a large or small pipe or cylinder. The block is moved by a screw 50 (n) which passes through a second block or supporting piece (o) and into the sliding block as shown, it being held in the latter by a pin (p) fitting into a recess (q) near the end of the screw.

It will readily be seen that the improvements here recited give to the pipe wrench easy adaptation to articles of different size or dimensions, and allow of its being made strong and durable at a reasonable expense 60 and also of being handled and used easily and forcibly.

What I claim as my invention and desire

to secure by Letters Patent is—

1. The thumb or tongue (d) having the 65 recess (e) with the edges (f, f) as set forth and connected and arranged to the sliding block (g) and with the spring as described.

2. The sliding block (g) having clutches to traverse the grooves and the set screw (i) 70 and arranged in relation to the other parts of the wrench as shown and described.

This specification signed this 7th day of April, 1860.

WM. F. BEECHER.

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Witnesses:

G. D. Hoodless, ZACHEUS B. FIFIELD.