

(No Model.)

M. H. RIZA.
PIPE WRENCH.

No. 529,196.

Patented Nov. 13, 1894.

Fig. 1.

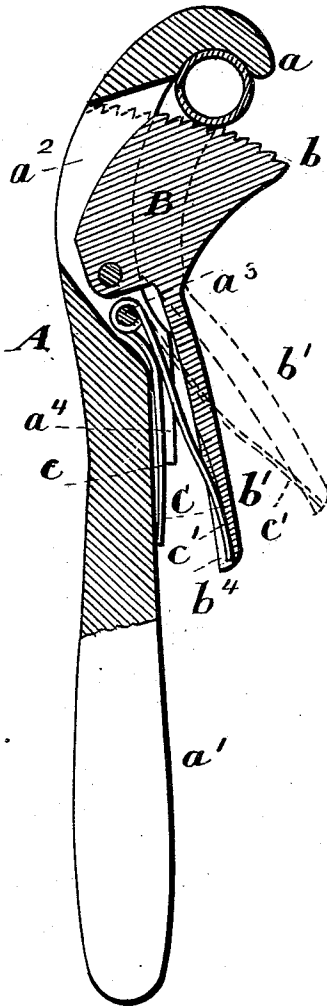


Fig. 2.

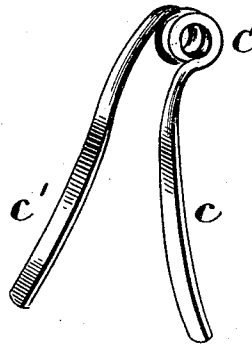
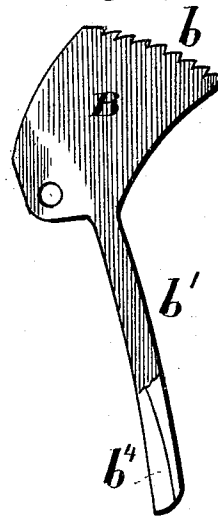


Fig. 3.



Witnesses.

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UNITED STATES PATENT OFFICE.

MIKE. H. RIZA, OF CENTRE MILL, TEXAS.

PIPE-WRENCH.

SPECIFICATION forming part of Letters Patent No. 529,196, dated November 13, 1894.

Application filed May 18, 1894. Serial No. 511,687. (No model.)

To all whom it may concern:

Be it known that I, MIKE. H. RIZA, a citizen of the United States, residing at Centre Mill, in the county of Hood and State of Texas, have invented certain new and useful Improvements in Pipe-Wrenches for Rods or any Round-Cylinder Object; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

The special object of the invention is to make a pair of tongs for holding rods or pipes of different diameter so that, when between the jaws, they will be held by an elastic cam pressure, without any further muscular exertion by the smith or expert mechanic who is about to work upon the rod or pipe.

Figure 1 of the drawings is a longitudinal vertical section of my pipe tongs; Fig. 2, a detail view of the spring, and Fig. 3 a detail side-elevation of the serrated cam-jaw, with its arm or handle.

In the drawings, A represents the fixed tong having the curved end-jaw a and the handle a' ; also the oblong slot a^2 in which works the front serrated cam jaw b on the tong B, the latter being provided with an arm b' at an obtuse angle thereto. The tong B is an elbow-lever turning on a pivot which is riveted fast in the tong A. Under the arm b' is located a double spring C whose middle is coiled around the fast cross-rivet a^3 , while

one arm c rests in the groove a^4 of tong A and the other arm c' rests in the groove b^4 of the arm b' of the tong B. When the two spring arms c c' are compressed, they lie, side by side, in the groove a^4 . With a minimum pipe or rod, the cam will be at the bottom of its socket while with a maximum size, the lowest of its serrations will be about on a level with the upper edge of the socket.

I am acquainted with the tongs or wrench described in Patent No. 362,819, granted to one Courtleyow on the 10th day of May, 1887, but this is troublesome and unwieldy in practice because the spring extends out when at work. It will be observed that my spring closes up, thereby rendering it much more convenient and reliable.

What I claim as new, and desire to protect by Letters Patent, is—

In pipe-wrenches, the handle carrying the integral curved jaw and the lever jaw having front serrations in the arc of a circle, combined with an intermediate V-spring having the vertex of its angle near the fulcrum of the lever-jaw and the two arms diverging outwardly therefrom, the lower arm being held by two side-flanges on the fixed jaw; whereby a double spring is thus formed of great strength, which cannot suffer lateral displacement, and is not liable to get out of order.

In testimony whereof I affix my signature in presence of two witnesses.

MIKE. H. RIZA.

Witnesses:

T. D. BEACH,
SAM R. BELL.