

H. C. STOUFFER.
Pipe-Wrench.

No. 159,229.

Patented Jan. 26, 1875.

FIG I

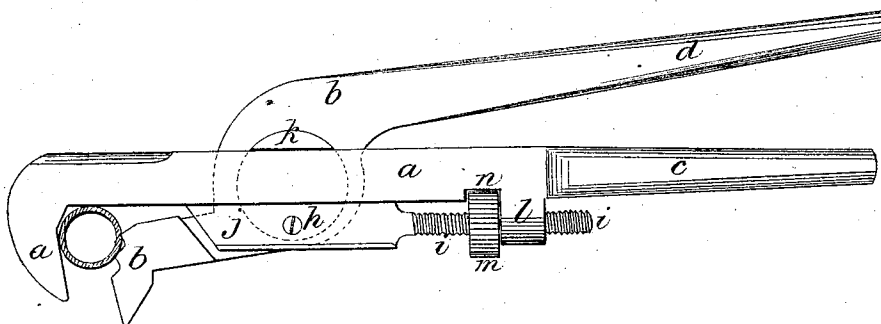


FIG II

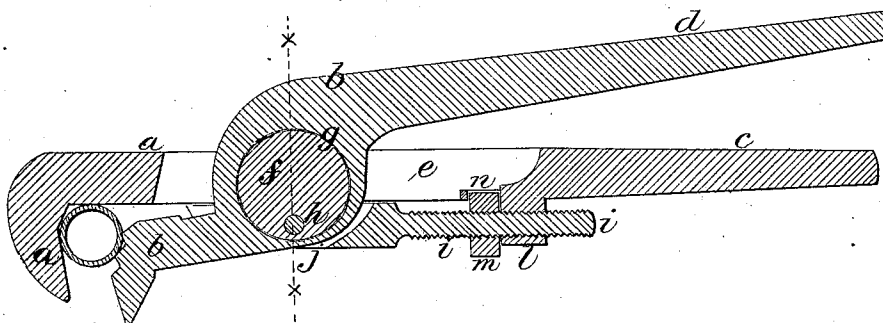


FIG III

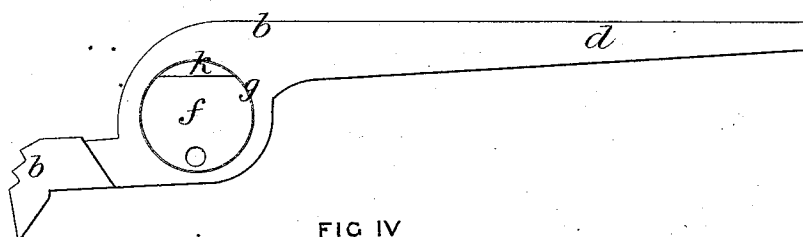
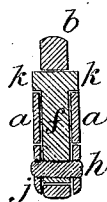


FIG IV



WITNESSES

John E. Laing
J. H. Rutherford

INVENTOR

Hiram C. Stouffer
by *Johnson and Johnson*
his Attys

UNITED STATES PATENT OFFICE.

HIRAM C. STOFFER, OF CANFIELD, OHIO, ASSIGNOR OF ONE-HALF HIS
RIGHT TO JOHN CHILDS, OF SMITH'S FERRY, PENNSYLVANIA.

IMPROVEMENT IN PIPE-WRENCHES.

Specification forming part of Letters Patent No. **159,229**, dated January 26, 1875; application filed
August 31, 1874.

To all whom it may concern:

Be it known that I, HIRAM C. STOFFER, (assignor of one-half interest to John Childs,) of Canfield, in the county of Mahoning and State of Ohio, have invented certain new and useful Improvements in Pipe-Wrench; and I do hereby declare that the following is a full, clear, and exact description thereof, which 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.

My invention consists of a pipe-tongs in which the toothed jaw is made adjustable by means of a circular plug-bearing secured to a forked block, provided with an adjusting device, and the plug guided in its adjustment by means of projections formed upon it and by the forked block, whereby the movable jaw is connected with the adjusting device, and carried by said plug-bearing within the slot of the fixed jaw-bar; also, in the combination of the outside bearing-plug projections with the fixed jaw-bar and the toothed jaw, the object whereof is to cause the gripping of the latter to be supported by a clamping action upon the back of the fixed jaw by said projections, and relieve the adjusting-device connection of undue strain.

In the accompanying drawings, Figure 1 represents a side view of a wrench embracing my invention; Fig. 2, a sectional view of the same; Fig. 3, a view of the movable jaw with its plug-bearing detached; and Fig. 4, a cross-section of the jaws through the plug-bearing.

The device consists of two gripping-jaws, *a* and *b*, formed upon the ends of jaw-bars, which terminate in handles *c* *d*, by which to manipulate the device. The jaw-bar *a* has longitudinal slot *e*, within which the movable jaw *b* is fitted, to allow it to be adjusted in relation to the fixed jaw, according to the size of the pipe or nut to be clamped. The movable jaw is provided with an opening, *g*, to receive

the plug-bearing, which must be of sufficient diameter to extend beyond the slotted sides of the fixed jaw-bar, in order to form a connection by a screw, *h*, with an adjusting screw-stem, *i*, and thereby make the plug or ring bearing *f* a fixed part of the adjusting device, so that the adjustment of the latter carries the plug with it, and the jaw within which said plug is seated, and at the same time allows the movable jaw to turn freely upon the plug-bearing. The inner end, *j*, of the screw-stem *i* is forked to embrace the movable jaw *b*, and that portion of the plug which extends beyond the inner side of the fixed jaw-bar, and it is at this point that the forked end *j* is connected to the plug by a solid screw, *h*, which passes through the forked end and the plug at or near its circumference. The movable jaw is guided by the forked end *j* of the screw-stem, which lies upon the inner side of the jaw-bar *a*, and by lugs or projections *k* *k* on the plug, which bear upon the back surface of the jaw-bar *a*, and form, with the adjusting device, the guides, which hold the movable jaw in place.

The outside plug-projections *k* *k* serve, in connection with the jaw-bar *a*, to support the movable jaw *b* by a clamping action of the projections upon the back of the slotted bar *a*, and the strain, instead of being in the direction of the handles, is against the back of said bar.

It is not designed that the handles of the implement be opened widely for application to the pipe, as their adjustment in all cases is obtained by means of the adjusting-stem.

The screw-stem *i* passes through a projection, *l*, on the fixed jaw-bar *a*, and a milled nut, *m*, confined within a notch, *n*, in said bar, and against the projection *l*, serves to adjust the screw-stem *i* and the movable jaw, as may be desired.

I claim—

1. The pipe-tongs having the toothed jaw *b*, adjustable by means of a plug-bearing, *f*, secured to the forked block *j*, the latter being provided with an adjusting device, and the

plug being guided in its adjustment by projections *k k*, formed upon it, and by the block *j*, substantially as shown and described.

2. The combination of the outside plug-projections *k k* with the jaw-bar *a* and the movable jaw *b*, whereby the gripe of the latter is supported by a clamping action of said projections upon the back of the said jaw-bar *a*, substantially as set forth.

In testimony that I claim the foregoing as my own I have affixed my signature in presence of two witnesses.

HIRAM C. STOUFFER.

Witnesses:

A. E. H. JOHNSON,
J. W. HAMILTON JOHNSON.