S. H. DICKERSON.

PIPE-TONGS.

No. 169,425. Patented Nov. 2, 1875.

Fig. 1

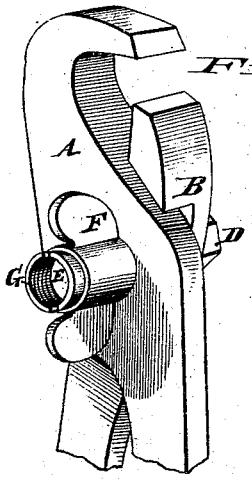


Fig. 2

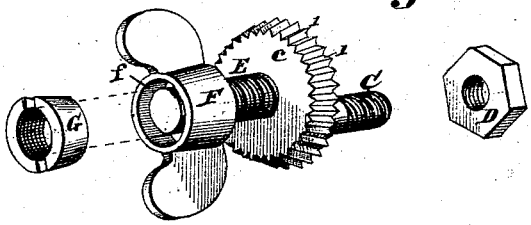
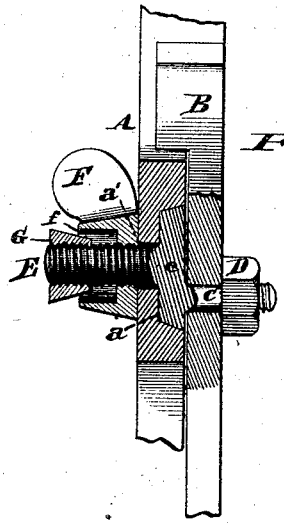


Fig. 3



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UNITED STATES PATENT OFFICE.

SAMUEL H. DICKERSON, OF CINCINNATI, OHIO, ASSIGNOR TO HIMSELF, BENJAMIN F. STANLEY, AND WILLIAM A. McCALLUM, OF SAME PLACE.

IMPROVEMENT IN PIPE-TONGS.

Specification forming part of Letters Patent No. **169,425**, dated November 2, 1875; application filed September 18, 1875.

To all whom it may concern:

Be it known that I, SAMUEL H. DICKERSON, of Cincinnati, Hamilton county, State of Ohio, have invented an Improvement in Pipe-Tongs, of which the following is a specification:

My invention relates to the adjustability of the joint between the two arms or jaws of the tongs; and consists, in the first part, in the peculiar construction of bearing-pin, having enlarged eccentric base, and its adjustably rigid connection with one of the tong-jaws, whereby the distance between said bearing-pin and the clamping-edge of jaw, to which it is secured, may be varied; and my invention consists, in the second part, in a certain combination and construction of devices for securing the bearing-pin when in use, and also operating it when adjustment is required.

Figure 1 is a perspective view of a pair of pipe-tongs embodying my invention. Fig. 2 is a perspective view of the adjusting devices in a detached position. Fig. 3 is a section through joint.

A is the holding or retaining, and B the griping, jaw of a pair of pipe-tongs, to which my improvement is attached. C is the bearing-pin, upon which the jaw B plays, it having an eccentrically-secured base, *c*, of increased diameter. The jaw A has formed in it a recess, *a*, to coincide with and receive the disk-formed base *c* of pin C, and, as seen in Fig. 2, the disk-formed base has conical-shaped or beveled edge, to provide for rapid clearing or disconnection of the teeth 1, formed upon it, which teeth engage with similar ones formed in the tapering or conical walls of the recess *a*. As seen in Fig. 2, these teeth are pyramidal in shape, extending entirely around the disk *c*, but need extend only partially through the entire depth of the disk; or they may taper into nothingness from the base or inner edge of the bevel, and the teeth in the corresponding recess *a* are of like construction. It is obvious, however, that the teeth need not be of pyramidal construction, but may be of any desired form and number down to one tooth, in which latter case the spaces in the recess *a*, to engage with the tooth, must be more than one in number to allow of adjustment; and it is also obvious that the spaces may be formed in the disk *c*, and the tooth (adjustable or rigid) secured or formed in the side or wall of the recess *a*, without materially changing the nature of the device.

D is a nut for securing the jaw B upon the bearing-pin C. E is a retaining-pin, formed upon the center of disk *c*, on the opposite side from pin C, and it passes through the jaw A at *a'*, and engages with the thumb-nut F, to secure the pin C *c* in position. The nut F is bored out at *f*, so as to allow the ring G to be screwed upon the pin E, and extend partly into the said nut F. The outer surface of the ring G is conical in shape, decreasing in size toward the base of pin E, so that when the nut F is unscrewed, to release the pin C *c* from contact with recess *a*, it will bind against the conical sides of the ring, and act in connection with the ring as a handle to operate or change the position of the pin C *c*.

It is not necessary to use the pin E to secure the pin C *c*, for it is obvious that a screw may be passed through the disk part *c*, and into one of a series of holes in the recess *a*, in which case there would be no need of teeth or spaces on the edge of the disk or recess.

Having thus described my invention, I claim, particularly—

1. As applied to a pair of adjustable pipe-tongs, the hereinbefore-specified eccentrically-adjusting bearing-pin C, having a base, *c*, adapted to interlock with a recess in the holding-jaw, substantially as and for the purpose specified.

2. As applied to a pair of adjustable pipe-tongs, the combination of bearing-pin C *c*, having any preferred form of teeth 1, and adapted to engage with similar teeth in the recess *a* of the holding-jaw, retaining-pin E, and nut F, constructed, connecting, and operating substantially as and for the purpose specified.

3. The combination of bearing-pin C *c*, retaining-pin E, nut F *f*, and ring G, constructed, connected, and operating substantially as and for the purpose specified.

In testimony of which invention I hereunto set my hand.

SAMUEL H. DICKERSON.

Witnesses:

JOHN E. JONES,

J. L. WARTMANN.