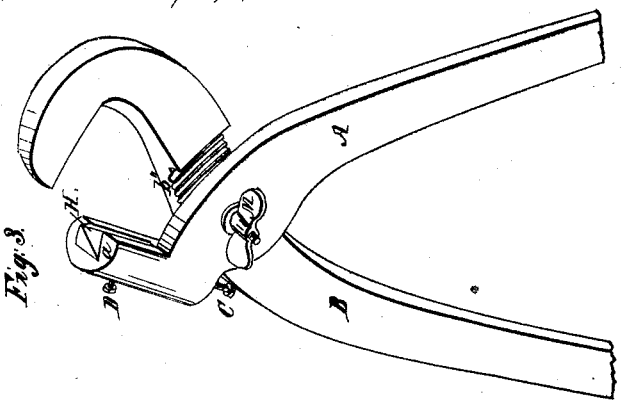
H. Herbert,

Wrench.

No. 45,496. Patented Dec 20, 1864

Fig. 3.



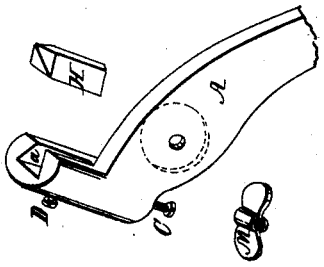
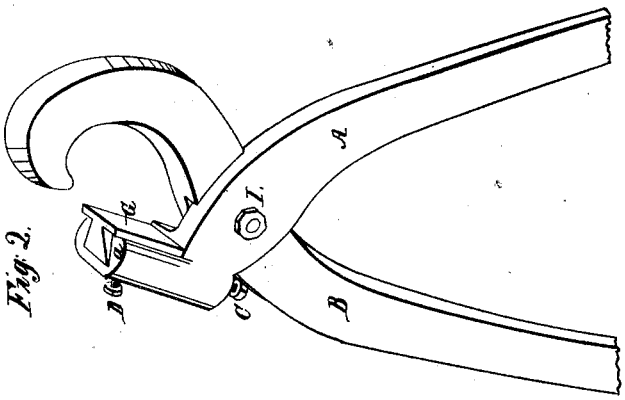


Fig. 2.



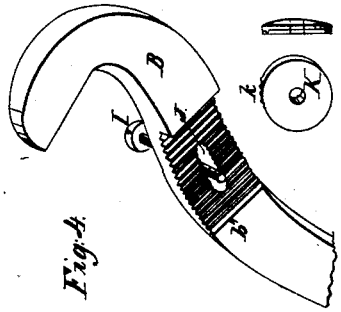
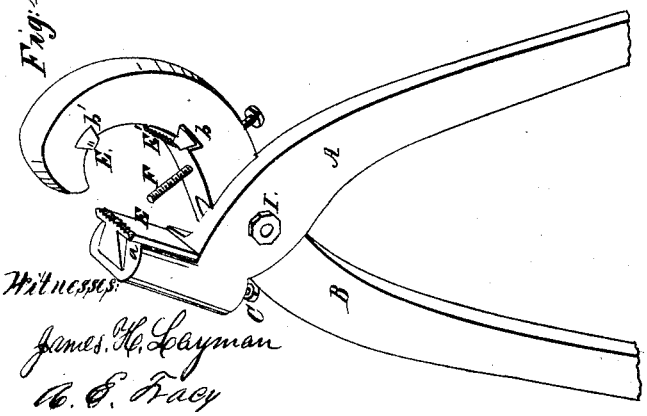


Fig. 4.

Fig. 1.



Witnesses:

James H. Layman

A. S. Tracy

Inventor:

H. Herbert

per Wright Brown & Quinby Attys

UNITED STATES PATENT OFFICE.

HENRY HERBERT, OF CINCINNATI, OHIO.

PIPE-TONGS.

Specification forming part of Letters Patent No. **45,496**, dated December 20, 1864.

To all whom it may concern:

Be it known that I, HENRY HERBERT, of Cincinnati, Hamilton county, Ohio, have invented a new and useful Improvement in Pipe-Tongs; and I do hereby declare the following to be a full, clear, and exact description thereof reference being had to the accompanying drawings, making part of this specification.

My improvement relates to devices whereby a pipe-fitter's tongs are made more efficient and comprehensive than heretofore, the invention being more particularly designed for the use of the gas-fitter.

Figure 1 represents a pair of tongs adapted to chase or cut a screw-threaded pipe. Fig. 2 represents a pair of tongs rigged as a screw-wrench. Fig. 3 represents the same adapted for cutting a groove around a pipe for the purpose of severing it. Fig. 4 represents a device whereby the tongs may be adapted to operate on work of divers diameters.

A B represent the two jaws of a gas-fitter's pipe-tongs. The jaw A has a dovetailed socket, *a*, for the reception of the various bits and dies needed by gas-fitters. The jaw A is also furnished with an adjusting-screw, C, to enable the operator to set the bit out or in, as may be required. D is a set-screw, to secure the bit to the place of adjustment. The counter-jaw B has the customary hooked form to enable it to grasp the pipe on the side opposite to that on which the jaw A engages.

When required as a chase or screw cutter, the dovetailed socket *a* is made to hold a screw-cutting die, E, while similar dies, E′ E″, are secured in as many sockets, *b b′*, of the jaw B. The jaw B is also traversed by a screw-threaded gage, F, which, when its point rests in contact with the inner face of the die E, limits the closure of the jaws to correspond with the diameter of the pipe which is being operated upon.

When required for use as a simple pipe-wrench, a nipper-bit, G, is made to occupy the socket *a*.

H is a graver-bit, by means of which the operator is enabled to cut around a pipe by a rapid motion of the tool preliminary to severing the pipe at that part.

I adapt my tongs for divers sizes of pipe by causing the pivot I to occupy a longitudinal slot, J, in the jaw B, transverse corrugations *b″* on the said jaw fitting similar corrugations, *k*, on the face of a washer, K, which is finally secured in any place desired by means of the nut M upon the screw-threaded extremity of the pivot I. The inner side of the jaw A is recessed (see dotted lines in Fig. 4) to receive the washer K.

I am aware that a wrench has before been constructed to receive changeable bits, as described in William Webster's patent of February 9, 1864, and also that it is not new to construct pipe-tongs with the pivot working in a slot to adapt them to be adjusted for different sizes of pipe; but

Having thus described my invention, I claim and desire to secure by Letters Patent—

As a new article of manufacture, the adjustable pipe-tongs, hereinbefore described, provided with the slot J, pivot I, nut M, corrugated washer K *k*, corrugations *b″*, and dovetail sockets *a b b′*, all as specified.

In testimony of which invention I hereunto set my hand.

HENRY HERBERT.

Witnesses:

JAMES H. LAYMAN,

GEO. H. KNIGHT.