

A. A. PEASE.
PIPE-TONGS.

No. 172,649.

Patented Jan. 25, 1876.

fig. 1

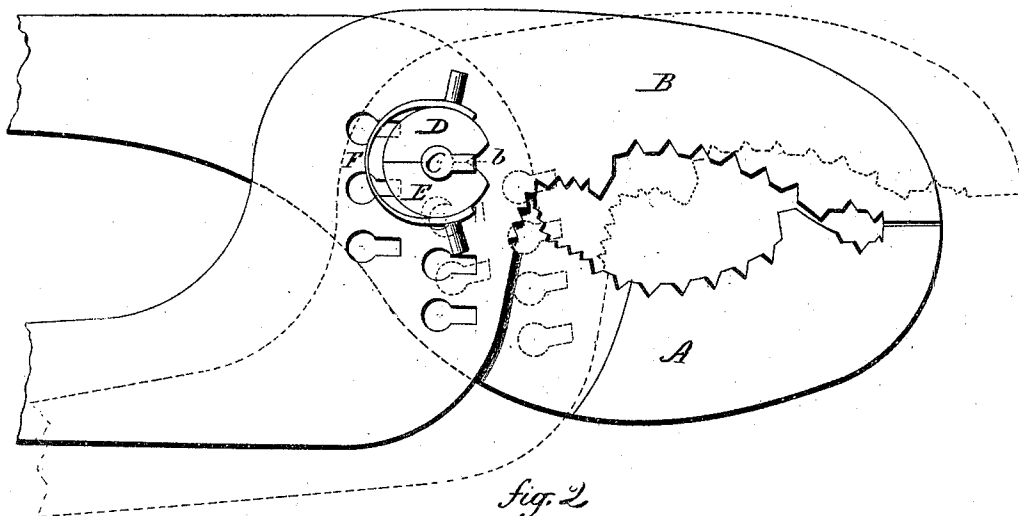


fig. 2

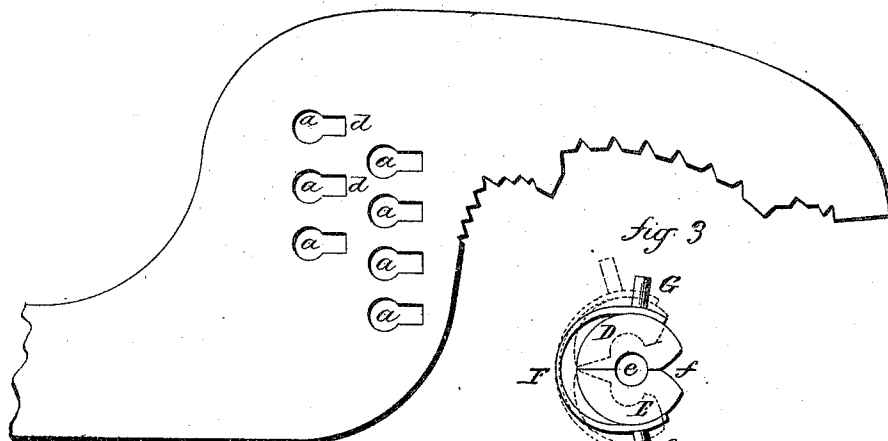


fig. 3

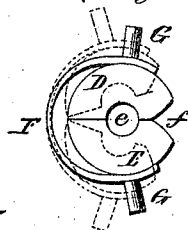


fig. 4

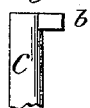


fig. 5



Witnesses:

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UNITED STATES PATENT OFFICE.

ALBERT A. PEASE, OF NEW HAVEN, CONNECTICUT.

IMPROVEMENT IN PIPE-TONGS.

Specification forming part of Letters Patent No. **172,649**, dated January 25, 1876; application filed November 16, 1875.

To all whom it may concern:

Be it known that I, ALBERT A. PEASE, of New Haven, in the county of New Haven and State of Connecticut, have invented a new Improvement in Pipe-Tongs; and I do hereby declare the following, when taken in connection with the accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, side view; Fig. 2, adjustable jaw detached; Fig. 3, the locking-collar detached; Figs. 4 and 5, detached views of the pivot.

This invention relates to an improvement in the instrument known as "pipe-tongs"—that is to say, tongs by which pipe or cylindrical bodies may be easily turned, as for screwing together or otherwise, the object being to construct the tongs so that a single pair will be adjustable to a great variety of sizes of pipe; and it consists in constructing one jaw with two or more series of pivot-bearings, so that this adjustable jaw may be readily set at different relative positions to the other jaw, to increase or diminish the extent of the opening of the jaws, as the case may be; also, in an automatic or self-closing collar to secure the two parts together, which said collar is applicable to other purposes, all as more fully hereinafter described.

A is the principal, and B the adjustable, jaw. The pivot C is set through a perforation, or made fast in the principal jaw. The adjustable jaw B is constructed with a series of perforations, *a*, more or less in number, and so that either will pass over the pivot C, and form a bearing, upon which the jaws will move as a fulcrum. The pivot is preferably constructed with a projecting lug, *b*, on one side, as seen in Fig. 4, and the perforations through the adjustable jaw with a corresponding enlargement, *d*, so that when placed over the pivot, and the pivot or jaw turned to bring the lug to either side from the enlargement, the jaw will be retained; but, instead of this lug and enlargement, the pivot may be made, as seen in Fig. 5, with an annular groove, substantially flush with the surface of the adjustable jaw when the two are set together. In that case the enlargement for the perforations will not be necessary.

Thus constructed, the aperture between the

jaws is varied by setting the fulcrum to different perforations—as, for instance, changing from the position in Fig. 1 to the one directly behind it, the face of the jaws will be brought into the relative position indicated in broken lines. Set to other positions makes a different variation; but this illustration is sufficient to the understanding of the method of adjustment.

To secure the adjustable jaw upon its fulcrum, and yet allow of its easy removal, the collar (shown detached in Fig. 3) is employed. This consists in a collar made in two parts, D and E, with a recess, *e*, in the center, and the meeting ends of the two parts at one side are beveled, as at *f*, in toward the recess. These two parts are united by a spring, F, encircling the two, the tendency of which is to hold the two parts freely together, but yet so as to allow the ends *f* to be separated. The collar thus constructed is pressed over the pivot in the annular recess or beneath the lug, as the case may be, until the recess *e* encircles the pivot, the parts being forced together around the pivot by the spring F. To separate the jaws, it is only necessary to open the parts of the collar, and remove it from the pivot. As a convenience for thus operating the collar, each part is provided with a stud or handle, G. This collar, while specially adapted to these improved tongs, is applicable to many other similar uses.

I do not broadly claim a pipe-wrench having one jaw adjustable relative to the other by certain fixed perforations through both, as such, I am aware, is not new.

I claim—

1. The combination of the two jaws A B, each formed upon, and so as to be operated by, its own independent handle, one constructed with two or more series of pivot-bearings, the said pivot forming the fulcrum upon which the two handles and their jaws work, substantially as described, and for the purpose of adjusting the jaws relatively to each other.

2. The collar consisting of the two parts D and E, united by the spring F, and with an opening, *f*, to the space in the center, substantially as and for the purpose described.

ALBERT A. PEASE.

Witnesses:

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