(Model.)

A. A. PEASE.

ADJUSTABLE TOOL.

No. 252,248 Patented Jan. 10, 1882.

Fig 1

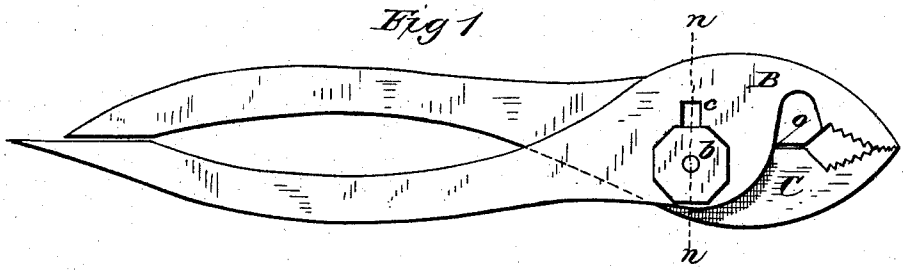


Fig. 2.

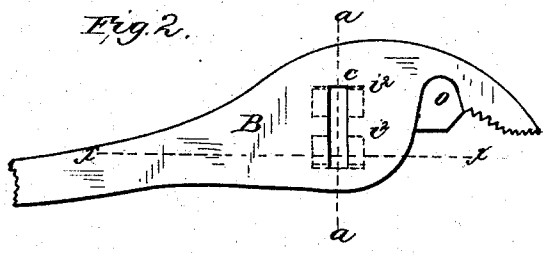


Fig. 3.

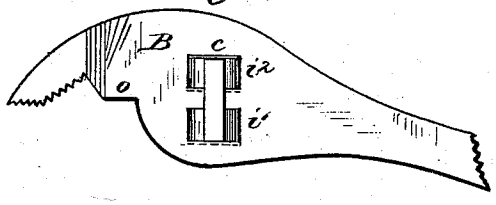


Fig. 4.

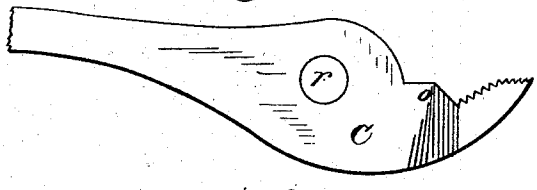


Fig. 5.

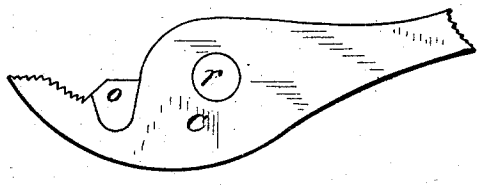


Fig. 6

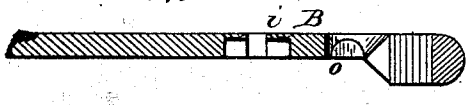


Fig. 7.

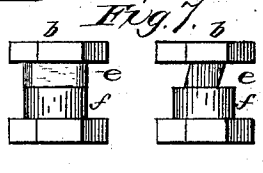


Fig. 8.

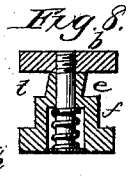


Fig. 9.

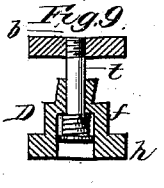


Fig. 10.

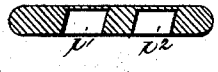


Fig. 11

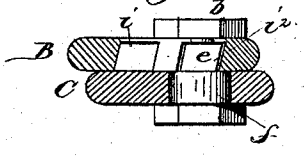
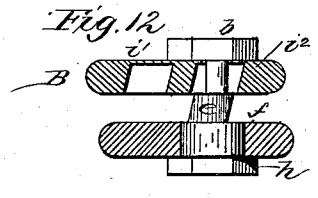


Fig. 12



Witnesses.
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A. G. Heylmun.

Inventor.
Albert A. Pease,
by Allen Webster,
Attorney.

N. PETERS, Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

ALBERT A. PEASE, OF SPRINGFIELD, MASSACHUSETTS.

ADJUSTABLE TOOL.

SPECIFICATION forming part of Letters Patent No. 252,248, dated January 10, 1882.

Application filed August 10, 1881. (Model.)

To all whom it may concern:

Be it known that I, ALBERT A. PEASE, of Springfield, in the county of Hampden and State of Massachusetts, have invented new and useful Improvements in Adjustable Tools, of which the following is a specification, which will enable others skilled in the art to which the invention appertains to make and use the same, reference being had to the accompanying drawings and letters of reference marked thereon, which form a part of this specification.

This invention relates to the construction of tools similar to pipe-tongs, in which a changeable pivotal bearing is desirable.

I am aware that tongs have heretofore been constructed with a changeable pivotal bearing, or, in other words, so constructed that the jaws may be adjusted relatively to each other. These are objectionable because of its being necessary to draw the pivot and insert again each time the position of the pivotal bearing is changed, thus completely separating the parts. In a tool of this construction much time is lost in adjusting the parts, and when worn they are liable to be separated by accident and lost.

My invention consists in the construction herein shown, whereby I am enabled to change the position of the pivotal bearing without completely separating the parts, this being quickly and easily done, thus saving much time and trouble.

In the accompanying drawings, in which similar letters of reference indicate like parts, Figure 1 is a side view of a small pair of pipe-tongs with my invention applied thereto. Figs. 2 and 3 are front and rear views of the jaw B. Figs. 4 and 5 are front and rear views of the jaw C. Fig. 6 is a sectional view through line *x x* of Fig. 2; and Fig. 10 is a section of the same through line *a a*. Fig. 7 shows two side views of the pivot. Figs. 8 and 9 are views of the same, with a part in section. Fig. 11 is a view with jaws in section on line *n n*, Fig. 1; and Fig. 12 is a view of the same with the jaws separated preparatory to changing the position of the bearing.

The construction will be readily understood on reference to the drawings.

The jaw B has two or more recesses, i' i^2, in which the part *e* of the pivot D fits. The jaw C may have one or more holes, *r*. These, however, will be in no way connected with each other.

The pivot is recessed, as shown in Figs. 8 and 9. The head of the bolt *t* fits within and should nearly fill the recess. A spiral spring bears against the head of the bolt *t* and rests against the bottom of the recess, as shown. The nut *b* screws upon the bolt *t*. Fig. 8 illustrates the position of the parts of the pivot when the jaws of the tool are together, as seen in Fig. 11, while Fig. 9 illustrates the position of the parts when the jaws are separated preparatory to changing the position of pivotal bearing, as seen in Fig. 12.

It will be seen that when the jaws are separated the spring is compressed and the bolt *t* and nut *b* move upward sufficiently to allow the part *e* to escape from the recess i^2, as shown in Fig. 12. The jaw B is now moved to the right, the bolt *t* traversing the slot *c* until the part *e* enters the recess i', thus separating the griping-jaws of the tool and allowing of the grasping of a larger object.

To overcome the tendency of the jaws to separate when under strain, the part *e* of the pivot is inclined, and the sides of the recesses against which the part *e* bears are correspondingly shaped. Thus constructed the tendency under strain is to draw the jaws more closely together.

It will be seen that this invention may be applied to other tools in which it is desirable to change the pivotal bearing.

The pivot D is provided with the usual head, *h*. The jaws B and C, near the junction of the axis, are formed with beveled or inclined surfaces *o*, which may form cutters or means for grooving pipes.

Having therefore described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The combination of the jaw C, having a

handle and hole or aperture, *r*, the jaw B, having a handle and recesses *i'* and *i²*, with slot *c*, and the recessed pivot D, with inclined bearing *e*, bolt *t*, spring, and nut, substantially as described, and for the purpose set forth.

2. In a tool, the pivot D, consisting of the pivotal part having the portions *h f*, inclined bearing *e*, and recess, the headed bolt having the nut *b*, and a spiral spring to draw the pivotal part and bolt together, substantially as described.

In witness whereof I hereunto set my hand, in the presence of two witnesses, this 8th day of August, A. D. 1881.

ALBERT A. PEASE.

Witnesses:

ALLEN WEBSTER,

JOHN S. HULL.