April 22, 1924.

1,491,632

B. O. REYNOLDS

COMBINED ANVIL AND VISE

Filed May 18, 1923

Fig. 1.

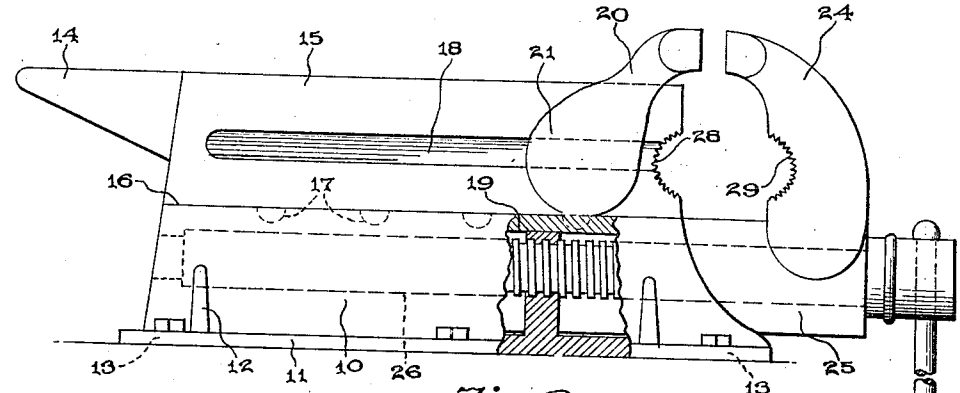


Fig. 2.

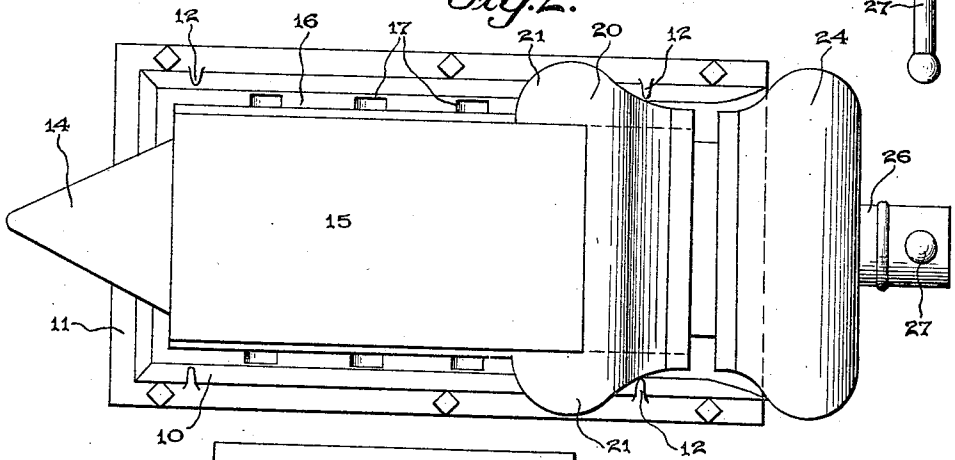
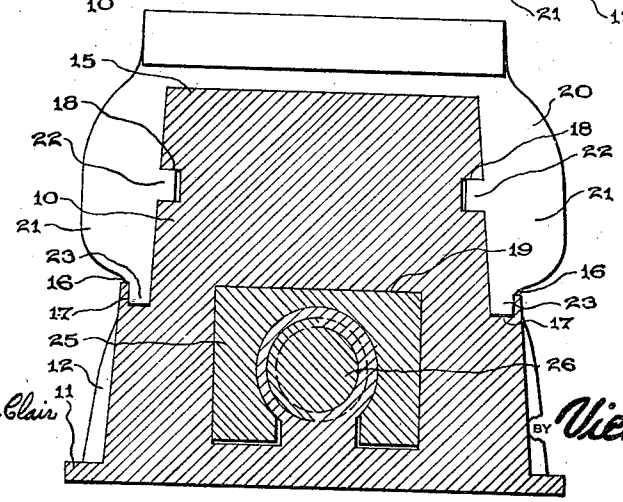


Fig. 3.



H. A. LaClair

WITNESS:

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UNITED STATES PATENT OFFICE.

BION O. REYNOLDS, OF CLARINDA, IOWA.

COMBINED ANVIL AND VISE.

Application filed May 18, 1923. Serial No. 639,955.

To all whom it may concern:

Be it known that I, BION O. REYNOLDS, a citizen of the United States, residing at Clarinda, in the county of Page and State of Iowa, have invented new and useful Improvements in Combined Anvils and Vises, of which the following is a specification.

This invention relates to tools, particularly to vises and has for its object the provision of a novel combined anvil and vise, novel means being provided for regulating the opening between the jaws of the vise for conveniently holding articles of different sizes.

Another object is the provision of a device of this character in which the adjustable jaw will be rigidly held in adjusted position when the movable jaw is moved into co-operation therewith by means of a conventional adjusting screw.

An additional object is the provision of a device of this character which will be simple and inexpensive to manufacture, highly efficient in use, durable in service and a general improvement in the art.

With the above and other objects and advantages in view the invention consists in the details of construction to be hereinafter more fully described and claimed and illustrated in the accompanying drawings, in which:

Figure 1 is a side elevation of the device,

Figure 2 is a top plan view thereof,

Figure 3 is a cross section.

Referring more particularly to the drawings I have shown my device as comprising an elongated solid body 10 provided at its lower edge with an outwardly extending flange 11 braced by webs 12 and formed with holes 13 for the passage of screws or bolts by means of which the device may be held down upon a work bench or other support. One end of this body is formed with a horn 14 which is common in anvil construction and the entire upper surface of the body 10 is here represented as flat and lying in one plane. The upper portion 15 of the anvil body is reduced in thickness compared with the lower portion to define horizontal shoulders 16 at both sides of the device and these shoulders have formed therein depressions or recesses 17. At opposite sides the reduced portion 15 is cast or otherwise formed with longitudinally extending grooves 18. The lower portion of this body is formed with a longitudinally extending hollowed out portion or bore 19.

One jaw of the device consists of a U-shaped yoke 20 straddlingly engaged upon the body 10 at the reduced upper portion 15 thereof and the opposite arms of this yoke are formed with lugs 22 which are slidably engaged within the grooves 18. The lower ends of the arms 21 carry lugs 23 selectively engageable within the depressions or recesses 17. By tilting this jaw member 20 forwardly it will rock upon the lugs 22 so that the lugs 23 may be disengaged from the recesses 17 which will permit the jaw to be slid along the body to a different selected point with the lugs 23 engaging within other ones of the recesses 17.

The numeral 24 represents the movable jaw which is carried by a hollow bar 25 slidable within the bore 19 and this movable jaw is moved toward or away from the jaw 20 by means of the screw 26 carrying a suitable handle 27. It might also be mentioned that the jaw end of the body 10 is formed with a preferably toothed recess 28 which mates with a similar recess 29 in the confronting face of the jaw 24 for the purpose of holding rods, pipes or other round objects which could not be held easily between the flat faces of the jaws 20 and 24.

In the operation it will be seen that the adjustable jaw 20 is shifted along the body 10 to the desired point, the lugs 23 being engaged within a selected pair of the recesses 17. This adjustment is for the purpose of making rapid changes in the size of the opening between the jaws 20 and 24. The object to be held is then placed between the jaws in the usual manner and the clamping action is obtained by turning the screw 26 to bring the movable jaw 24 into clamping relation to the jaw 20.

From the foregoing description and a study of the drawings it will be apparent that I have thus provided a very simply constructed and easily operated combined anvil and vise which will be a great convenience and a saver of time and labor to mechanics and others having occasion to use such tools. Owing to the simplicity of the construction and the fewness of the parts it is apparent that there is practically nothing to get out of order so that the device should have a

long life and satisfactorily perform all of its functions.

While I have shown and described the preferred embodiment of the invention it is of course to be understood that I reserve the right to make such changes in the form, construction and arrangement of parts as will not depart from the spirit of the invention or the scope of the subjoined claims.

Having thus described my invention I claim:

1. A vise comprising an elongated body constituting an anvil, said body having its upper portion of less width than its lower portion to define horizontal shoulders, said shoulders being formed each with a series of recesses, an adjustable jaw straddling the body and formed with lugs engageable within selected ones of said recesses, the opposite sides of said body being formed with longitudinal grooves, other lugs on the jaw slidably engaged within said grooves, and a movable jaw slidable with respect to said body and equipped with operating means.

2. A vise comprising an elongated body constituting an anvil, said body having its upper portion of less width than its lower portion to define horizontal shoulders, said shoulders being formed each with a series of recesses, an adjustable jaw straddling the body and formed with lugs engageable within selected ones of said recesses, the opposite sides of said body being formed with longitudinal grooves, other lugs on the jaw slidably engaged within said grooves, a movable jaw slidable with respect to said body and equipped with operating means, the movable jaw being formed on a hollow bar slidable along a bore in the body, and an operating screw extending through the hollow bar and having a nut mounting whereby to move the movable jaw longitudinally.

In testimony whereof I affix my signature.

BION O. REYNOLDS.