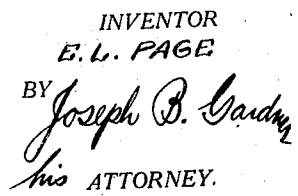


1,387,936.

2 SHEETS—SHEET 1.

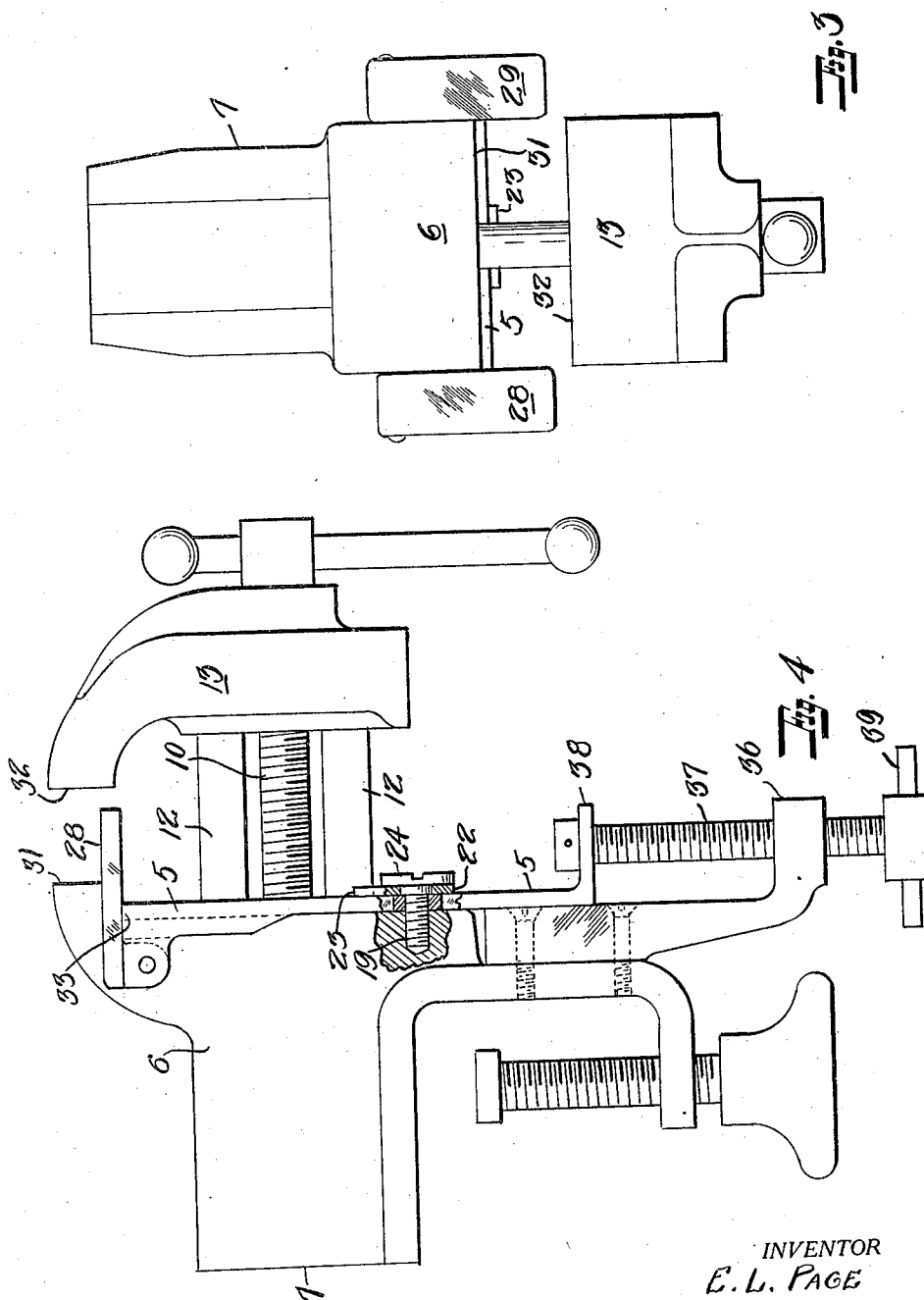


E. L. PAGE.
 VISE APPLIANCE.
 APPLICATION FILED APR. 17, 1920.

1,387,936.

Patented Aug. 16, 1921.

2 SHEETS—SHEET 2.



INVENTOR
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UNITED STATES PATENT OFFICE.

EDWIN L. PAGE, OF OAKLAND, CALIFORNIA.

WISE APPLIANCE.

1,387,936.

Specification of Letters Patent. Patented Aug. 16, 1921.

Application filed April 17, 1920. Serial No. 374,528.

To all whom it may concern:

Be it known that I, EDWIN L. PAGE, a citizen of the United States, and a resident of Oakland, county of Alameda, and State of California, have invented a new and useful Vise Appliance, of which the following is a specification.

My invention relates to a vise and particularly to an attachment or appliance therefor which enables irregular shaped objects to be clamped therein.

An object of the invention is to provide an appliance which will make it possible to effectively clamp an irregular shaped object in a vise without causing the jaws to exert excessive pressure against the object.

Another object of the invention is to provide a device which will enable a piece of work to be readily clamped in a horizontal or other predetermined position.

A further object of the invention is to provide an appliance of the class described which, without necessitating its detachment from the vise, may be quickly moved to a position wherein it will not interfere with the operation of the vise whenever it is desired to use the latter in the ordinary manner.

The invention possesses other objects and features of which, with the foregoing, will be set forth in the following description of the preferred form of my invention which is illustrated in the drawings accompanying and forming part of the specification. It is to be understood that I do not limit myself to the showing made by the said drawings and description, as I may adopt variations of the preferred form within the scope of my invention as set forth in the claims.

Referring to said drawings:

Figure 1 is a side elevation of a vise equipped with the appliance of my invention, parts of the structure being shown in section.

Fig. 2 is a transverse vertical section of the apparatus taken on the line 2—2 of Fig. 1.

Fig. 3 is a plan view of the apparatus.

Fig. 4 is a side elevation of a modified form of the device, parts thereof being broken away and shown in section.

Briefly expressed the apparatus of my invention comprises a slide which is connected to one of the jaw members of a vise and movable in a plane transverse to the

line of movement of the movable jaw. Connected to said slide and arranged adjacent the opposite ends of the jaws are parallel supporting arms which are adapted to be moved into or out of the area between the plane surfaces defined by the opposing faces of the jaws. Means are also included in the apparatus for adjusting the position of the slide and the supporting arms with respect to the jaws of the vise.

A detail description of my invention follows:

The appliance comprises a slide 5 which is preferably connected to the relatively stationary jaw member 6 of the vise 7. The slide is recessed or otherwise constructed at its upper portion to enable it to straddle the screw 10 and spindles 12 connecting the movable jaw member 13 to its mate 6. In the present form of the invention the slide is mounted for movement in a plane substantially perpendicular to the line of movement of the jaw member 13. With the device disposed in the position shown in Figs. 1 and 2 the movement of the slide may be characterized as vertical. The slide is guided in its vertical movement by the engagement of the sides 16 of the recess 17 with the spindles 12 and with the lug 18 which is preferably cast on the body 14. A screw 19 having a shoulder 21 extends through the lug 18 and holds the slide in engagement with the jaw member 6. In order to prevent the turning of the screw 19 during the movement of the slide, a washer 22 having a yoked extension 23 which engages one of the spindles 12, is interposed between the slide and the head 24 of the screw.

Means are provided on the slide which cooperate with the jaws to support and clamp a piece of work in the vise. As shown in the present embodiment of the invention the upper extremities 26 and 27 of the slide are extended outwardly and lie adjacent the opposite ends of the jaw 6. Pivoted to these extremities and preferably having a common axis are supporting arms 28 and 29 which are adapted to be swung into or out of the area between the plane surfaces defined by the opposed faces 31 and 32 of the jaws 6 and 13 respectively. The extremities 26 and 27 are provided with horizontally aligned shoulders 33 and 34 upon which the supporting arms 28 and 29 respectively rest when the latter are in operative position or in other words disposed in the area just men-

tioned. It should be noted that when the arms are in the operative position they present a pair of horizontally alined, parallel tables or supports, so that when a piece of work is placed between the jaws and on the arms, its base will automatically assume a horizontal position—a feature which is of great advantage and convenience in ordinary bench work.

Means are provided for adjusting the vertical position of the slide and arms with respect to the jaw members. Formed preferably at the lower end of the jaw member 6 is an extension 36 which is engaged by a vertically disposed screw 37 that is secured to a toe 38 formed on the slide. By turning the handle 39 of the screw the arms may be raised or lowered so as to support the work at the desired depth in the vise.

In general operation the jaws of the vise are separated as usual and the supporting arms placed in operative position. The work is then placed between the jaws and upon the supporting arms. Then by moving the jaws together and lightly clamping the object between them, it will be held securely. When the piece of work is comparatively narrow it is only necessary to use one of the supporting arms.

Whenever it is desired to use the vise without my appliance, the arms may be readily swung backward to assume the position indicated by the dotted lines in Fig. 1, and, if then necessary the slide may be lowered to its bottom position.

In Fig. 4 I have shown a slightly modified construction. In this form of the invention my device is in the form of an attach-

ment and is arranged to be placed upon a vise which has not been originally designed to be equipped with my appliance. The only noteworthy difference is that the extension 36 is bolted or otherwise secured to the jaw member 6 instead of being formed integral therewith as shown in the first mentioned form.

I claim:

1. The combination with the jaw members of a vise, of a vertically adjustable slide connected to one of said members, and supports connected to said slide and positioned to lie at the opposite ends of said jaws, said supports being movable independently of each other into or out of the area between the planes coincident with the opposing faces of the jaw members.

2. An attachment for a vise with jaw members, a vertically adjustable slide adapted to be connected to one of said members, supports pivoted to said slide and positioned to lie at the opposite ends of said members, said supports being adapted to move independently of each other into or out of the area between the planes coincident with the opposing faces of the jaws, means for guiding said slide in its vertical movement, and a screw for moving said slide vertically.

In testimony whereof, I have hereunto set my hand at Oakland, California, this 9th day of April, 1920.

EDWIN L. PAGE.

In presence of—

L. L. M. SALSBERY,
N. CHAPMAN.