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F. A. FONTAINE

VISE

Filed Jan. 12, 1927

Fig. 1.

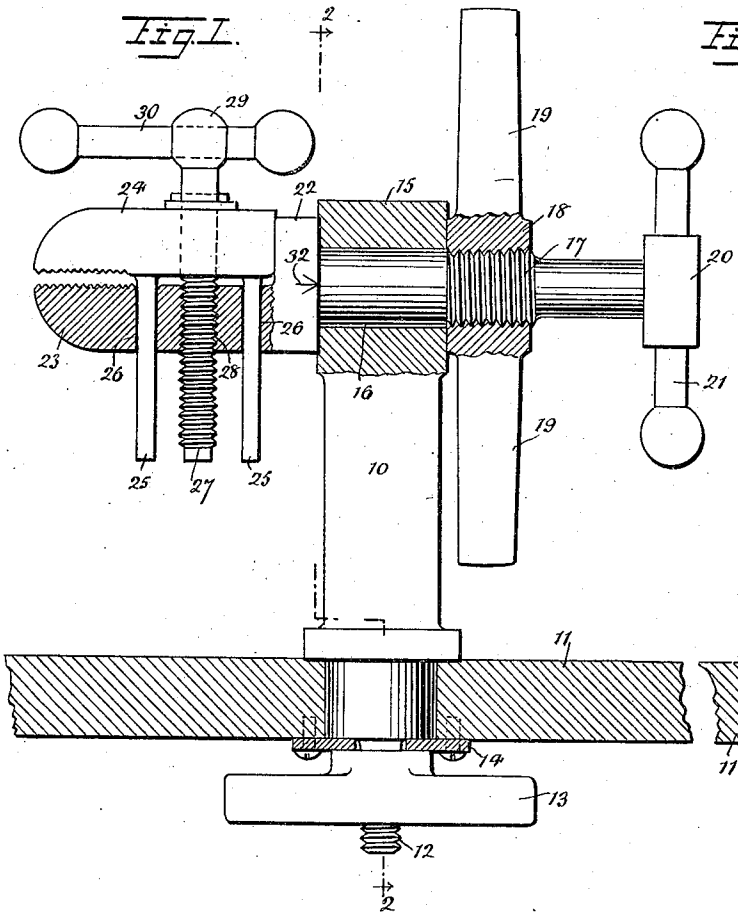


Fig. 2.

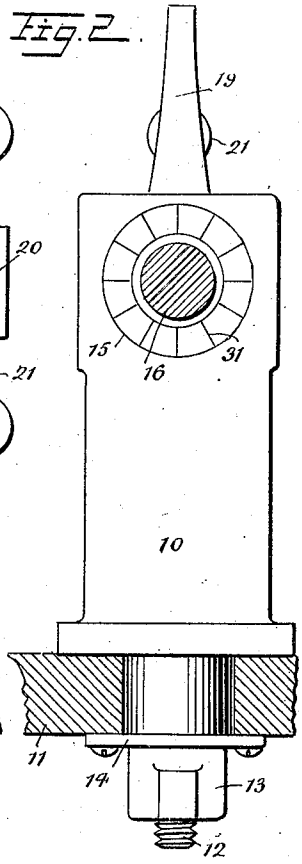
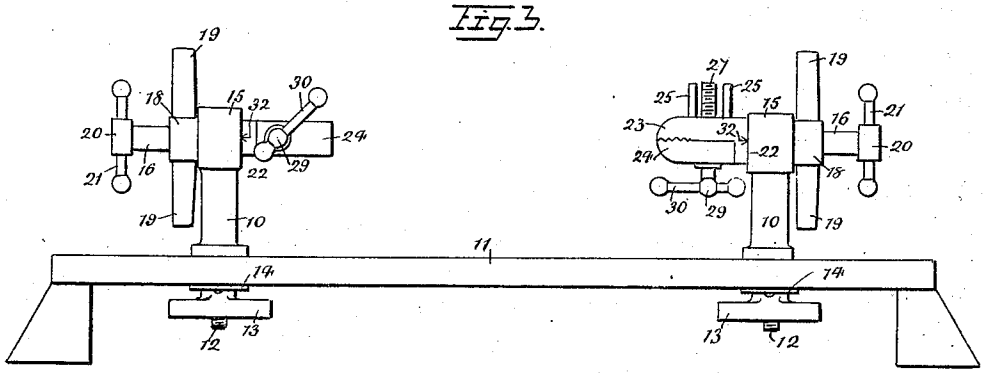


Fig. 3.



WITNESSES

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UNITED STATES PATENT OFFICE.

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VISE.

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My invention relates to a vise adapted to be held to a work table or the like and more particularly relates to a vise in which the jaws are turnably adjustable about the axis thereof and one jaw adjustable toward and from the other.

The general object of my invention is to provide a device of the indicated character improved in various particulars whereby to promote simplicity of construction and convenience in the adjustment of the vise.

Reference is to be had to the accompanying drawings forming a part of this specification, it being understood that the drawings are merely illustrative of one example of the invention.

Figure 1 is a view partly in section and partly in side elevation showing a vise embodying my invention.

Figure 2 is a transverse vertical section as indicated by the line 2—2 in Figure 1.

Figure 3 is an elevation showing a pair of the vises adapted for joint action in supporting a piece of work.

In carrying out my invention in accordance with the illustrated example, a standard 10 is provided, here shown as held on a table or bench 11, by forming a threaded reduced end 12 on the lower end of the standard 10 and providing a lever nut 13 threaded to said reduced end and adapted to bear against a bearing plate 14 on the under side of the table 11.

The standard 10 is formed with a bearing 15 at its upper end, in which bearing is turnably adjustable a shaft 16 having thread 17 receiving nut 18 having diametrically opposite lever handles 19.

One end of shaft 16 has a head 20 in which is transversely disposed a slidable handle 21 for turning shaft 16. On the opposite end of shaft 16 is a rigid head 22, on which head is rigidly formed the fixed jaw 23 of the device. A movable jaw 24 is provided to be adjustable toward and from the jaw 23. Said movable jaw 24 has guide pins 25 passing through transverse holes 26 in jaw 23. A screw 27 passes through the jaws 23, 24 and has engagement with an internally threaded hole 28 in fixed jaw 23. Said screw 27 has a head 29 in which is transversely disposed a slidable handle 30.

With the above described construction the nut 18 may be turned back to permit turning of the shaft 16 by the handle 20 or by wholly screwing up the nut 18, said nut will bind at one side against the bearing 15 of standard 10, which standard with its bearing 15 constitutes the body of the device. The tightening up of nut 18 will cause the head 22 to firmly bind against the opposite face of bearing 15 and thereby hold the shaft 16 against turning. The arrangement permits of the shaft being turned to dispose the jaws 23, 24 in various angular positions, suited for producing, for example, various polygonal work.

On that face of the bearing 15 adjacent the head 22 an annular series of graduations 31 is produced, and on said head 22 is any suitable indicating mark such as an arrow 32, to indicate the degree of adjustment of the shaft 16 and jaws 23, 24.

I would state furthermore that while the illustrated example constitutes a practical embodiment of my invention, I do not limit myself strictly to the exact details herein illustrated, since, manifestly, the same can be considerably varied without departure from the spirit of the invention, as defined in the appended claims.

What I claim is:

1. A vise including a body having a bearing, a shaft turnable in said bearing, a handle on said shaft at one end, a head rigid on said shaft at the opposite end at one side of said body and parallel with the axis of said shaft, a nut threaded on said shaft at the opposite side of said body and adapted to bear against said body and bind the inner end of said head against the body, a jaw rigid with said head, a movable jaw adjustable toward and from said rigid jaw, guide pins on the movable jaw transverse to the shaft and passing freely through the rigid jaw, and a handled screw passing transversely through said movable jaw and having threaded engagement with said rigid jaw.

2. A vise including a body having a bearing, a shaft turnable in said bearing, a handle on said shaft at one end, a head rigid on said shaft at the opposite end at one side of said body, a nut threaded on said

shaft at the opposite side of said body and adapted to bear against said body, and bind the inner end of said head against the body, a jaw rigid with said head, a movable jaw adjustable toward and from said rigid jaw, guide pins on the movable jaw passing freely through the rigid jaw, and a handled screw passing transversely through said jaw and having threaded engagement with said rigid jaw, said body having graduations thereon at that face opposed to said head, and said head having an indicating mark coacting with said graduations for indicating the extent of the turning movement of the shaft to dispose the jaws in the desired adjustment.

FRED A. FONTAINE.