Jan. 31, 1950 O. C. AMMONS 2,495,801

HINGED ROD-JOINT LOCKING DEVICE

Filed Dec. 30, 1947

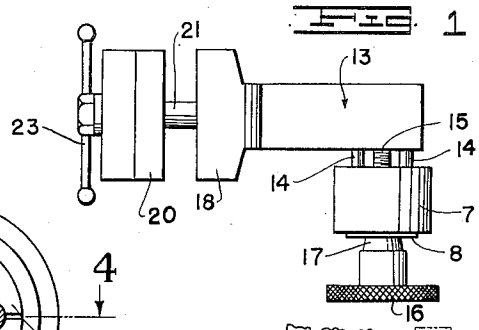


FIG. 1

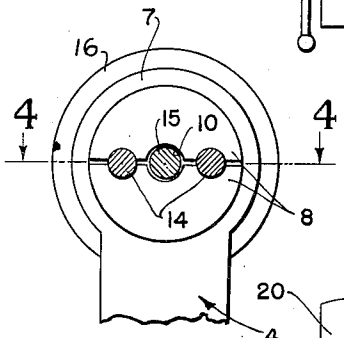


FIG. 3

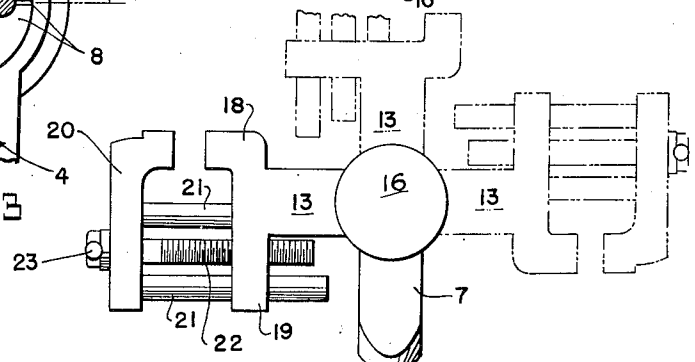
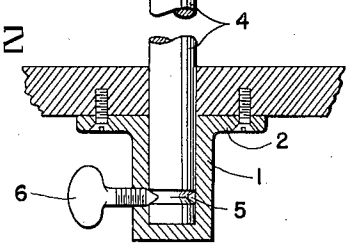


FIG. 2



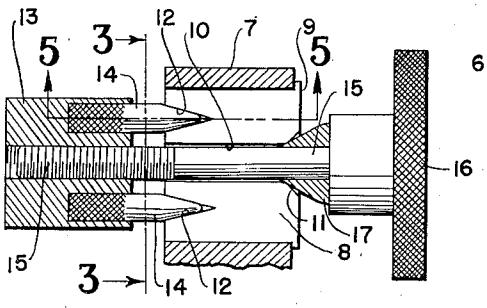


FIG. 4

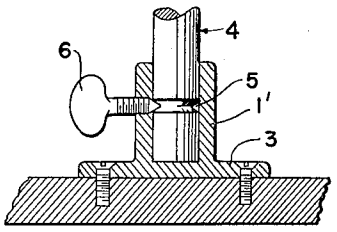


FIG. 6

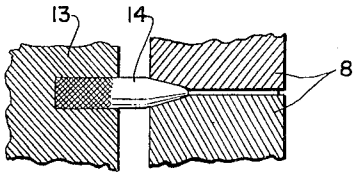


FIG. 5

INVENTOR.
OLLY C. AMMONS
BY Lyon Lyon
ATTORNEYS

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HINGED ROD-JOINT LOCKING DEVICE

Olly C. Ammons, Pasadena, Calif.

Application December 30, 1947, Serial No. 794,682

1 Claim. (Cl. 287—14)

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My invention relates to hinged rod-joint locking devices.

Included in the objects of my invention is a novel hinged rod-joint locking device adapted for steady and smooth release when used to support heavy objects in cantilever fashion.

With the above and other objects in view, as may appear hereinafter, reference is directed to the accompanying drawings in which:

Figure 1 is a top plan view of a common vise with my hinged rod-joint attached to the anvil or mounting bar.

Figure 2 is a side elevational view thereof with one form of the mounting socket shown in section and indicating by broken lines various adjusted positions of the vise jaws;

Figure 3 is an enlarged fragmentary sectional view taken through 3—3 of Figure 4;

Figure 4 is a sectional view taken through 4—4 of Figure 3;

Figure 5 is a fragmentary sectional view taken through 5—5 of Figure 4; and

Figure 6 is a sectional view of a modified form of the socket member showing the mounting post fragmentarily.

My universal vise includes a socket member 1 which, as shown in Figure 2, may be adapted for mounting on the underside of a table. In this case the socket member is provided with a flange 2 adjacent its open end. Alternatively the socket member may be provided with a flange 3 at its closed end so that the socket member 1' may be mounted on top of a worktable as shown in Figure 6.

The socket member is adapted to receive the cylindrical lower portion of a post 4. The portion of the post 4 which fits within the socket 1 is provided with a groove 5 and a suitable set-screw 6 extends laterally into the socket member for the double purpose of restraining the post against removal and to secure the post against rotation in the socket.

The upper end of the post 4 is enlarged to form a head 7 having a lateral opening adapted to receive a longitudinally split bushing 8. One end of the bushing is provided with a flange 9 to restrict movement of the bushing through the opening in the head 7. The bushing 8 is provided with a bore 10 having a beveled end 11. The opposite end of the bushing is provided with tapered sockets 12 on opposite sides of the bore 10 and centered between the split halves of the bushing.

An anvil bar 13 is provided from which extends a pair of laterally directed wedge pins 14 adapted to fit the sockets 12. Between the wedge pins 14 there is provided a screw-threaded hole which receives the screw-threaded end of a stem 15. The stem 15 extends through the bore 10 of the split bushing and is provided with a knurled head

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or handle 16. Journaled on the head 16 is a wedge cone 17 which enters the beveled end 11 of the bushing bore 10.

The anvil bar 13 is provided at one end with a fixed vise jaw 18 offset from one side of the anvil bar and projecting forwardly of the anvil bar. A boss 19 laterally projects from the opposite side of the anvil bar. A movable jaw 20 confronts the fixed jaw 18 and includes a depending portion in which is fitted a pair of guide bars 21 adapted to extend into the anvil bar and into the boss 19. Between the guide bars 20 is mounted a vise screw 22 which extends through the boss portion 19. The outer end of the vise screw is provided with a suitable handle 23.

The anvil bar may be rotated about the horizontal axis defined by the stem 15 through the various positions shown in Figure 2.

Having fully described my invention, it is to be understood that I do not wish to be limited to the details herein set forth, but my invention is of the full scope of the appended claim.

I claim:

A hinged rod-joint locking device comprising: a mounting bar; a mounting post offset to one side of said mounting bar; means for adjustably securing said mounting bar to said mounting post about an axis traversing both said mounting post and mounting bar, said means including a bushing split along a plane including said axis and journaled in an aperture in said mounting post, a headed stem extending therethrough and screw-threaded into said mounting bar, a pair of wedge pins anchored into said mounting bar on opposite sides of said stem and having conical points positioned between the parts of said split bushing at one end thereof, and a wedge cone having a nose portion positioned between the parts of said split bushing at the opposite end thereof, said wedge cone being engaged by the head of said stem, whereby rotation of said stem forces said wedge pins and wedge cone between the parts of the split bushing, thus causing the latter to grip adjacent surfaces of said post aperture.

OLLY C. AMMONS.

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