June 26, 1945. A. M. SCHRODER 2,379,379

UNIVERSAL STANDARD

Filed May 5, 1944

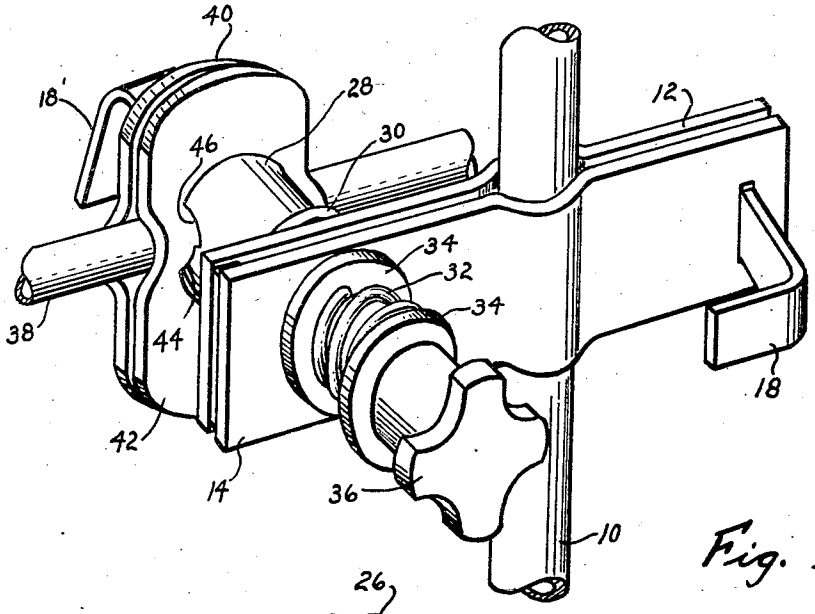



Fig. 1

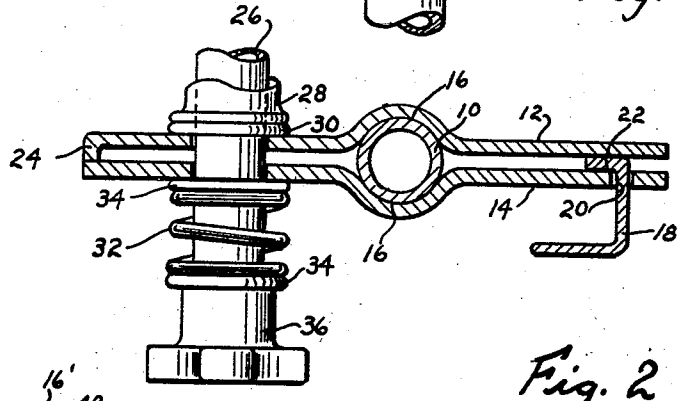



Fig. 2

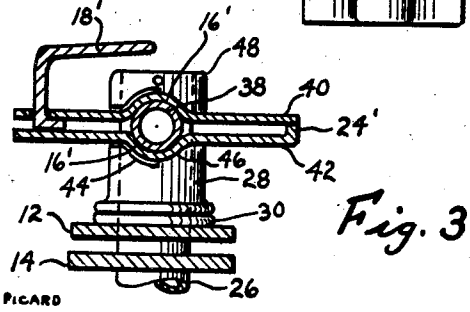



Fig. 3

AL PICARD

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Patented June 26, 1945 2,379,379

# UNITED STATES PATENT OFFICE

2,379,379

## UNIVERSAL STANDARD

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Application May 5, 1944, Serial No. 534,279

6 Claims. (Cl. 248—207)

This invention relates to a standard having a bracket or the like for universal adjustment thereon for the purpose of adjustably holding an object such as a lamp, etc.

Objects of the invention include the provision of a standard having a vertically slidable and rotatable bracket thereon which is frictionally held thereto and easily releasable by hand so that it may be quickly positioned at any point on the standard; the provision of a bracket as aforesaid mounting a shaft thereon, there being a spring associated with the shaft in such a way as to frictionally clamp the bracket to the standard, said shaft also having means for slidably and rotatably holding an article-supporting rod, this rod being frictionally secured by said means, the above named spring being utilized for accomplishing the securement of the article-holding rod, said means being rotatable with the shaft and quickly loosened for sliding and rotatable adjustment of the rod; and the provision of a standard having a bracket mounted for universal adjustment thereon, said standard and bracket being easily manufactured mainly from stamped parts and providing for very quick adjustment in any direction.

Other objects and advantages of the invention will appear hereinafter.

Reference is to be had to the accompanying drawing, in which

Fig. 1 is a perspective view of the standard and bracket mounted thereon.

Fig. 2 is a sectional view through the standard and bracket with parts broken away; an

Fig. 3 is a sectional view of the rod clamping means.

A vertical standard 10, supported in any desired way on a bench or on the floor, is provided with a pair of generally parallel plates 12 and 14, these plates being formed with oppositely extending hollowed portions 16 which surround the standard and are adapted to clamp the same so as to vertically and rotatably position the plates relative to the standard where desired. A thumb piece 18 extends through an opening 20 in one of the plates and is provided with a foot 22 located between and spacing the plates and adapted to bear on plate 12, as illustrated, so that when the thumb piece 18 is pressed it will pivot in the aperture 20 and force the plates apart.

The above described plates are provided with a spacer 24 so that the plates will be positioned generally parallel and spacer 24 forms the pivot point for the plates when the thumb piece 18 is actuated to spread them apart.

A shaft 26 extends directly through both plates 12 and 14 at a point at the other side of the standard from the thumb piece 18 so that little or no binding effect will be imposed on the shaft when the thumb piece is actuated. Shaft 26 has a boss 28 loosely mounted thereon and a frictional washer 30 is interposed between the boss 28 and plate 11 as is clearly shown in Fig. 2. A spring 32 surrounds shaft 26 and a washer 34 similar to washer 30 is interposed between the spring and plate 14, there being a nut 36 screw threaded to the shaft for the purpose of adjusting the tension on the spring. It will be seen that this construction will cause plates 12 and 14 to firmly grasp the standard 10 but that upon even a slight pivoting motion of thumb piece 18 the plates will be sprung apart sufficiently to release the standard so that plates 12 and 14 together with shaft 26 as a unit may be quickly moved up or down the standard or rotated thereabout. If desired, another washer 34 may be interposed between the spring and the nut.

A rotatable rod 38 passes through shaft 26 adjacent one end thereof as clearly shown in Fig. 3 and it will be seen that this rod may be rotated with the shaft but will stay in any angular position where placed because of the fact that the spring in combination with the friction washers tends to resist rotation of the shaft. Rod 38 is slidable transversely of the shaft and is held by a pair of plates 40 and 42, similar to but smaller than plates 12 and 14 and having a similar thumb piece 18' and bulges or depressions 16'. Also there is provided a spacer 24'. The boss 28 is hollowed out to conform to bulge 16' as clearly shown and in addition the boss is recessed as at 44 so as to avoid touching the parts 16' except at one side of the center of rod 38 as shown at 46. The same condition obtains as to another boss 48 which however is fixed to shaft 26 and it will be seen that as thumb piece 18' is actuated, the friction imposed by spring 32 to resist separation of plates 40 and 42 will be reduced over that imposed on plates 12 and 14.

The above description will be seen to provide a standard having a universally mounted rod 38 thereon and the construction is comparatively simple and easy to manufacture, it being noted that spring 32 imposes a frictional grip both on plates 12 and 14 and also on plates 40 and 42, and the degree of holding power may be varied by means of the nut 36; however, in spite of the fact that a single spring is utilized to maintain bracket

12, 14 in position on the standard and rod 38 in position yet rod 38 may be adjusted independently of the adjustment of the plates 12 and 14.

Having thus described my invention and the advantages thereof, I do not wish to be limited to the details herein disclosed, otherwise than as set forth in the claims, but what I claim is:

1. In a device of the class described, a standard, a pair of plates adapted to grip the standard intermediate the ends of the plates, resilient means binding the plates together, means for pivoting the plates to separate the same against the action of said resilient means for axial and rotational adjustment of the plates on the standard, a shaft mounted on the plates, a rod slidable transversely of the shaft and means for frictionally holding the rod in position on the shaft, said last named means being caused to grip the rod by said resilient means.

2. In a device of the class described, a standard, a pair of plates arranged one at either side of the standard, means to separate the plates, a shaft extending through the plates, a spring associated with the shaft to bind the plates together, a boss on the shaft, a second pair of plates associated with the shaft, a fixed abutment on the shaft, said spring exerting tension on said boss to force said second named plates together, a rod frictionally gripped by said second named plates and means to separate said second named plates independent of the means to separate the first named plates.

3. In a device of the class described, a standard, a pair of plates one at each side of the standard, a shaft passing through the plates at one side of the standard, a spring associated with the shaft and binding the plates against the standard, means at the opposite side of the standard from the shaft to spring the plates apart, a rod rotatably and slidably mounted on the shaft, and means to grip the rod, said spring exerting resilient pressure on said last named means.

4. A device as recited in claim 3 including means to manually release said rod gripping means.

5. In a device of the class described, a standard, a separable bracket rotatably and slidably mounted on and gripping the standard, a shaft on the bracket, a pair of plates on the shaft, a fixed abutment on the shaft, a spring urging the plates together against the abutment, a rod yieldingly held between the plates, and means to separate the plates, said spring urging the separable bracket to grip the standard.

6. In a device of the class described, a standard, a bracket rotatably and slidably mounted thereon, a shaft on the bracket, a spring on the shaft at one side of the bracket, a boss loose on the shaft at the other side of the bracket, a fixed abutment on the shaft, a pair of plates on the shaft between the boss and the abutment, said spring urging the bracket, boss, and plates against the abutment, a rod gripped between the plates, and manual means to separate the plates against the spring pressure.

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