June 12, 1928. 1,673,721

G. M. TURNER

PEDESTAL

Filed Aug. 24, 1925

Fig. 1.

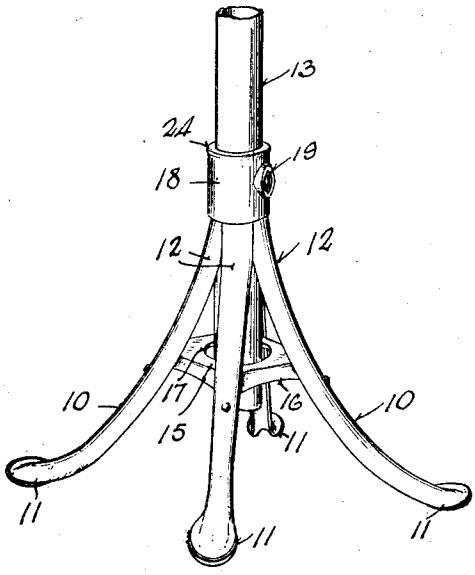


Fig. 2.

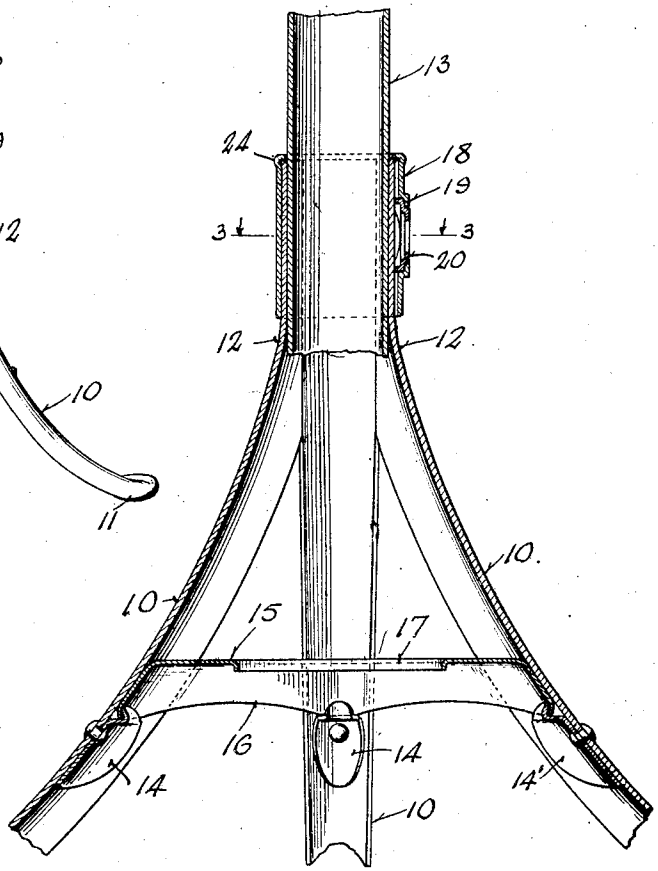


Fig. 5.

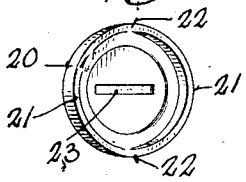


Fig. 3.

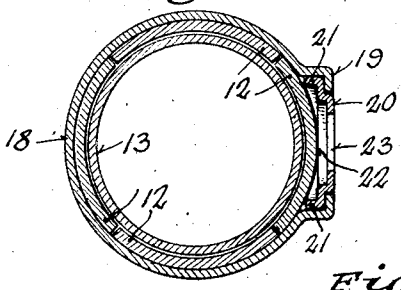


Fig. 4.

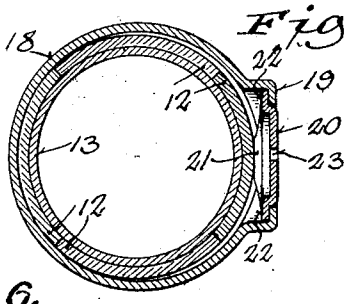
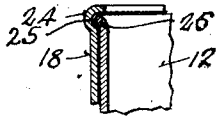


Fig. 6.



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UNITED STATES PATENT OFFICE.

GILES M. TURNER, OF MILWAUKEE, WISCONSIN.

PEDESTAL.

Application filed August 24, 1925. Serial No. 52,028.

The invention relates to an improved construction of pedestal which may be used as a floor support for a table, a stool, a costumer, or other like purpose in which the central post or standard is maintained in vertical position.

I contemplate manufacturing the improved pedestal entirely of metal. It is a knock-down structure, the parts of which may be encompassed in a small package for convenient shipment, and which may be readily assembled and erected for use.

The pedestal is composed of a plurality of legs which spread at their feet, and the upper ends of which are adapted to be brought together to have a clamping engagement with the standard or post. The legs are provided with catches which are intermediate their ends which are engaged by a bridge piece in such manner that when the upper ends of the legs are brought into engagement with the standard or post, such legs are locked in position by the bridge piece and placed under tension, so that no disarrangement can occur.

A sleeve is adapted to be placed over the upper ends of the legs to effect their engagement with the standard or post, such sleeve being provided with a cam member arranged for rotation in a vertical plane and adapted to wedge itself between the sleeve and one or two of the upper ends of the legs, whereby the outward thrust of the cam upon the sleeve serves to bind the upper ends of the legs firmly in engagement with the standard or post.

The standard or post may be adjusted in a vertical direction by relaxing the cam binding and locking means so that the elevation of whatever part may be carried upon the standard or post can be adjusted as desired.

Other features of novelty residing in my construction will be pointed out in the appended claims.

In the accompanying drawing:

Figure 1 is a perspective view of my invention as assembled.

Fig. 2 is a vertical central, sectional view, enlarged, of the same through two opposite legs, and showing details of construction.

Fig. 3 is a horizontal sectional view on the line 3—3, Fig. 2, showing the cam binding and locking means in relaxed position.

Fig. 4 is a like view of the same parts, showing the cam as having been partially rotated to effect binding and locking of the assembled parts.

Fig. 5 is a perspective view showing the face of the cam.

Fig. 6 is a vertical sectional view, enlarged, showing certain details of the connection between the upper ends of the legs and the clamping sleeve.

Referring to the drawing, the numerals 10 indicate a plurality of legs, preferably four in number. These legs are of pressed sheet metal construction and their formation is such that when assembled pursuant to the purposes of my invention, the feet 11 at the lower ends thereof are spread to such an extent that the pedestal firmly supports whatever may be mounted thereon, without liability to tipping. In transverse section the legs are curved so as to endow them with strength to resist bending strains.

From the feet 11, the legs curve upwardly in such manner as to bring their transversely curved upper ends 12 in such close relation as to form a complete circle of comparatively small diameter. The ends 12 as thus brought together are adapted to encircle and frictionally engage the central standard or post 13, preferably constituted as a tubular metal part.

Upon each leg, within the groove at the underside, and at a point about midway of its ends, a catch 14 is permanently attached by riveting or spot welding. A bridge piece 15 drawn from sheet metal and angular in form is adapted by means of the corners of its apron 16 to engage the catches 14 attached to the legs, so that when the upper ends 12 of the legs are drawn together about the post or standard 13, such legs will be placed under tension in their pivotal movement over the apron of the bridge piece. The tension thus put upon the parts effectively locks the connected parts against disarrangement. The bridge piece is provided with a central opening 17 through which the standard or post may pass when adjustment of the height thereof becomes desirable, and the metal about the said opening may be downturned to form a circular rib, as shown in Fig. 2.

The upper ends 12 of the legs are received in a sleeve 18, the inside diameter of which is slightly greater than the diameter of the structure when the upper ends of the legs are brought into engagement with the standard or post. The said sleeve is provided

upon one side with a circular embossment 19, in which is formed a central perforation. A specially constructed cam 20, in the form of a shallow cup is pressed from sheet metal, and is formed upon its rim with opposite high portions 21 and opposite low portions 22, such portions standing at an angle of 90° in the circumference of the rim. The cam member 20 is formed with a circular shoulder or step which is adapted to be seated in the opening in the boss 19 formed upon the sleeve 18. The bottom of the cup shaped cam 20 is provided with an opening 23, of any suitable form for the reception of a tool by means of which the cam may be rotated in a vertical plane.

In assembling the parts, the cam is positioned in the boss 19 of the sleeve so that the low portions 22 of the cam are parallel to the axis of the standard or post. With the cam thus positioned, the sleeve is passed over the upper ends of the legs 10 which are at that time brought close together, and the lower end of the standard or post is inserted within the circle formed by the said upper ends. The parts will then appear as in Fig. 3. In the rotation of the cam 20, the high portions 21 thereof will pass from the position shown in Fig. 3 and approach that shown in Fig. 4, in which latter the high portions of the cam have assumed a position parallel to the axis of the post or standard, in which rotating movement of the cam, the opposed pressure exerted by the cam will cause the upper ends of the legs 12 to tightly engage the post or standard and lock the same against vertical movement. The cam may bear with wedging action upon a single one of the legs 10 as illustrated, or upon two adjacent legs, depending upon the angle of adjustment of the sleeve 18 upon the upper ends of the legs.

The upper end of the sleeve 18 may be inwardly flanged or beaded as at 24, so as to arrest its downward movement over the upper ends of the legs, and at the inside of the bead on the sleeve, a circumferential groove 25 is formed, such groove being designed to receive the slightly flared portions of curved projections 26 of the upper ends of the legs, so that as the sleeve is positioned about such upper ends, and the tension exerted in drawing the ends together is relaxed, the upper ends of the legs will spring out and the flared or projecting edges will engage in the said groove and prevent longitudinal movement of the legs with respect to each other. The springing apart of the upper ends of the legs in the slight degree, permits the post or standard to be inserted easily in the circular opening thus formed. By locking the upper ends of the legs and the sleeve in the manner described, stability is added to the pedestal.

Although I have shown a preferred manner of attaching the catches 14 to the legs, it will be within my invention to form the said catches as integral tongues by punching and pressing such catches inwardly from the outer surface of the legs, but the procedure first described of attaching separate catches is productive of best results, and leaves the outer surface of the legs free from openings in which dust and other matter might collect.

In my invention, the clamping means for the vertically adjusted standard or post is contained entirely within the sleeve, so that any projection is avoided, and a symmetrical structure is produced.

Having thus described my invention, what I claim and desire to secure by Letters Patent of the United States is:

1. A pedestal comprising a plurality of pressed sheet metal legs, means for connecting the legs intermediate their ends, a post or standard embraced by the upper ends of the legs, a sleeve surrounding the upper ends of the legs, and a rotating cam enclosed within the sleeve for effecting binding engagement of the upper ends of the legs with the post or standard.

2. A pedestal comprising a plurality of pressed sheet metal legs transversely curved in cross section to impart rigidity thereto, engaging means secured to the legs intermediate their ends, a bridge piece engaging the said means to hold the legs against displacement, a central post or standard against which the upper ends of the legs are adapted to bear, a sleeve surrounding the said upper ends of the legs, and a rotating cam enclosed within the sleeve adapted to bind the upper ends of the legs against the post or standard.

3. A pedestal comprising a plurality of pressed sheet metal legs spread at their lower ends and brought together at their upper ends, a central post or standard against which the upper ends of the legs are adapted to bear, catches secured to the legs at their inner sides and a bridge piece provided with an apron which engages the said catches, a sleeve about the post or standard engaging the upper ends of the legs to place the latter under tension when drawn across the apron of the bridge piece, and a cam enclosed within the sleeve adapted to bind the upper ends of the legs against the post or standard.

4. A pedestal comprising a plurality of curved metal legs, means for uniting the legs at a point intermediate their ends, a central post or standard, a sleeve surrounding the post or standard and embracing the upper ends of the legs, the said sleeve being provided with a circular embossment, and a rotating cam enclosed within the embossment for binding the upper ends of the legs against the post or standard.

5. A pedestal comprising a plurality of curved sheet metal legs, means connecting

the legs at a point intermediate their ends, a central post or standard inserted between the said legs, a sleeve encircling the post or standard and embracing the upper ends of the legs, and a circular cam within the said sleeve for binding the upper ends of the legs against the post or standard, the said cam being provided on its edge with opposite high portions and opposite low portions, whereby the vertical position of the post or standard may be adjusted and fixed by the rotation of the cam.

6. A pedestal comprising a plurality of curved legs, a post or standard received by the upper ends of the legs, a sleeve encircling the said upper ends, and a cam enclosed within the sleeve and rotating in a vertical plane to bind the upper ends of the legs against the post or standard when the latter is adjusted to position.

7. A pedestal comprising a plurality of metal legs the upper ends of which have a slight outward flare or projection, means for connecting the said legs at a point intermediate their ends, a sleeve encircling the upper ends of the legs and provided with an inner circumferential groove in which the said projections enter, a central post or standard embraced by the upper ends of the legs, and a cam device for binding the said ends against the post or standard to maintain the same in adjusted vertical position.

In testimony whereof, I have signed my name at Milwaukee, this 21st day of August, 1925.

GILES M. TURNER.