April 8, 1930. W. R. DARNELL 1,753,600

FURNITURE GLIDE

Filed July 13, 1927

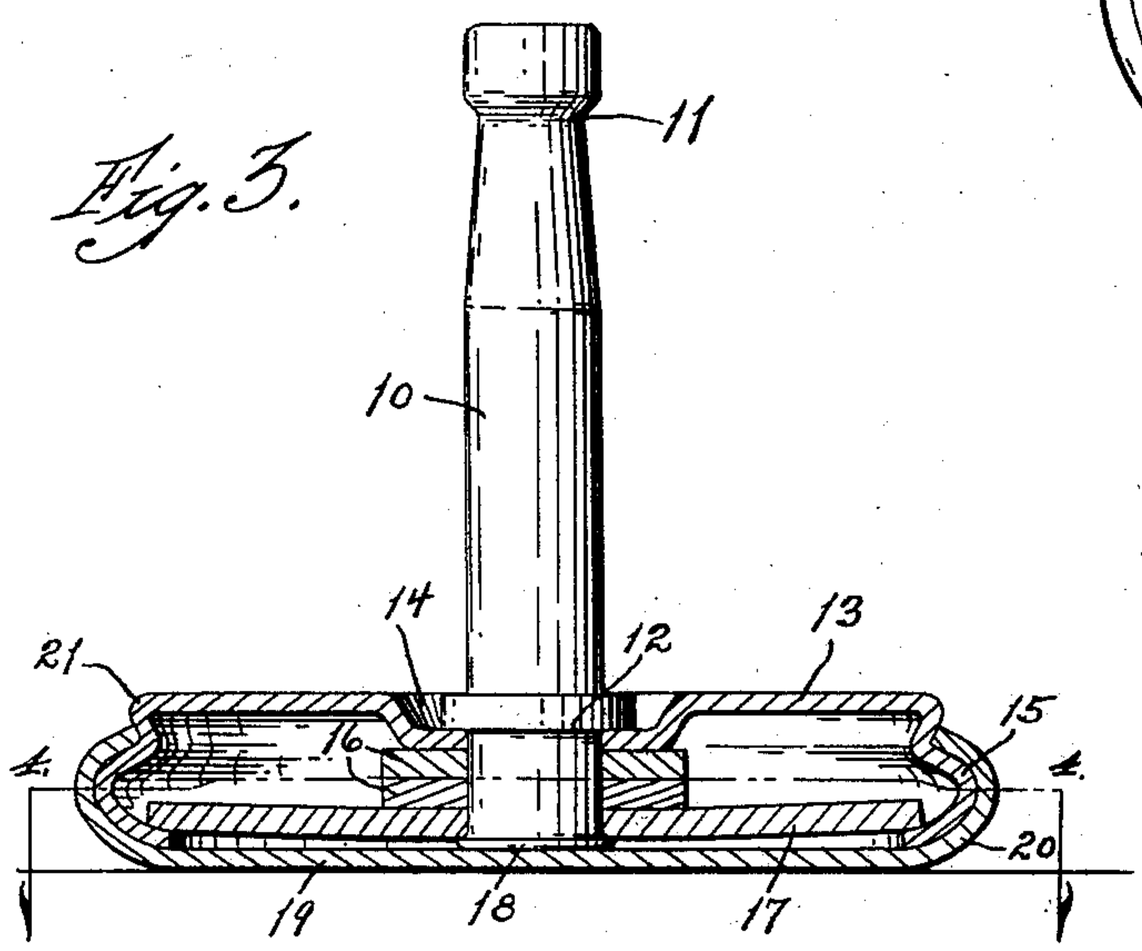


Fig. 3.

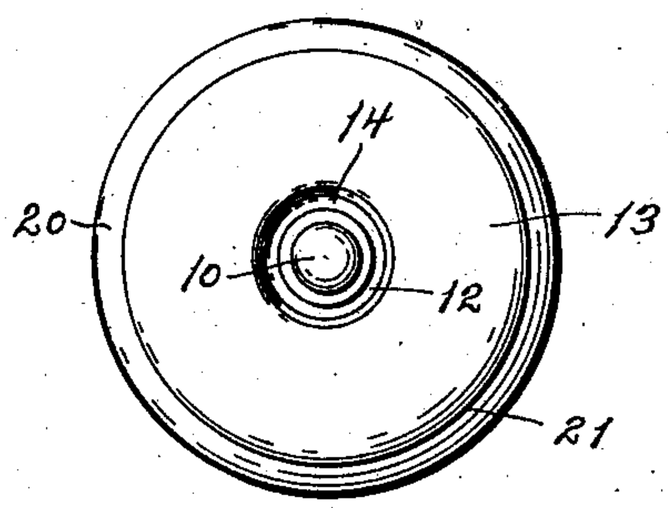


Fig. 1.

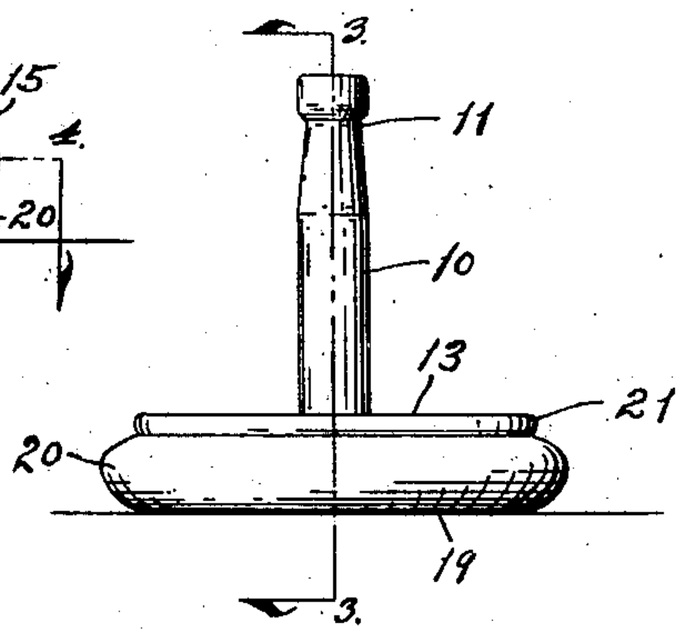


Fig. 2.

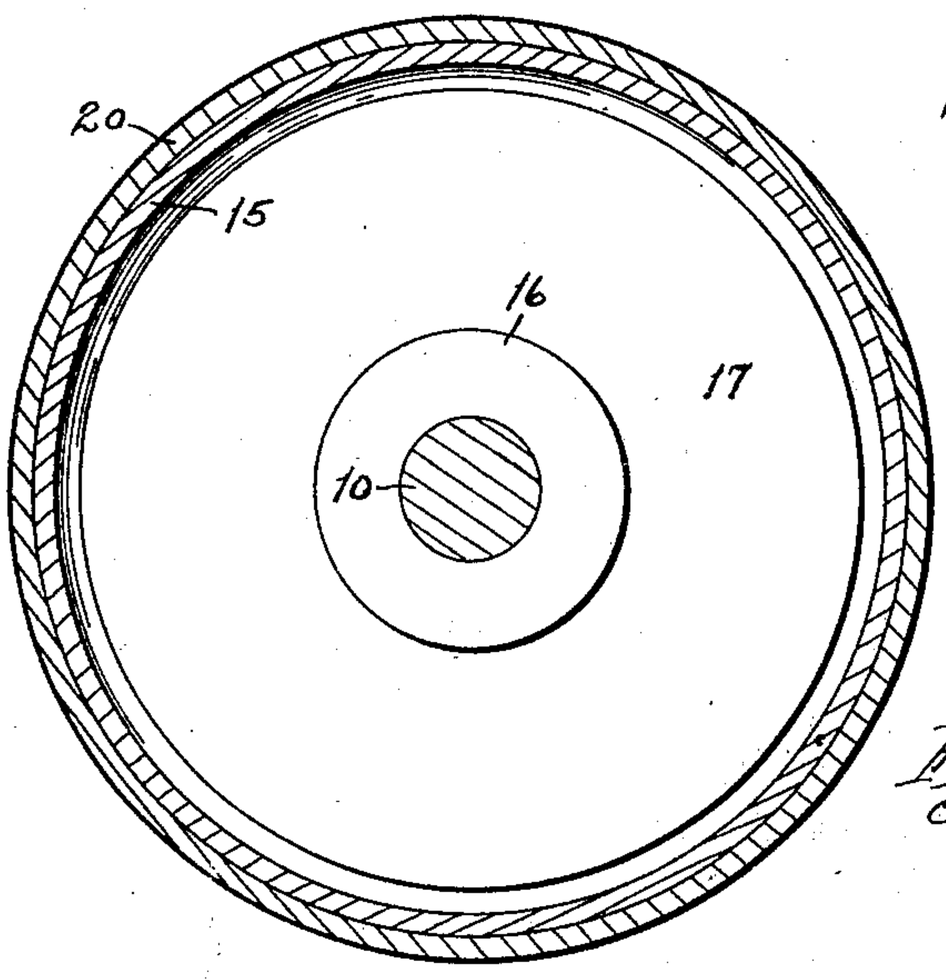


Fig. 4.

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Patented Apr. 8, 1930 1,753,600

UNITED STATES PATENT OFFICE

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FURNITURE GLIDE

Application filed July 13, 1927. Serial No. 205,385.

The object of the present invention is to provide an improved construction for a glide caster for furniture or the like.

A further object of this invention is to provide a furniture glide of compact and durable construction composed entirely of metal and designed for rigid assembly to prevent distortion or separation of the parts.

A further object of this invention is to provide an improved furniture glide having an interior reenforcing disk for preventing collapse or distortion of the walls.

With these and other objects in view, my invention consists in the construction, arrangement and combination of elements hereinafter set forth, pointed out in the claims and indicated by the accompanying drawing in which—

Fig. 1 is a plan view of my improved furniture glide.

Fig. 2 is a side elevation of the same.

Fig. 3 is a vertical section on the line 3—3 of Fig. 2 on an enlarged scale.

Fig. 4 is a horizontal section on the line 4—4 of Fig. 3.

In the embodiment of my invention shown by the accompanying drawing, I employ a suitable stem 10 which may be formed with a reduced neck portion 11 near its upper end in a common manner. At a point spaced from its lower end the stem 10 is formed with a peripheral flange or shoulder 12. A shell member 13 is provided, which is of circular shape and formed at its center with an aperture to receive snugly the stem 10. Surrounding its central aperture, the shell 13 is formed with a depression or countersink 14 which is designed to receive the peripheral flange 12 so that said flange does not project above the upper surface of the shell and a substantially plane surface is provided for contact with the lower surface of a load object such as a furniture leg. The shell 13 is formed with a circumferential depending skirt 15 which is concavo-convex in cross section. Mounted on the stem 10 below and within the shell 13 are one or more washers 16 which fit snugly on said stem and contact with the lower face of the depressed portion 14 of the shell. Mounted on the stem 10 below the washer 16 is a reenforcing disk 17 which is of larger diameter than said washers and is in engagement at its margin with the depending skirt 15 of the shell. The shell 13, washers 16, and disk 17 are assembled to the stem 10 by upsetting the lower end of the stem at 18 so that said shell, washers and disk are rigidly and firmly held between the annular flange 12 and such upset portion.

A shoe 19 is provided, which has a substantially plane lower surface and a peripheral upwardly extending wall 20 which fits outside of and frictionally engages the depending skirt 15 of the shell. The shoe 19 is assembled to the shell by the application of considerable force, whereby the wall 20 is caused to assume a concavo-convex conformation in close engagement with the skirt 15, whereby the parts are rigidly held together. The upper margin of the wall 20 is turned inwardly circumferentially and the peripheral portion of the shell 13 is pressed outwardly in overlapping relation to the margin of the wall to form an overhanging bead 21. By this arrangement the parts are all rigidly held together and the device presents no sharp angles when completed.

The central portion of the shoe 19 is in engagement with the lower end of the stem 10, whereby the shoe is held in its correct position irrespective of the weight of a load or the application of force on the bottom of the device in the operation of installation to a load object. The reenforcing disk 17, by its engagement with the skirt of the shell, prevents collapse of the side walls when pressure is exerted in the assembling operation ahd in the production of the overhanging bead 21 over the top margin of the shoe.

The device is composed entirely of metal and is compact and pleasing in appearance and because of its small vertical dimension it does not unduly elevate the furniture or other object on which it is installed. Any suitable kind of metal may be employed for the shell and shoe, but I find that stainless steel is a desirable metal since it is very hard and durable, capable of withstanding the weight of heavy loads and impact of blows

and is also capable of taking a polish which facilitates sliding on a floor surface.

I claim as my invention:

1. A furniture glide comprising a shoe having a peripheral upstanding wall, a shell formed with a central aperture and with a countersink concentrically thereof and with an annular plane surface of material and considerable width outside of said countersink, said shell being formed with a depending skirt adapted to fit within the wall of said shoe and having an inwardly directed lower marginal portion, a stem formed with a peripheral flange providing a shoulder spaced from its lower end, said stem extending through the aperture of said shell and arranged with its peripheral flange entirely received within said countersink, a spacing member mounted on said stem in engagement with the lower surface of the countersink of said shell, and a reenforcing disk on the lower end of said stem in engagement with said spacing member and also having its margin overlapping and resting upon the inwardly directed marginal portion of the skirt of said shell, said stem being upset against the lower face of said disk, whereby the stem, shell, spacing member and disk are rigidly assembled together, the wall of said shoe being pressed into frictional engagement with the outer surface of said skirt to assemble the shoe to said shell.

2. A furniture glide comprising a shoe having a peripheral upstanding wall, a shell formed with a central aperture and with a depending skirt adapted to fit within the wall of the shoe, said skirt extending down along and in contact with said wall substantially to the tread portion of the shoe, the wall of said shoe and the skirt of said shell being pressed into close frictional engagement and the shell being formed with a peripheral bead substantially overhanging the upper margin of the shoe, a stem formed with a shoulder spaced from its lower end, said stem extending through the aperture of said shell with its shoulder engaging the upper surface of the shell, spacing means on said stem engaging the lower surface of the top of the shell, said stem being formed at its lower end with a head in contact with the bottom of said shoe, and a reenforcing disk on said stem confined between said head and the spacing means, said disks having its peripheral portion extending over and resting upon the lower marginal portion of the skirt of said shell, whereby a rigid structure and assembly is provided.

WALTER RALEIGH DARNELL.