

Feb. 10, 1942.

R. E. MILLER

2,272,848

ADJUSTABLE FURNITURE GLIDE

Filed April 17, 1941

Fig. 1.

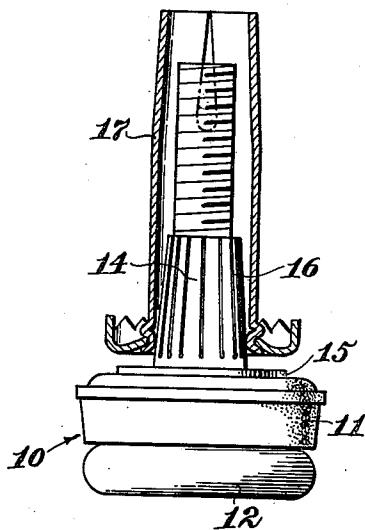


Fig. 2.

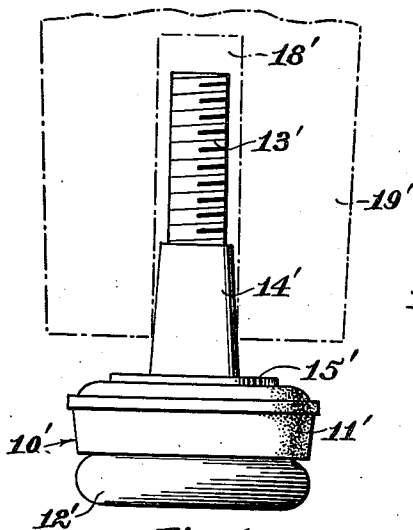
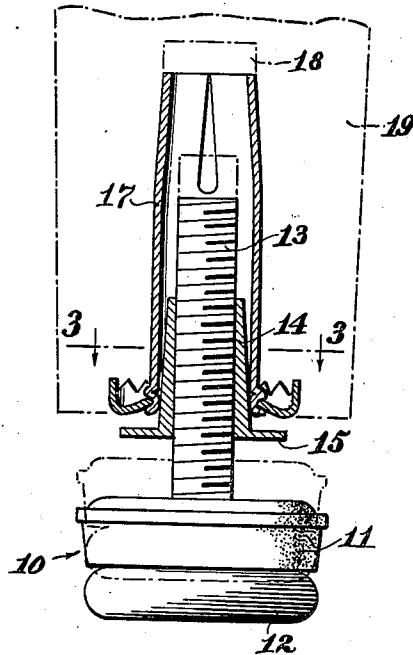


Fig. 4.

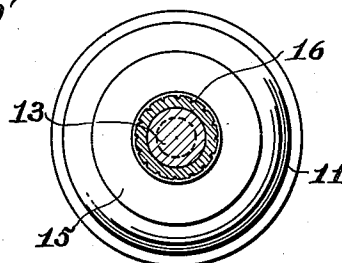


Fig. 3.

INVENTOR.

Robert E. Miller.

BY

Gluck & Brewster

UNITED STATES PATENT OFFICE

2,272,848

ADJUSTABLE FURNITURE GLIDE

Robert E. Miller, Bronxville, N. Y.

Application April 17, 1941, Serial No. 388,960

1 Claim. (Cl. 16—19)

This invention relates generally to furniture leg shoes of the type known as "glides," by which name they will be referred to hereinafter, and more particularly it relates to furniture glides that are adjustable in a vertical direction, whereby the furniture on which such glides are used may be conveniently leveled.

Among the objects of my invention is the provision of a furniture glide that may be applied to sockets or bores in furniture legs, which sockets or bores may have a considerable range of variation in their diameters, and which at the same time includes means for adjusting the glides relatively to the furniture leg, so that leveling of the article of furniture may be readily accomplished.

The general objects of my invention include the provision, in an adjustable furniture glide, of a construction that is simple, and effective, and low in cost.

These objects and such other objects as will hereinafter appear or be pointed out, are attained in the illustrative embodiments of my invention shown in the drawing, in which—

Figure 1 is an elevational view, partly in section of an illustrative embodiment of my invention.

Figure 2 is a view of the adjustable furniture glide of Figure 1 in a different position of adjustment and applied to a furniture leg, which is indicated in broken lines, and having additional portions of the glide shown in section;

Figure 3 is a plan view of the glide of Figure 1, with the top portion broken away on the line 3—3 of Figure 2; and

Figure 4 is an elevational view showing a second embodiment of my invention and a different manner of attaching it to a furniture leg.

My invention contemplates in general the provision in connection with a furniture glide of a tapered member which is adapted for insertion into a bore in the end of a furniture leg. This bore may be either one formed in the leg itself, or it may be the bore of a metallic or other socket, such as in a conventional caster socket, which is inserted in a bore in the leg. In either case, the bores are apt to become worn by use, whereby they will become enlarged. On the other hand, errors in manufacture or in using a boring tool may also result in variations in dimensions of the bores. By providing the glide with a tapered member to seat in the bore, it will be observed that a firm seating of the tapered member in bores having a considerable range of dimensions is assured. Means may also

be provided to prevent turning of this member within the bore.

Mounted for adjustment in a vertical direction relatively to this tapered member is the glide proper. Due to variations in the aforementioned bores the tapered member will enter any given bore to an extent that varies with the dimensions of said bore. As a consequence in a multi-legged article of furniture the glide associated with each leg will have a position relative to said leg that is different for each of the legs. By providing the aforementioned adjustment of the glide relatively to the tapered member, it is possible to obtain a leveling of the article of furniture even though the tapered member for each leg is different in relative position to the leg for each one of the legs of the article.

Referring now to the drawing in detail, I have shown at 10 a glide comprising a body member 11, which may be of resilient material having a cushioning action, such as soft india rubber. Where such a resilient material is used the lower portion may be encased in a smooth surfaced shell 12 of hard material, such as metal or synthetic plastic such as Bakelite, which will serve to provide a smooth contact with the floor. Obviously the part 12, instead of a shell, may be solid, and, if desired, parts 11 and 12 may be solid, and may also be made in one piece. Again, the part 11 may be omitted.

A mounting is provided whereby the glide may be adjusted vertically relatively to said bushing. For this purpose a threaded stud 13 is provided which projects upwardly from the body 11 and which has its lower end secured to the body in any suitable or preferred manner, so that it will be rigid therewith and turn therewith. This way may be accomplished, where the body 11 is of rubber, by imbedding the lower end of said stud 13 in said body, as by molding it thereinto.

Seated in threaded engagement on the stud 13 is a member 14 which is shown as in the form of tapered cylindrical bushing, which is provided with an internally threaded bore, and which may, if desired, be provided with a flange 15 at its lower end. This bushing, which may be made of any suitable or preferred material, such as metal or any one of the variety of synthetic plastics that are available today (such as Bakelite for example) may be provided with means for preventing rotation of the member 14 within a bore into which it is inserted, such as upwardly extending flutings 16 on its outer convex surface, which may be in the form of grooves or ribs.

In Figures 1 and 2 the member 14 is shown in-

serted into a caster socket 17 which may be of the conventional type, as shown. In Figure 3 the socket 17 is shown inserted into a bore 18 in a furniture leg 19, the latter being shown in broken lines.

The manner of use of my adjustable furniture glide will be readily apparent from Figures 1 and 2. It will be observed that in the particular example there shown the bore of the socket 17 is such that the tapered member 16 does not entirely enter to the full extent so that the shoulder 15 thereof is spaced some distance from the lower end of the furniture leg. If it is now desired to level the article of furniture, this may be done by adjusting each of the respective glides carried by the legs of said article by turning each glide in its member 14, which will cause it to move closer to or farther away from the shoulder 15, or from the end of the furniture leg. This adjustability is indicated by the broken line position of the glide shown in Figure 2.

While my invention contemplates a unitary article of manufacture and sale one of the parts of which is a socket such as a conventional caster socket, it will be obvious that instead of using a socket so associated with the adjustable glide, the member 14 thereof may be inserted into a caster socket already previously positioned in place in the furniture leg, such as where the furniture leg has originally been used with a caster inserted into a socket carried by the legs.

My invention also contemplates the application of the glide to a furniture leg without the use of a caster socket. This is shown in Figure 4 in which a furniture leg 19', provided with a bore 18', is shown as having inserted therein the tapered member 14' carried by the stem 13' of the glide 10'. It will be observed that the member 14' is shown of tapered cylindrical form and as smooth on its exterior walls, that is, as lacking the flutings 16 of Figures 1 and 3. For

certain purposes this construction and this manner of use may be found preferable to that described in connection with the Figures 1 and 3.

While the member 14 in both the described embodiments has been shown as of tapered cylindrical form, it will be obvious that it may have other configurations. For example, it may have a polygonal cross section, such as a square, and obviously will function similarly to the described embodiments, provided of course it tapers in an upward direction.

While I have herein disclosed several illustrative embodiments of my invention it will be understood that the same may be embodied in many other forms, without departing from the spirit thereof, as will be obvious to those skilled in the art, and that the disclosure herein is by way of illustration merely and is not to be interpreted in a limiting sense.

Having thus described my invention and illustrated its use, what I claim as new and desire to secure by Letters Patent is:

In combination in a furniture leg shoe: a bushing adapted for insertion into a bore in a furniture leg, said bushing being tapered whereby it may wedge itself into a fixed position in any one of a plurality of bores differing from each other in diameter, the degree of entry of the bushing into the bore being dependent upon and varying with the diameter of the bore, said bushing having a threaded bore, a stem having a glide on one end thereof, said stem being threaded so as to fit adjustably into said threaded bore of the bushing, whereby said stem may be adjusted relatively to said bushing so as to compensate for variations of the position of the bushing in said bore and also to compensate for variations in the length of the furniture leg and the level of the floor on which the leg is to be positioned.

ROBERT E. MILLER.