Feb. 11, 1936. W. F. HEROLD 2,030,699

CUSHION SLIDE FOR FURNITURE

Filed Dec. 24, 1932

Fig. 1.

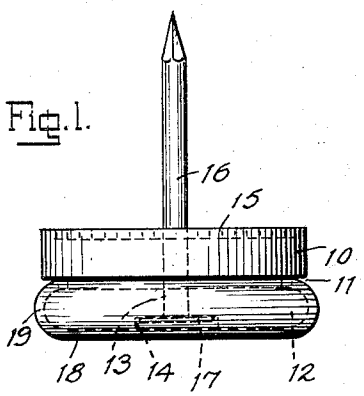


Fig. 6.

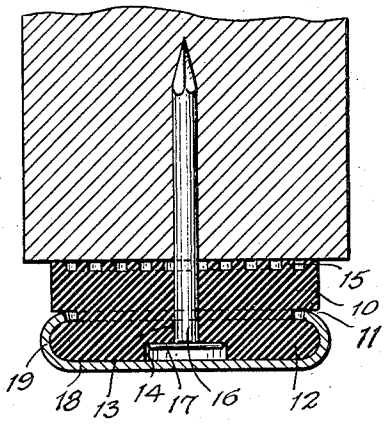


Fig. 2.

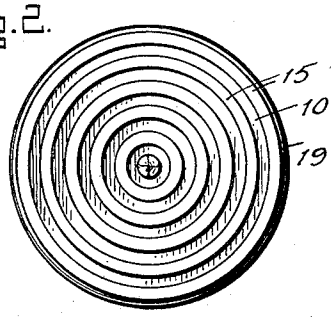


Fig. 7.

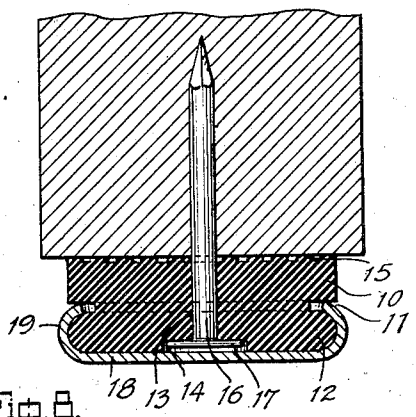


Fig. 8.

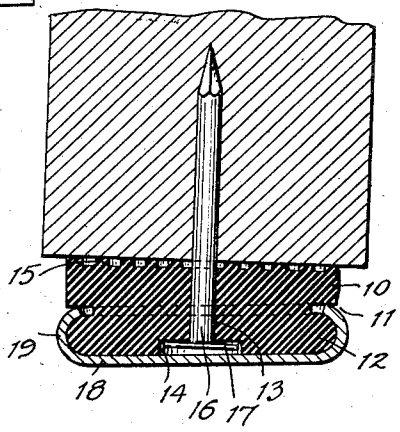


Fig. 5.

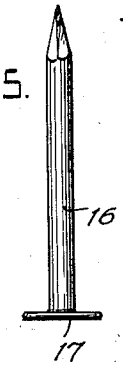


Fig. 3.

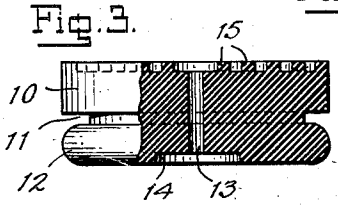
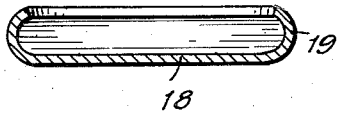


Fig. 4.



Inventor

WALTER F. HEROLD.

By

Attorney

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2,030,699

CUSHION SLIDE FOR FURNITURE

Walter F. Herold, Bridgeport, Conn., assignor to The Bassick Company, Bridgeport, Conn., a corporation of Connecticut

Application December 24, 1932, Serial No. 648,736

2 Claims. (Cl. 16—42)

The present invention relates to cushion slides for furniture, particularly of the type adapted to be attached to the furniture by driving with a hammer, an object being to provide such a slide of neat appearance, of simple and inexpensive construction, and which has resiliency characteristics adapted to provide resilient and compensating support for furniture of widely different weights. To this end it is proposed to provide resilient cushion means adapted to have a limited flexing under very light loads, providing the proper resilient support and compensation for irregularities within its limits, which also has normal flexing under relatively heavier loads, and which provides solid support under excessive loads. Another object is to provide a cushion slide which will permit tilting of the furniture without loosening, and which will at all times remain firmly in place, without looseness or rattling, irrespective of whether the slide is in engagement with the floor or not.

A further object is to provide an interlocking connection between the floor engaging sliding shoe and the cushion element, which will reliably retain them together under all conditions of use, but which at the same time will permit of convenient manual assembly and disassembly.

A still further object is to provide a slide which will be practically noiseless when being moved about, due to its ability to flex under very light impacts. It is still another object to provide a slide which will permit of the use of relatively harder rubber, or similar material, than could heretofore be successfully employed, thus providing a more reliable connection between the cushion body and the sliding base.

With the above and other objects in view an embodiment of the invention is shown in the accompanying drawing, and this embodiment will be hereinafter more fully described with reference thereto, and the invention will be finally pointed out in the claims.

In the drawing:

Fig. 1 is a side elevation of a cushion slide, according to the illustrated exemplary embodiment of the invention.

Fig. 2 is a top plan view thereof.

Fig. 3 is a view partially in side elevation and partially in vertical section of the resilient cushion element.

Fig. 4 is a vertical sectional view of the sliding shoe.

Fig. 5 is a side elevation of the attaching nail element.

Fig. 6 is a vertical sectional view showing the slide attached to a furniture leg.

Fig. 7 is a similar view showing the position of the parts under light load.

Fig. 8 is a similar view showing a tilted position of the leg.

Similar reference characters indicate corresponding parts throughout the several figures of the drawing.

Referring to the drawing, the cushion slide, according to the present embodiment of the invention, comprises a circular cushion body 10, formed of rubber or other suitable resilient material, provided about midway between its upper and lower surfaces with a laterally extending peripheral groove 11, the peripheral portion of the rubber body beneath this groove being of semi-circular cross section and constituting a plug section 12 adapted for interlocking insertion in the sliding metal shoe or base, as will presently more fully appear. A central vertical passage 13, for the attaching nail, is provided in the rubber body and at its lower end the lower surface of the body is provided with a circular recess 14 for receiving the nail head.

The upper surface of the body is provided with a series of spaced concentric ribs 15, which constitute the light load flexing area, as will presently be more fully explained.

The attaching nail 16 is adapted to be snugly engaged in the passage 13 and the head 17 seated in the recess 14, the depth of the latter being greater than the thickness of the head to provide a space within which the head may move during flexing and tilting, the depth of the recess being somewhat increased in the attached relation, as will be presently more fully pointed out.

The sliding metal shoe or base 18 is provided with an upwardly and inwardly curved rim 19 into which the plug section 12 is adapted to be forced and expanded to thus interlockingly retain the parts together. In the assembled relation the upper inturned portion of the rim extends into the groove 11 and provides an under support for the peripheral portion of the exposed upper section of the cushion body. The inner wall of the groove 11 is inwardly spaced from the edge of the rim 19, so that the rubber section in the plane of the groove is laterally unconfined to a predetermined extent, and therefore permits free lateral expansion of the upper unconfined portion 10 of the cushion body without cutting or restriction.

In attaching the slide blows are applied by

a hammer against the metal base 18, and after the nail is driven to a point where the cushion body contacts the end of the leg further driving compresses the cushion element, so that upon its expansion after the driving operation the head of the nail presses the base of the recess 14 upwardly and assumes a position in spaced relation above the inner surface of the base, the cushion element being under slight compression to maintain this relation and eliminate looseness and rattling. The section 15 through its relatively increased resiliency permits this driving and positioning action of the nail to be accomplished with increased facility, particularly where a relatively hard rubber is employed.

The reduced cross-sectional area of the upper ribbed portion 15 and the air spaces between the ribs is such that this portion will compress to a substantial degree under a relatively light load, so that resilient support and compensation for irregularities is provided for light furniture which would otherwise not provide sufficient weight to compress the main body of the rubber cushion. As shown in Fig. 7 the ribs expand into the air spaces under this condition. Normal loads will compress the main body of the rubber within proper limits to provide resilient support and compensation for irregularities. Extremely heavy loads will compress the rubber only to the point where the nail head contacts the metal base, whereupon solid support will be provided, so that the rubber is thus relieved of excessive deteriorating pressure.

Fig. 8 illustrates the position of the parts when the leg is tilted, the metal base remaining flat on the floor.

The increased flexibility provided by the portion 15 permits of the use of harder rubber than heretofore, and therefore a more durable slide and one in which the connection between the cushion body and the metal shoe will be more reliable than when relatively soft rubber is employed.

I have illustrated and described a preferred and satisfactory embodiment of the invention but it will be obvious that changes may be made therein, within the spirit and scope thereof, as defined in the appended claims.

Having thus described my invention what I claim and desire to secure by Letters Patent is:—

1. A cushion slide for a furniture leg comprising a cushion body of rubber having an upper surface adapted to engage with the lower end of said leg, said cushion body having a peripheral groove intermediate its upper and lower surfaces defining an upper resilient portion and a lower shoe attaching portion, said upper portion being provided with a series of recesses rendering it less resistant to deformation than said lower portion, a non-resilient sliding shoe having a substantially flat base and an upwardly and inwardly extending rim, the lower portion of said cushion body being disposed in said shoe with the edge of said rim engaging said groove, the marginal portion of said upper portion overhanging said rim and adapted to be compressed between said rim and said leg, and leg attaching means carried by said cushion body, the relatively greater resistance to deformation of said lower portion being such that upon tilting of said leg relatively to said shoe separation of said shoe therefrom through deformation of said cushion body is prevented while said upper portion is subject to deformation.

2. A cushion slide for a furniture leg comprising a cushion body of rubber having an upper surface adapted to engage with the lower end of said leg, said cushion body having a peripheral groove intermediate its upper and lower surfaces defining an upper resilient portion and a lower shoe attaching portion, a non-resilient sliding shoe naving a substantially flat base and an upwardly and inwardly extending rim, the lower portion of said cushion body being disposed in said shoe with the edge of said rim engaging said groove, the marginal portion of said upper portion overhanging said rim and adapted to be compressed between said rim and said leg, and leg attaching means carried by said cushion body, the lower shoe attaching portion of said cushion body being confined laterally and vertically by said rim and the upper resilient portion being unconfined laterally, whereby said shoe attaching portion has greater resistance to deformation than said upper resilient portion, the relatively greater resistance to deformation of said lower portion being such that upon tilting of said leg relatively to said shoe separation of said shoe therefrom through deformation of said cushion body is prevented while said upper portion is subject to deformation.

WALTER F. HEROLD.