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B. CHRISTMAS

1,921,561

CUSHION SUPPORT

Filed April 13, 1932

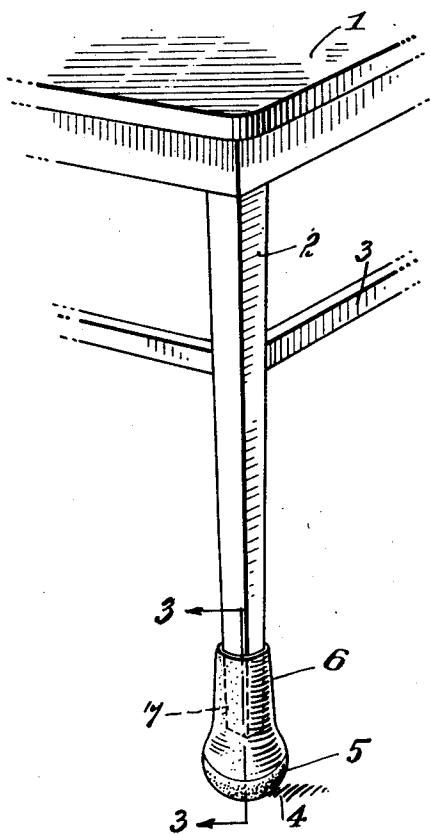


Fig. 1.

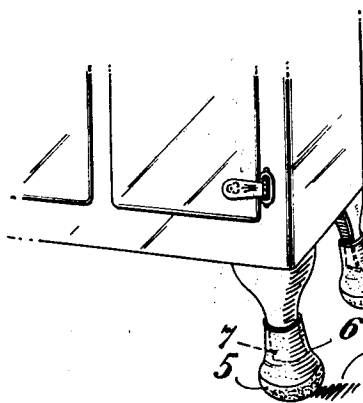


Fig. 4.

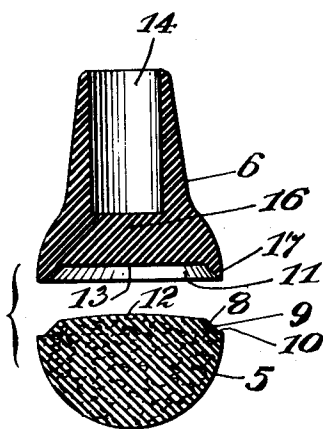


Fig. 2.

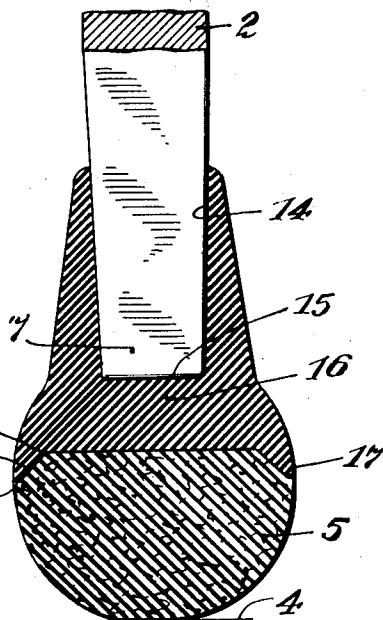


Fig. 3.

INVENTOR-
Burton Christmas
BY
Edward Thomas
his ATTORNEY-

UNITED STATES PATENT OFFICE

1,921,561

CUSHION SUPPORT

Burton Christmas, Pittsburgh, Pa.

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6 Claims. (Cl. 45-137)

This invention relates to cushion supports and is herein illustrated in the form of a tip adapted to be removably put upon the leg of a chair or upon the leg of a device subject to vibration like the leg of a refrigerator.

The leg of an ordinary chair is solid to the bottom and rests upon a hard floor so firmly that anyone sitting down in its experiences a shock such as is experienced when the foot comes down on a hard pavement and the body receives the shock of striking the pavement with a metal clad heel. Moreover, when a device such as an electric refrigerator having moving parts, rests upon a hard floor, the usual metal legs transmit to the floor the vibration of those moving parts, the vibrations including both sensible vibrations and sound vibrations, thus making the device noisy and in other ways annoying.

According to the present invention, these and other difficulties are overcome by interposing between the floor and the metal or wooden leg of a cushion sponge rubber, large enough to support the weight of the device without such compression as will destroy its resiliency.

In the form of the invention herein shown, the rubber cushion is shown as part of a removable rubber grip which embraces the leg and is of sufficient firmness where it grips the leg to firmly hold the leg in place upon the cushion of sponge rubber. Other features and advantages will hereinafter appear.

In the accompanying drawing,

Figure 1 shows the leg of a chair supported on a cushion of the present invention.

Figure 2 shows the cushion and one form of rubber grip for attaching it to a leg.

Figure 3 is a sectional view showing a leg, the cushion and grip on a larger scale, and

Figure 4 is a fragmentary view of an electric refrigerator.

A chair having a seat 1, a leg 2, and a rung 3, is supported on a floor 4 by a cushion 5 of sponge rubber which is firmly attached to a rubber grip 6, embracing the lower end 7 of the leg 2 of the chair. As more clearly shown in Figures 2 and 3, the cushion 5, consists of a smooth faced hemispherical body of sponge rubber having a projection 8 on the flat surface of the hemisphere provided with a bevelled edge 9, set back from a rabbet 10 around the periphery of the flat surface. The projection 8 is adapted to fit in a corresponding depression 11 in the rubber grip 6, so that the top surface or nearly top surface 12 of the projection 8, lies against the depressed flat surface 13 of the depression 11 in the grip.

It is found that the cushion 5 may be sufficiently strongly held to the grip 6 by means of a suitable cement, if it is desired to unit the parts after vulcanization is complete. It is found that the sponge rubber 5 should be of such consistency that a hemisphere having a diameter of nearly 3 inches can be compressed by a strong man between his thumb and forefinger to about half or less than its normal thickness, without undue strain.

The sponge rubber is preferably of a very fine texture with bubbles almost the size of pinheads. The grip 6 is made of very different rubber, preferably approximately that used for tire treads, and for a chair has been found satisfactory in one size to have $1\frac{1}{8}$ inch opening, with a wall approximately an eighth of an inch thick at the top and $2\frac{1}{4}$ inches deep extending out as a pyramid and forming a frustro-conical structure, so that it is 2 inches across (outside measurement) at the bottom of the socket opening, thus giving a wall thickness of approximately $\frac{3}{8}$ of an inch thick at the bottom 15 of the socket 14. A little below this point the grip portion 6 rounds out to complete the curve of the hemisphere of the cushion 5. Between the bottom 15 of the socket 14, and the face of the depression 13, there is a wall 16 nearly an inch thick formed of the same continuous body of rubber which forms the socket 14. This leaves a stiff wedge shaped annular rim 17 about a quarter of an inch deep and nearly as thick at its base to form the depression 11, and help hold the edge of the sponge cushion 5.

It is found that chairs provided with these tips give the same comfortable sensation that is attained by sitting down in a cushioned rocking chair, the slight sideways or forward and back yielding of the cushion 5, greatly adding to the sensation of comfort.

It is also found that such a tip is extremely effective on electrical refrigerators, eliminating most of the noise and floor vibration. Made as above described, it is found that three sizes of sockets 14 with corresponding proportions in the walls of the grip 6 and of the cushion 5, give a satisfactory range to fit practically all household furniture and refrigerators.

Having thus described certain embodiments of the invention, what is claimed is:

1. A support for an article of furniture including a rubber sponge cushion having a smooth face and adapted to support the furniture from the floor, and a socket of relatively tough rubber adapted to engage the furniture and held to the sponge cushion.

2. A support for an article of furniture including a rubber sponge cushion having a smooth face of relatively large area and adapted to support the furniture from the floor, and a socket of relatively tough rubber adapted to engage the furniture and held to the sponge cushion.

3. A support for an article of furniture including a rubber sponge cushion having a smooth face of relatively large area and adapted to support the furniture from the floor, and a socket of relatively tough rubber having walls about $\frac{1}{8}$ inch thick and increasing in thickness toward the bottom and adapted to engage the furniture and held to the sponge cushion.

4. A support for an article of furniture including a rubber sponge cushion having a smooth face and adapted to support the furniture from the floor, and a socket of relatively tough rubber

having a solid bottom as thick as its walls and binding the socket sides together and forming a broad support for the sponge.

5. A support for an article of furniture including a rubber sponge having a smooth face adapted to rest upon a floor, and a tough rubber frusto-conical member having a firm flat base and extending upward to form a thick-walled socket.

6. A support for an article of furniture including a rubber sponge having a smooth face adapted to rest upon a floor, and a tough rubber frusto-conical member having a firm flat base upon which the sponge is made fast, a stiff annular rim around the edge holding the edge of the sponge, and thick walls forming a socket in the top of the pyramid to resiliently engage a leg of the furniture.

BURTON CHRISTMAS.

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