

Oct. 13, 1936.

T. A. COLBRIDGE

2,056,957

CHAIR ATTACHMENT

Filed Feb. 18, 1935

Fig. 1.

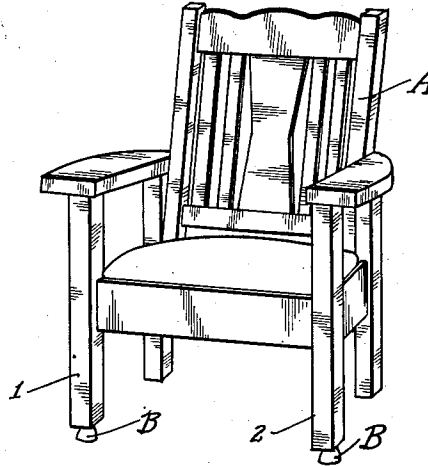


Fig. 2.

Fig. 3.

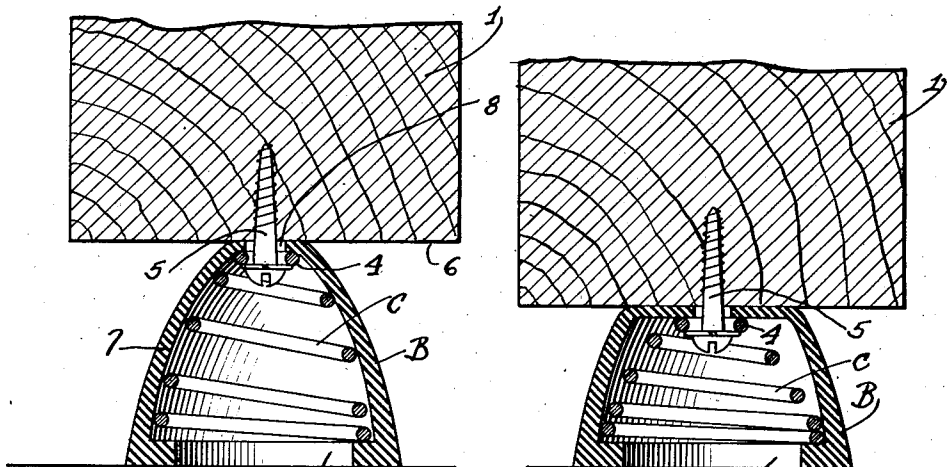
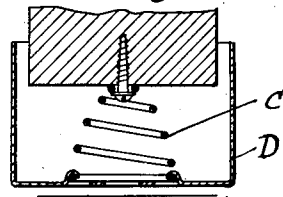
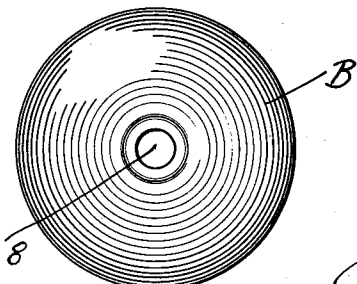


Fig. 4.

Fig. 5.



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UNITED STATES PATENT OFFICE

2,056,957

CHAIR ATTACHMENT

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Application February 18, 1935, Serial No. 6,992

3 Claims. (Cl. 45—137)

The present invention relates to chair attachment and more particularly to attachments which may be readily applied to feet of legs of articles of furniture, such for example, as chairs, davenports, benches, sofas, and the like, so that such articles of furniture may be rocked or tilted thus affording more comfort for sitting purposes.

It has been observed that many people occupying straight backed chairs or chairs of like kind often tilt such chairs on the back legs to secure greater comfort in sitting. Under such circumstances, the chair occupant must necessarily be mindful of his unbalanced position unless perchance he leans the chair against some object, as otherwise he might suffer a fall and injury.

The present invention is directed to attachments which may be readily and easily applied to the feet of legs of articles of furniture, whereby such articles may be rocked or tilted, thus affording more comfortable seats.

An object of the present invention is to provide simple, efficient and inexpensive means for application to the feet of legs of articles of furniture to enable the use of such articles of furniture as rockers.

Another object of the present invention is to provide cushion contact members for the legs of articles of furniture.

A further object of the present invention is to provide a spring support of simple construction and pleasing appearance for application to a foot of a leg of an article of furniture, which support may be readily and easily attached to such leg so that such piece of furniture may be tilted with respect to the floor and thus be rendered more comfortable for anyone sitting in the same.

A still further object of the present invention is to provide a cushion support having a resilient body and a soft cushion floor engaging portion together with a spring inside of said body to carry the weight of the piece of furniture and its occupant, with the body adapted to flex with the spring as the latter is distorted in use.

Another and yet further object of the present invention is to provide spring supports for legs of articles of furniture which supports include conically coiled springs capable of collapse or compression, and one-piece covers for such springs which covers are yieldable with the springs and completely conceal such springs from view under all conditions of use.

The above other and further objects of the present invention will be apparent from the following description, accompanying drawing, and appended claims.

The accompanying drawing illustrates an embodiment of the present invention and the views thereof are as follows:

Figure 1 is a view of a chair, having applied to the feet of its front legs, the chair attachments made in accordance with the principles of the present invention.

Figure 2 is an enlarged vertical sectional view through a chair attachment of the present invention, and showing it as applied to the leg of an article of furniture, which leg is fragmentarily shown, and with attachment in fully extended or normal position.

Figure 3 is a view similar to Figure 2 showing the spring partially compressed or distorted when the article of furniture to which it is attached is occupied.

Figure 4 is a top plan view of the illustrated form of chair attachment.

Figure 5 is a fragmentary sectional view of a modified form of structure of the present invention.

The drawing will now be explained.

The straight back chair A of conventional form has applied to the feet of its front legs 1 and 2 chair attachments B of the present invention.

Reference to Figures 2 and 3 will show details of construction of the illustrated form of attachment.

Figure 2 illustrates the attachment in normal or fully extended position, while Figure 3 illustrates the attachment when partially compressed or distorted.

The attachment B comprises a conically coiled spring C formed with its convolutions tapering upwardly from the bottom. The uppermost convolution 4 is adapted to receive a screw 5, or other attaching means for securing the attachment to the foot 6 of the leg 1 of the chair or other article of furniture.

In order to conceal the spring C from view and as well as protecting other furniture from damage thereby, a cover of yieldable or resilient material is applied about the spring C so as to encompass it throughout, and enclose it from view. The cover 7 is illustrated as made of rubber or rubber composition, preferably conical in elevation, to conform to the elevational contour of the spring. The apex of the cover 7 is provided with an aperture 8 through which the attaching screw 5 passes. The lower end of the cover 7 is provided with an inwardly extending bottom flange 9 which underlies the lower convolutions of the spring and serves the dual purpose of preventing the spring from scratching or other-

wise marring the floor or other surface on which the article of furniture is resting, also for preventing slipping of the article of furniture. The cover 7, being of resilient or yieldable material gives as the spring C is compressed or distorted in use. Figure 3 shows partial distortion or compression of the spring and accompanying distortion of the cover 7.

The provision of the conical spring and the conical cover enables ready adaptation of the attachment to any angular position assumed by the legs of the article of furniture. With the attachments in place against the feet of the front legs of a chair, such as that shown in Figure 1, the bottom flanges 9 of the attachments B will rest flatwise against the floor while the legs 1 and 2 will be inclined with respect to the plane of the floor, thus causing slight deformation of the attachments B.

When the chair is occupied, the weight of the occupant will necessarily compress the springs C slightly. If the occupant desires to teeter or rock, he may do so, which rocking or teetering is then followed by attendant distortion of the springs of the attachments.

The height of the attachments B are such as to incline the feet portion of the article of furniture at a comfortable or convenient angle without causing backward tipping of the furniture.

An article of furniture, such as a chair, provided with the attachments of the present invention, may be utilized as a rocker, thus affording increased comfort to the occupant. The chair seat is inclined at such an angle as to increase the comfort of the occupant while sitting, even though the occupant does not desire to rock.

It is within the contemplation of the present invention to provide all of the legs of an article of furniture with such attachments which would thus afford cushions under all of the legs, adding to the comfort of the occupants of the particular article of furniture.

The cover 7 is so made as to closely surround the spring C to prevent disassociation of the spring and the cover.

It is within the contemplation of the present invention to substitute for the cover 7 of resilient or rubber-like material, material of other characteristics, at the same time of such nature as to readily conform to the deformation of the springs C in use.

In Figure 5, I have shown a cup-like member D containing the spring C, said cup-like member being adapted to relatively telescope the leg 1 of the article of furniture as the spring is flexed.

Whenever the chair or other article of furniture

to which the attachments of the present invention are secured is rocked to its limit in a direction towards the floor, the convolutions of the springs C are compressed so as to lie within a height substantially that of the lowermost convolutions of the springs. In such event, the covers 7 would be correspondingly compressed or distorted, yet completely covering the springs.

The covers may have suitable advertising or decorative indicia applied thereto as desired.

In the event the springs are employed without the cover members, it is contemplated that the coils thereof are to be suitably decorated as by chrome plating, enameling, rubber covering or the like.

It will be apparent that the device of this invention may also be advantageously used as a cushion or support in various applications other than herein disclosed and wherever a durable and effective cushioning element is required.

I am aware that many changes may be made and numerous details of construction may be varied through a wide range without departing from the principles of this invention, and I therefore do not purpose limiting the patent granted hereon, otherwise than necessitated by the prior art.

I claim as follows:

1. In combination with a leg of a piece of furniture, a conical spring secured at its apex to a foot of said leg, and a one-piece elastic cover about said spring inherently capable of extension and deformation with said spring, said cover being conical and attachable at its apex to said leg.

2. A contact member for application to the foot of a leg of a piece of furniture, said member including a conically coiled spring and a one-piece resilient encasement for said spring conforming to the conical shape of the spring, said spring and encasement having apex openings for an attaching screw, and said encasement having a bottom flange underlying the bottom convolutions of said spring to prevent separation of said spring and encasement and to protect the floor against damage by the spring.

3. A cushion member comprising a conically coiled spring and a one-piece resilient encasement for said spring conforming to the conical shape of the spring, said spring and encasement having apex openings for attaching said member in place, and said encasement having a bottom flange underlying the bottom convolutions of the spring to prevent separation of the spring and encasement and to provide a resilient foot for the spring.

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