March 7, 1939. M. M. MAYER 2,149,357

RESILIENT CHAIR SEAT

Filed Nov. 17, 1937 2 Sheets-Sheet 1

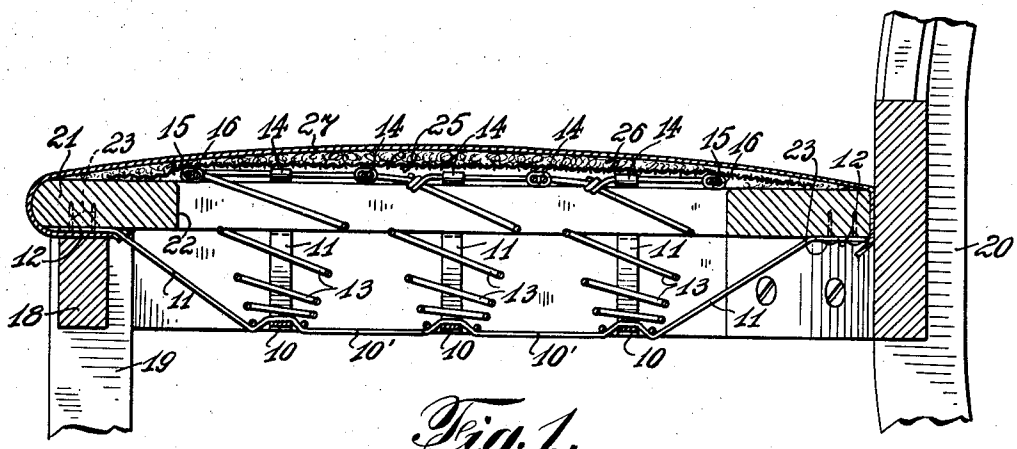


Fig. 1.

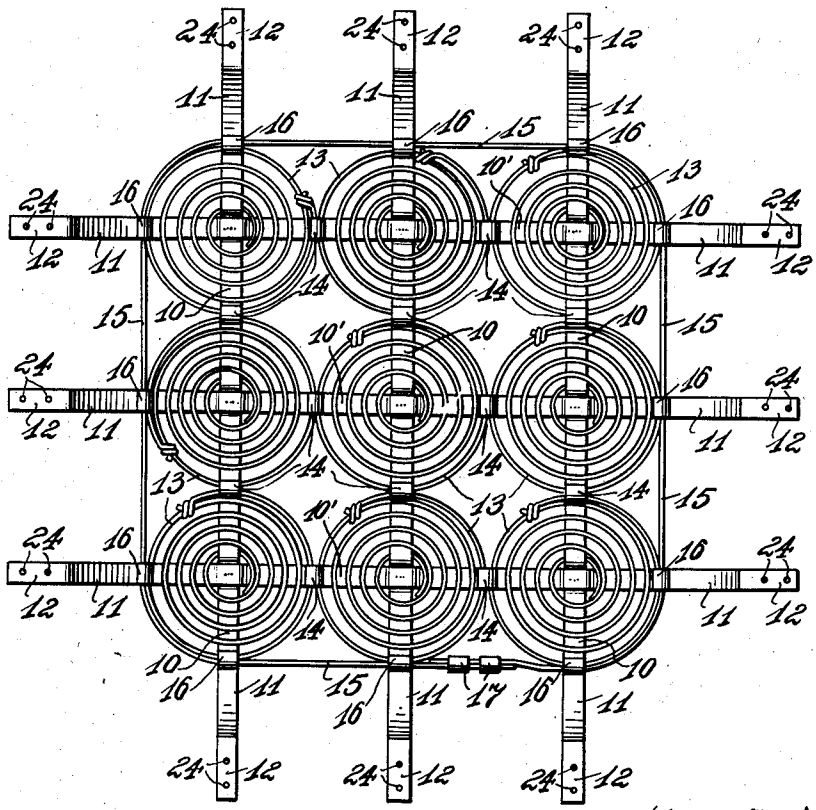


Fig. 2.

Max M. Mayer
INVENTOR.

BY Marshall Pressman
ATTORNEY.

March 7, 1939. M. M. MAYER 2,149,357

RESILIENT CHAIR SEAT

Filed Nov. 17, 1937 2 Sheets-Sheet 2

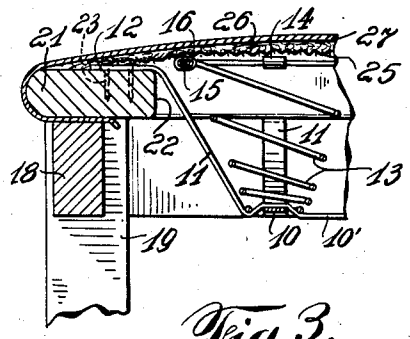


Fig. 3.

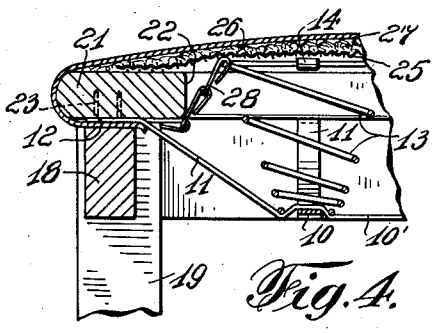


Fig. 4.

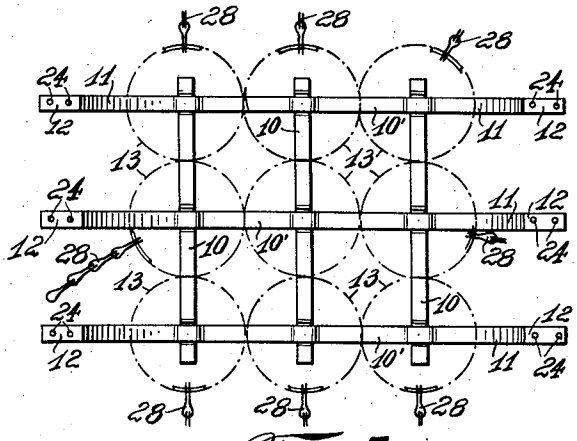


Fig. 5.

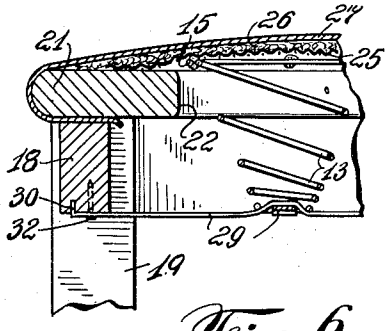
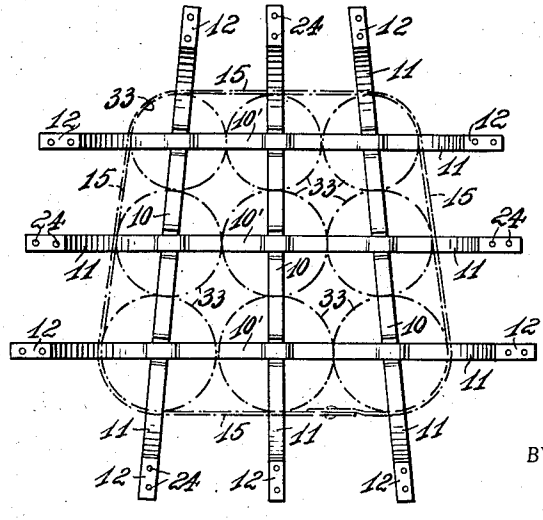


Fig. 6.



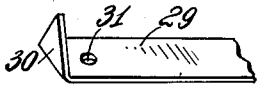


Fig. 7.

Fig. 8.

Mark M. Mayer
INVENTOR.

BY Howard Greenman
his ATTORNEY.

Patented Mar. 7, 1939

2,149,357

UNITED STATES PATENT OFFICE

2,149,357

RESILIENT CHAIR SEAT

Max M. Mayer, New York, N. Y.

Application November 17, 1937, Serial No. 174,944

4 Claims. (Cl. 155—179)

My invention relates to resilient devices adaptable for chair seats and for other purposes as will be evident upon a consideration of my disclosure herein shown and described.

I limit my description of my devices as applied to chairs, but it has other applications as will be seen upon a consideration of my specification and its accompanying drawings.

Spring seats for chairs are liable to lose their resiliency after long and continued use and, hence, it is desirable that they be readily removed from and easily introduced into the chair frame.

Among the other desirable attributes in resilient chair seats is their ease of construction, economy in cost, rigid attachment to the chair frame, and possibility of their proper application by those not expert in furniture construction.

In the accompanying drawings illustrating modifications of the devices of my invention and of their application, similar parts are designated by similar numerals.

Figure 1 is a vertical cross section of a device of my invention illustrating one means for its attachment to a chair.

Figure 2 is a top view of the device of my invention shown in Figure 1.

Figure 3 is a fragmentary vertical section showing a modified means for attaching the device of Figure 2 to a chair.

Figure 4 is a fragmentary vertical section of a modified form of a device of my invention and of attaching it to a chair.

Figure 5 is a diagrammatic top view of the complete device of my invention shown in Figure 4.

Figure 6 is a fragmentary vertical section showing a modified form of a device of my invention and means for attaching it to a chair.

Figure 7 is a fragmentary perspective view of an attaching means of the device of Figure 6.

Figure 8 is a top view, partly diagrammatic, of a modified form of a device of my invention.

The particular device of my invention shown in Figures 1 and 2 comprises a supporting base consisting of two series of three metallic strips each 10, 10, 10 and 10', 10', 10', the outward extremities of which are bent angularly outward 11, 11 and then outwardly 12, 12 in a plane horizontal to the central portions thereof. The base members of one series are bent to form recesses for the placement therein of the base members of the other series, as shown in Figure 1.

Positioned above each intersection of the transverse supporting strips is a coiled conical spring 13, the smaller end of which is held in fixed position between the abutting supporting strips, and the upper portions of the springs 13, 13 being attached to each other at their abutting peripheries by tubular clasps 14, 14, and the outer springs are attached at their outer peripheries to a rod 15 by similar clasps 16, 16, the two ends of the rod being fastened together by similar clasps 17, 17.

Figure 1 illustrates one means of attaching the device of Figure 2 to a chair.

The side frame 18 of a chair supports the usual legs, one of which is represented at 19, and a back 20. Situated above the side frame 18 is the seat 21 having a central opening 22 therein.

In this method of attachment of the device of Figure 1 to the chair the extensions 12, 12 of the strips 10, 10, 10', 10' are attached to the under side of the seat 21 by means of screws, nails or other similar fastening means 23, 23 passed through the holes 24, 24 in the members 12, 12. Positioned upon the springs 13, 13 is a layer of burlap or similar material 25, upon which is a layer of cotton or similar material 26, and covering the entire top and extending between the side frame 18 and the seat 21 is the decorative seat cover 27.

It will thus be seen that the weight placed upon the seat is firmly supported by the strips 10, 10, 10', 10' and that the device can be readily replaced by a new one, if required by simply removing the seat 21 from the side frame 18.

Figure 3 shows a modified method of attaching the device to a chair seat, in which the extensions 11, 11 of the strips 10, 10, 10', 10' is attached to the top face of the seat 21, instead of between the seat 21 and the side frame 18.

Figures 4 and 5 illustrate a device similar to that shown in Figure 2, except that the rod 15 is removed and the top peripheries of the springs 13, 13 are attached to the chair frame by means of chains 28.

The modified form of my device shown in Figures 6 and 7 is similar to those previously described, except that the supporting strips, as 29 are straight and have an upturned wedge-shaped extremity 30 and a hole 31. The strips 29, 29 in this form of my device are attached to the under side of the side frame, by driving the extension 30 into the wood and further attaching it by means of a screw 32 passing through the hole 31.

The modified form of my device shown in Figure 8 is similar to that shown in Figure 2, except that it is adapted to a seat opening having angu-

larly positioned sides. This device consists of a series of spring **33, 33**, the diameter of the springs in each series varying uniformly to adapt themselves to the contour of the opening.

It will thus be seen that my invention presents means whereby a spring bottom can be readily and firmly applied to seat bottoms having an opening therein and that the size and shape of my device can be readily made to conform with the size and shape of said opening.

I do not limit myself to the particular size, shape, number, arrangement or material of parts as specifically shown, as these are given simply as a means for describing my devices, and my invention is intended to cover any changes therein within the scope of my disclosure.

What I claim is:

1. In a resilient device adapted for chair seats, in combination, a supporting base comprising a plurality of parallel metallic strips and a plurality of diverging intersection metallic strips; a plurality of series of abutting coiled springs supported by said strips at their intersections, the coils of each series of springs being of less diameter than that of an adjacent series; a wire surrounding the upper periphery of said springs and attached thereto, and means connecting the upper peripheries of said springs at their points of abutment.

2. In a resilient device adapted for chair seats, in combination, a supporting base comprising a plurality of parallel metallic strips and a pluradity of diverging intersecting metallic strips, the extremities of said strips being bent upwardly and thence outwardly; a plurality of series of abutting coiled springs supported by said strips at their intersections, the coils of each series of springs being of less diameter than that of an adjacent series; a wire surrounding the upper periphery of said springs and attached thereto, and means connecting the upper peripheries of said springs at their points of abutment

3. In a resilient device adapted for chair seats, in combination, a supporting base comprising a plurality of parallel metallic strips and a plurality of diverging intersecting metallic strips; a plurality of series of truncated pyramidal shaped coiled springs supported by said strips at their intersections, the coils of each series of springs being of less diameter than that of an adjacent series and the upper coil of each spring abutting upon the upper coils of adjacent springs; a wire surrounding the upper periphery of said springs and attached thereto, and means connecting the upper peripheries of said springs at their points of abutment.

4. In a resilient device adapted for chair seats, in combination, a supporting base comprising a plurality of parallel metallic strips and a plurality of diverging intersecting metallic strips, the extremities of said strips being bent upwardly and thence outwardly; a plurality of series of truncated pyramidal shaped coiled springs supported by said strips at their intersections, the coils of each series of springs being of less diameter than that of an adjacent series and the upper coil of each spring abutting upon the upper coils of adjacent springs; a wire surrounding the upper periphery of said springs and attached thereto, and means connecting the upper peripheries of said springs at their points of abutment.

MAX M. MAYER.