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T. W. FOOTE

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RESILIENT EDGE CONSTRUCTION FOR SEATS

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FIG. 1.

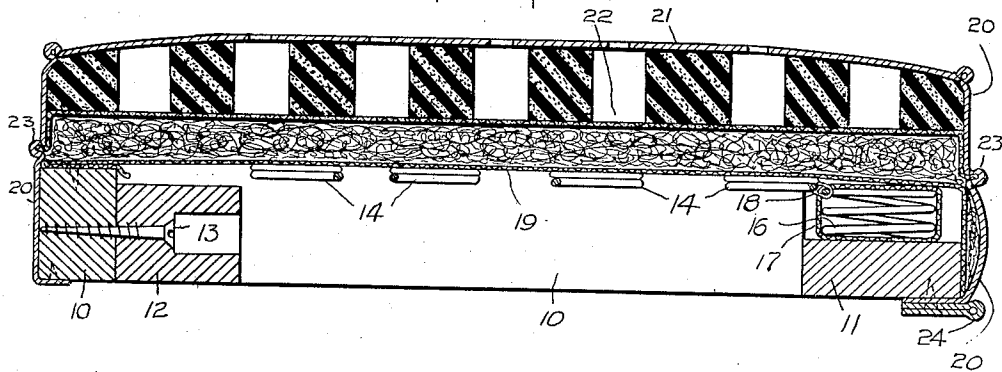
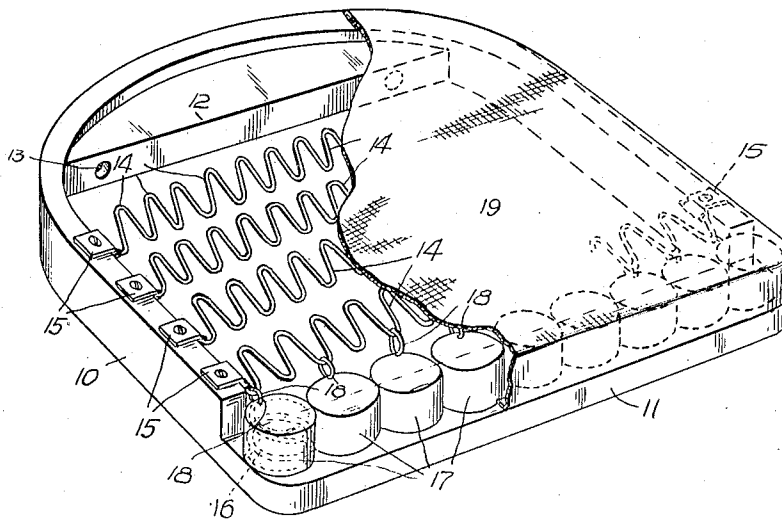


FIG. 2.



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RESILIENT EDGE CONSTRUCTION FOR SEATS

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3 Claims. (Cl. 155-179)

This invention relates to improvements in chair seats and has reference particularly to a resilient edge construction for the front of the seat.

A chair seat ordinarily consists of a wood or metal frame supporting a plurality of spring units, either of the coil or flat non-sag type. Upon this assembly rests the cushion. It has been found that greater comfort can be afforded chair seats of this character by installing an especially devised spring construction for the front of the seat and it is the object of this invention to provide a novel arrangement of springs along the front rail of the chair seat, whereby added resilient support will be given to the cushion along the forward edge thereof.

I accomplish the object of this invention by means of the embodiment thereof hereinafter described, set forth in the appended claims and illustratively exemplified in the accompanying drawing, in which:

Figure 1 is a substantially transverse sectional view of a chair seat and cushion;

Figure 2 is a perspective view of the chair seat, showing the front edge spring construction.

Referring to the drawing, 10 denotes a box-like seat comprising side and back rails and a flat depressed front rail 11, the latter being much broader than the sides and substantially one-half the height. The back portion of the rail is reinforced by means of a web piece or block 12 which is secured in position against the inner face of the rail 10 by means of screws 13. In the drawing, I have shown spaced flat springs 14 disposed across from side to side of the seat rail 10, each spring comprising a zig-zag strand of spring wire attached at its ends to the top of the seat rail sides by means of holders 15.

The foremost flat spring 14 is disposed with its forward angles just beyond the ends of the side rails and slightly over the front rail 11. Mounted upright upon the front rail 11 are a number of closely adjacent spring units 16, each thereof comprising an internal spring coil individually enclosed in a cylindrical cloth casing 17, closed at opposite ends. The top coil of each unit supported upon the front rail 11 is about level with the flat springs 14 and a wire clip or tie piece 18 is used to attach the upper coil of each unit to an adjacent angle of the front flat spring. The entire seat is covered at its top by a covering 19 which is brought downwardly over the spring units 16 and is attached to the front rail 11.

The forward face of the front rail 11 in the present instance is covered by a skirt portion 20 of the seat covering 21. The seat or cushion 22 comprises a spring filled pad underlaid with hair

or other suitable material. The covering 21 is perforated over its top piece and the edges 22 are beaded to provide an attractive finish. The skirt 20 is a depending portion of the sides and front of the covering 21 and a bead 23 is formed in the material between the sides, front and skirt portion 20. The free under edge of the skirt portion 20 is turned under the side, back and front rails 10 and 11 and a separate bead 24 is placed against the turned under portion and the two superimposed layers of materials are tacked or otherwise attached to the undersides of rails to hold the cushion in position.

A construction for chair or other seats according to the present invention is particularly desirable because ordinarily the front edge of a seat is the first part to break down after use, but when reinforced with individual spring units along the front edge directly beneath the cushion, the edge retains its initial resiliency almost indefinitely.

What I claim is:

1. In a chair seat the combination of a frame having two side rails, a front rail of a height substantially less than that of said side rails, a zig-zag spring mounted on and extending between said side rails in a horizontal plane above the upper surface of said front rail with the front ends of its loops disposed adjacent a vertical plane through the rear edge of said front rail, a row of helical springs supported on said front rail with their top coils substantially in the horizontal plane of said zig-zag spring, and means to connect the top coil of each of said helical springs with the forward end of the nearest loop of said zig-zag spring.

2. A chair seat as claimed in claim 1 comprising further additional zig-zag springs mounted on and extending between said side rails in the horizontal plane of the first mentioned zig-zag spring and rearwardly thereof.

3. In a chair seat the combination of a frame having upright side and back rails and a front rail of a height substantially less than that of said side rails, a zig-zag spring mounted on and extending between said side rails in a horizontal plane above the upper surface of said front rail with the front ends of its loops disposed adjacent a vertical plane through the rear edge of said front rail, a row of helical springs supported on said front rail with their top coils substantially in the horizontal plane of said zig-zag spring, and means to connect the top coil of each of said helical springs with the forward end of the nearest loop of said zig-zag spring.

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