April 24, 1956 J. C. YOUNG 2,742,957

RESILIENT SEAT BACK CONSTRUCTION

Filed Jan. 12, 1953

Fig. 1

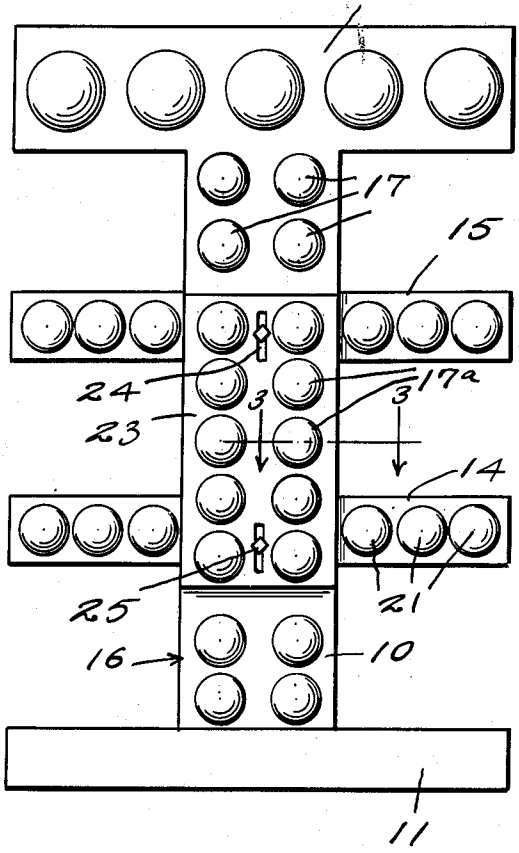


Fig. 2

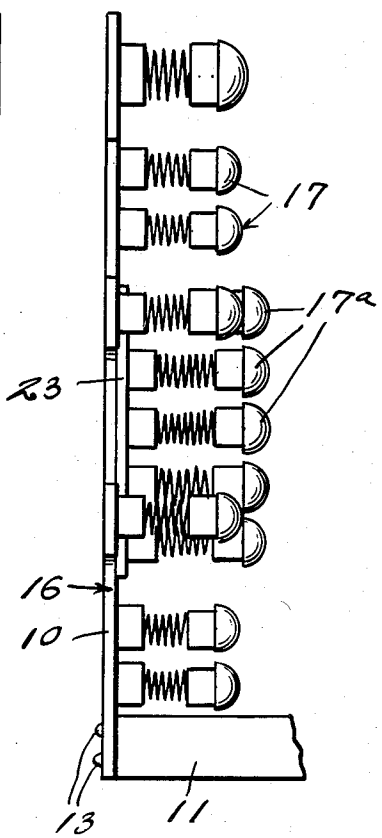
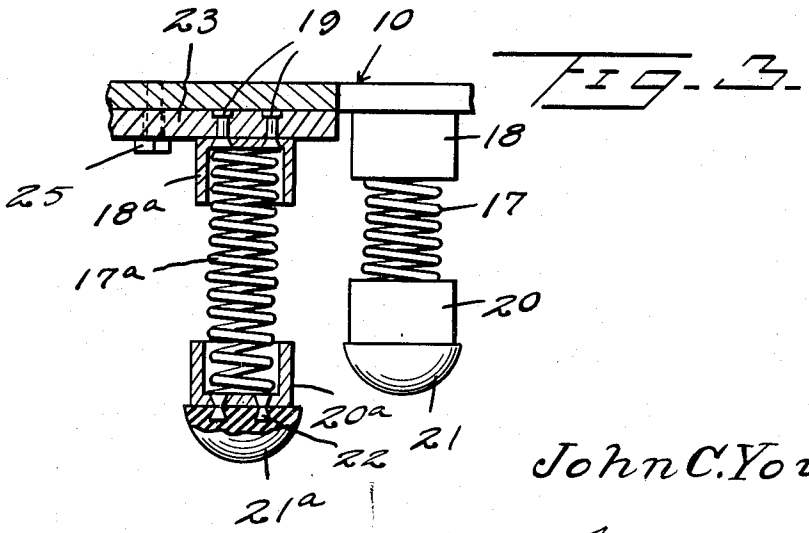


Fig. 3



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RESILIENT SEAT BACK CONSTRUCTION

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3 Claims. (Cl. 155—179)

This invention relates to an improved back construction for a seat.

An object of this invention is to provide an improved back constructioen for a seat, such as the front seat of an automobile, which will readily conform itself to the back of a person and will resiliently support the back.

Another object of this invention is to provide an improved back construction wherein a plurality of separate springs are secured to and extend from a support with the separate springs having individual cushion elements on their outer ends for individual contact with the back of a person.

A further object of ths invention is to provide an improved back construction which is so constructed and arranged as to form a ventilated back whereby air may readily circulate therethrough for direct contact with the back of a person.

With the above and other objects in view, my invention consists in the arrangement, combination and details of construction disclosed in the drawing and specification, and then more particularly pointed out in the appended claims.

In the drawing—

Figure 1 is a detailed front elevation of a seat back constructed according to an embodiment of this invention,

Figure 2 is a detailed side elevation of the back,

Figure 3 is a fragmentary sectional view taken on the line 3—3 of Figure 1.

Referring to the drawings, the numeral **10** designates generally a substantially upright plate or spine supporting member which is adapted to be secured to a seat frame **11** by fastening means **13**. The plate **10** has secured to the upper end thereof a horizontally disposed plate **12** which projects laterally of the opposite vertical edges of plate **10**.

A lower pair of laterally projecting flat bars **14** extend from the opposite vertical edges of plate **10** and a second pair of intermediate laterally projecting flat bars or arms **15** extend from the opposite vertical edges of plate **10**. The forward side of the total back frame, which is generally indicated by the numeral **16**, has secured thereto a plurality of springs **17**. The springs **17** are coil springs and are seated at their inner or rear ends in cup members **18** which are fixed by fastening means **19** to the frame **16**.

The outer or forward ends of the springs **17** have secured thereon cap members **20**, and cushion members **21** are secured to the cap members **20**.

As shown in Figures 2 and 3, intermediate springs **17*a*** are secured to a vertically adjustable plate **23** having spaced slots **24** through which adjusting bolts **25** engage for securing the plate **23** to the forward side of the plate **10** in the area adjacent to and including the space between the arms **14** and **15**. Springs **17*a*** are substantially

longer and stronger than the springs **17** so as to more snugly engage the small of the back of a person leaning thereagainst, and the vertical adjustment of plate **23** permits the intermediate unit to be adjusted for persons of different sizes. In other respects the springs **17*a*** are similar to the springs **17** and include base cups **18*a*** with caps **20*a*** mounted on the outer ends of the springs **17*a*** and cushion members **21*a*** secured by any suitable fastening means such as **22** to the caps **20*a***.

The spacing between the arms **14** and **15** is such that where the back structure herein disclosed is used with a swingable seat construction such as is disclosed in my co-pending application filed of even date, for swingable vehicle seat construction, the seat may readily turn or swing about the pivot thereof, with the steering wheel of the vehicle engaging between either the arms **14** and **15** or the arm **15** and the upper plate **12**. The back structure hereinbefore disclosed will provide a relatively skeleton-like back structure which will permit free ventilation or free circulation of air through the back structure.

I do not mean to confine myself to the exact details of construction herein disclosed, but claim all variations falling within the purview of the appended claims.

What I claim is:

1. A resilient seat back construction comprising a substantially upright elongated plate, an upper horizontal plate fixed to the upper end of said upright plate and projecting laterally of the vertical edges of the latter, a pair of horizontal lower oppositely extending arms carried by said upright plate, a pair of horizontal intermediate oppositely extending arms carried by said upright plate, a plurality of spaced forwardly projecting coil springs carried by said upright plate, said upper plates and said arms certain of said springs extending to one plane spaced from said plate and certain other of said springs extending to a plane spaced further from said plate than said one plane, and individual cushion means carried by the forward ends of said springs.

2. A seat back construction comprising a substantially upright flat frame member, a plate fixed to the forward side of said member, means vertically adjusting said plate relative to said member, a plurality of spaced forwardly projecting coil springs fixed to said member, a plurality of spaced forwardly projecting coil springs fixed to said plate, said first and second named springs projecting forwardly to different distances cups on the outer ends of said springs, and individual cushion means carried by said cups.

3. A seat back construction comprising a substantially upright flat frame member, a plate fixed to the forward side of said member, means vertically adjusting said plate relative to said member, a plurality of spaced forwardly projecting coil springs fixed to said member, a plurality of spaced forwardly projecting coil springs fixed to said plate, said latter-named springs projecting forwardly beyond said first-named springs, cups on the outer ends of said springs, and individual cushion means carried by said cups.

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