

R. KERR, Sr.
VENTILATED SEAT STRUCTURE.
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1,356,493.

Patented Oct. 19, 1920.

Fig. 1.

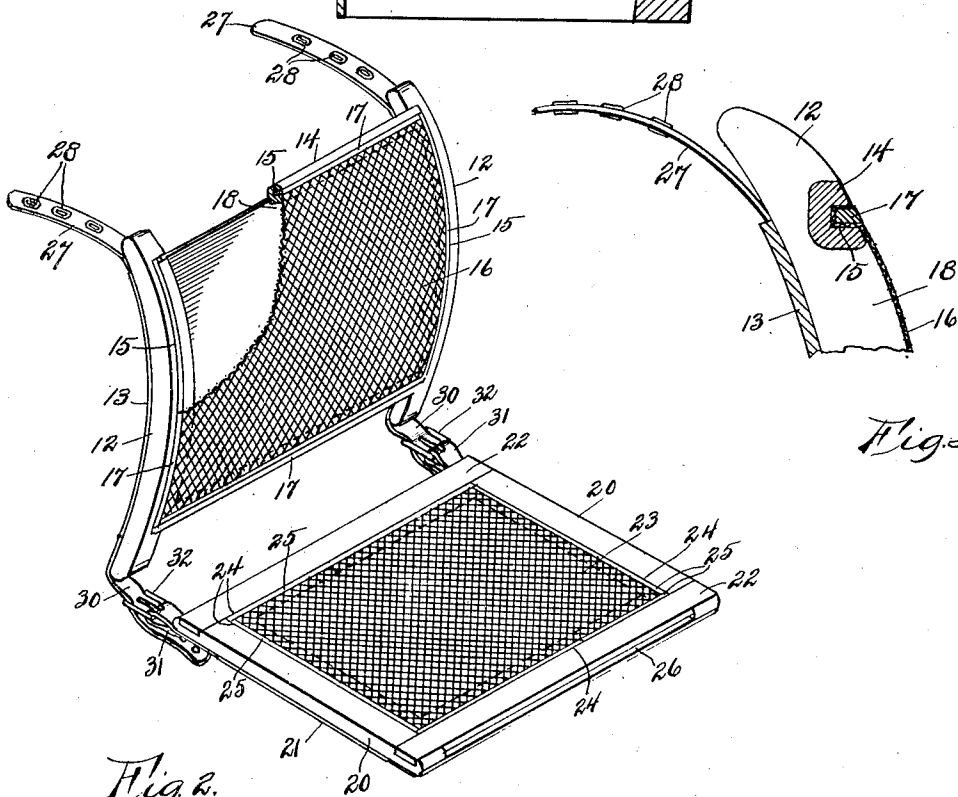
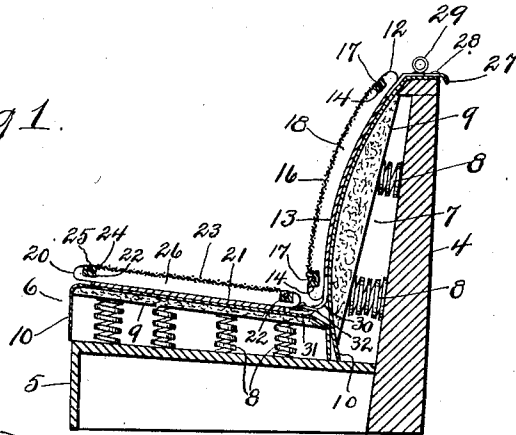
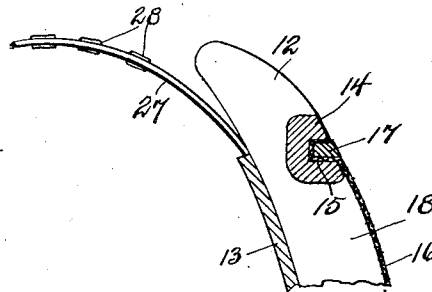


Fig. 3.



Witness:

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INVENTOR

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UNITED STATES PATENT OFFICE.

ROBERT KERR, SR., OF MANHATTAN, KANSAS.

VENTILATED-SEAT STRUCTURE.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, ROBERT KERR, Sr., a citizen of the United States, and resident of Manhattan, county of Riley, State of Kansas, have invented a certain new and useful Improvement in Ventilated-Seat Structures, of which the following is a complete specification.

This invention pertains to seats and has particular reference to the seats of automobiles, and aims to provide a ventilating structure in relation to the outer surface of either or both the seat bottom and the back of the seat.

For this purpose I provide a frame carrying a layer of perforated or ventilating material, and which is adapted to be supported by said frame in spaced and ventilating relation to the outer face of either the seat bottom or the back of the seat.

A further feature of the invention is the provision of frames carrying perforated material for ventilating purposes for both the seat bottom and the back of the seat, and means for supporting one of the frames at various elevations with reference to the back of the seat, together with connections between the same, permitting said variation of the position of said first frame.

With these general objects in view the invention will now be described by reference to the accompanying drawing illustrating one form of construction for embodying the improvement, after which the novel features therein will be particularly set forth as claimed.

In the drawing—

Figure 1 is a vertical sectional view of a seat structure having ventilating devices embodying the present improvement;

Fig. 2 is a perspective view on a larger scale, showing the ventilating devices with one of the same partly broken away; and

Fig. 3 is an enlarged sectional detailed view of a portion of one of the devices.

Referring to the drawing in detail, this shows a seat structure such as is commonly provided in automobiles, and comprising a back frame 4, and a seat bottom rest 5, on which is supported a seat bottom designated generally by the numeral 6, to the rear of which is mounted a back rest structure, designated generally by the reference numeral 7. Both the seat bottom and the back rest structures comprise a plurality of resilient spring elements 8, over which

is positioned layers of cushioning material 9, faced with coverings 10, of suitable flexible material, such as leather or the like.

It is found by experience, and particularly in the case of automobile seats, that there is a tendency to freely perspire about those parts of the body which are in contact with the surface of the seat structure. This is particularly annoying since it detracts from the comfort of the person, and soils his clothing by the increased tendency to pick up dust and grease by those portions of the clothing which have become moistened, and in addition to which these moist portions tend to mar the finish of the surface of the seat with which they come into contact. To overcome these disadvantages, I have devised a ventilating construction, adapted to be interposed between either or both the back rest and the seat bottom and the person occupying the seat. While this construction may be incorporated as a part of the original seat structure, I illustrate my improved feature as embodied in a device which may be applied either temporarily or permanently to the seat, for example to merely that portion of the seat representing the driver's position, where the advantages due to the device are especially to be desired. For the front face of the back rest I employ a frame of suitable proportions, and comprising side members 12, shaped to conform to the curvature of the back, and connected by a thin sheet of light material 13, across the rear edges of the members 12, whereby a smooth surface is provided for supporting the frame against the leather facing 10, of the back rest. At the top and bottom the side members are connected by transverse pieces 14, having grooves 15, for receiving the upper and lower edges of a sheet or layer of perforated material 16, such as interwoven strands of rattan, or the like, to provide a ventilating screen. The edges of said layer of material 16 are clamped in said grooves 15, as well as in similar grooves 15, at its sides in the side members 12, by means of strips 17, pressed tightly into said grooves. In this way an air space 18 is left between the material 16 and the back of the seat for allowing free circulation of the air to the rear of said screen material. A similar frame work is provided for the seat bottom, but comprising substantially straight side members 20, connected at the bottom by a smooth sheet

of material 21, and at the top by transverse strips 22, between which is stretched the layer of perforated material 23, having its edges clamped within grooves 24, by means of strips 25, the same as the back frame above described. This results in a free air circulating space 26, being left between the material 21, and the bottom of the screen.

A pair of flexible strips 27, are secured to the upper ends of the side members 12, and provided with a series of eyelets 28, whereby the back frame may be secured at varying elevations with reference to the back of the seat by means of buttons or screw-eyes 29, as illustrated in Fig. 1. The lower ends of said members 12 are provided with straps 30, adapted to be connected with straps 31 at the rear end of the members 20, buckles 32 being provided for the adjustable connection of said straps 30 and 31, and thus permitting the vertical shifting of the back frame without changing the position of the seat frame.

It will thus be seen that I have provided a simple and inexpensive arrangement and construction for effectively carrying out the desired object of the invention, it being apparent that the open air spaces 18 and 26, provide ample clearance for full and free circulation of the air between the body of the person and both the back rest and the bottom of the seat, and the screens of perforated material 16 and 23, leaves the clothing of the person at these points exposed to the effective ventilating action of the air in said air spaces. Thus any excessive accumulation of moisture, such as is usually experienced, is prevented and the other disadvantages hereinbefore enumerated are likewise overcome.

While I have illustrated and described the invention by means of what is now regarded as the preferred form of embodiment thereof, I desire to reserve the right to make such changes as may fairly fall within the scope of the appended claims.

What I claim is:

1. The combination with a seat having a back portion, of a separate frame shaped to conform to said back and provided with means for adjustably securing said frame at varying elevations with reference to said back, the frame being also provided with a layer of perforating material adapted to be supported by said frame in spaced relation to said back of the seat in position for engagement with the back of the person occupying such seat.

2. The combination with a seat having a back portion, of a pair of frames provided with layers of perforated material adapted to be supported by said frame in spaced relation to the back and bottom of the seat respectively, and means for adjustably securing together the adjoining edges of said frame.

3. The combination with a seat having a back portion, of a pair of frames provided with layers of perforated material adapted to be supported by said frame in spaced relation to the back and bottom of said seat respectively, means for supporting one of said frames at varying elevations with reference to said back, and means for adjustably connecting the adjoining edges of said frames.

In witness whereof I hereto affix my signature.

ROBERT KERR, SR.