D. BENSON AND G. K. BRUCE.

VENTILATED AUTOMOBILE DRIVER'S SEAT.

APPLICATION FILED JULY 16, 1920.

1,400,717. Patented Dec. 20, 1921.

Fig. 1.

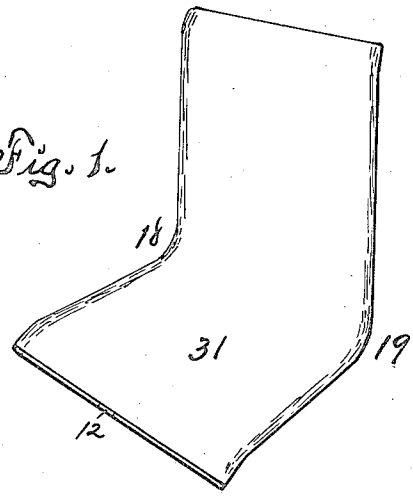


Fig. 2.

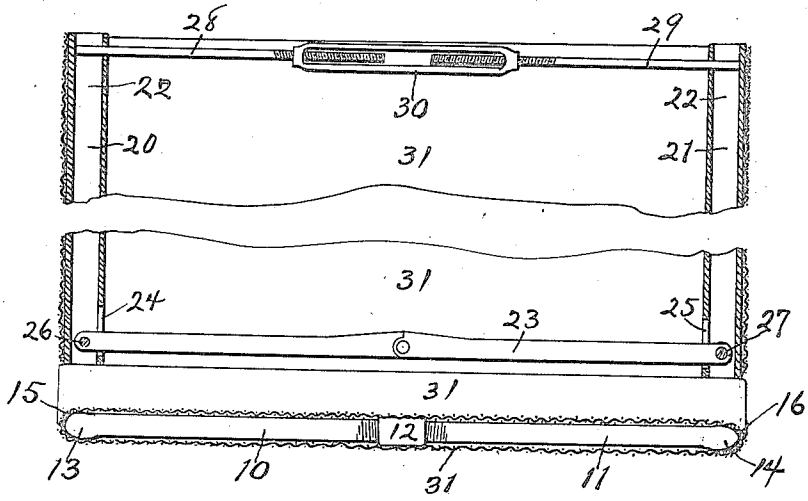
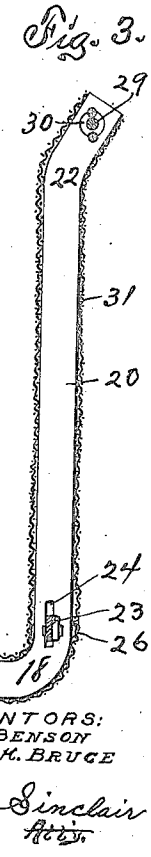


Fig. 3.



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DAVID BENSON AND GEORGE K. BRUCE, OF DES MOINES, IOWA.

VENTILATED AUTOMOBILE-DRIVER'S SEAT.

1,400,717. Specification of Letters Patent. Patented Dec. 20, 1921.

Application filed July 16, 1920. Serial No. 396,778.

To all whom it may concern:

Be it known that we, DAVID BENSON and GEORGE K. BRUCE, citizens of the United States of America, and residents of Des Moines, Polk county, Iowa, have invented a new and useful Ventilated Automobile-Driver's Seat, of which the following is a specification.

The object of this invention is to provide an improved seat or chair adapted to be removably and replaceably mounted and having means for automatic ventilation in use.

A further object of this invention is to provide an improved construction for a ventilated removable and replaceable seat or chair specially adapted for use by drivers or other occupants of automobiles.

A further object of this invention is to provide improved means for ventilating a seat.

A further object of this invention is to provide an improved construction for an adjustable seat-frame adapted to carry a tubular fabric seat and back of hammock type.

A further object of this invention is to provide an improved tubular fabric seat and back of hammock type.

Our invention consists in the construction, arrangement and combination of elements hereinafter set forth, pointed out in the claim and illustrated by the accompanying drawing, in which—

Figure 1 is a perspective of the complete device. Fig. 2 is a front elevation partly in section. Fig. 3 is a central vertical section of the device.

In the construction of the device as shown the numerals 10, 11 designate frame members preferably made of tubing formed with oppositely-threaded end portions arranged in alinement and connected by a screw coupling 12. The coupling 12 also provides means for adjusting the spacing apart of the adjacent end portions of the frames. The frame members 10, 11 are bent substantially at right angles at points 13, 14 and the central portions 15, 16 of the frames are arranged in parallel planes and extend rearwardly from said points of bending, there being an intermediate obtuse-angled bend 17 in each of said central portions immediately at the rear of the alining connected portions of the frames. The alining connected portions of the frames 10, 11 constitute the front and the central spaced portions of the frames constitute the sides of the bottom, hence the bends 17 provide for dropping the front slightly below the sides to simulate an ordinary curving or droop of the front of a chair-seat. The frames are bent again at right angles at points 18, 19 on an axis parallel with the alining connected front portions of the frames and are extended vertically from said bends, the vertical portions 20, 21 being spaced apart substantially the same as the side portions 15, 16 and constituting the sides of the back of the seat. There is an intermediate obtuse-angled bend 22 in each of the frame portions 20, 21 immediately below the upper ends thereof, whereby the upper end portions of the frames are inclined rearwardly, thus simulating the rearward curving of the top of the back of a chair in a common manner. The sides of the frame are connected adjacent to and above the bends 18, 19 by a knee connecting rod 23 which extends at its ends through slots 24, 25 into and is pivoted on horizontal pins or rivets 26, 27 mounted in the side portions 20, 21. The upper end portions of the frames are connected adjustably by alining rods 28, 29 extending loosely through holes in the inner wall of upper ends of the frame portions 20, 21 and bearing against the outer wall thereof, the spaced alining inner ends of the rods being oppositely threaded and connected by a turnbuckle 30. The turnbuckle 30 provides additional means for adjusting the width of the seat-frame and its adjustment reacts on the adjustment of the coupling 12 and the connecting rod 23. A seat cover 31, preferably made of fabric tubing as shown, is mounted on the seat frame and wholly embraces it, the frame being somewhat contracted by means of the coupling 12 and turnbuckle 30 and by flexing or breaking the joint of the knee connecting rod, to permit of the convenient envelopment of the frame by the cover. Thereafter, the frame is expanded laterally by straightening the knee connecting rod and operating the coupling 12 and turnbuckle expansively, thereby applying lateral strain on and stretching the tubular fabric cover. The amount of strain applied to the cover may be adjusted to compensate for stretch in use or to accommodate the supporting quality of the cover to the weight of the user.

In use, the vibration of the cover 31 by movements of the user flexes the fabric in a manner similar to the operation of bellows and causes air to pass through the fabric and also establishes various currents of air through the fabric tube, to the end of thoroughly ventilating the tube and preventing the accumulation of perspiration due to intimate association with the buttocks and shoulders of the user.

In use, the complete device as shown and described preferably is mounted loosely on the seat cushion of the driver's or other seat of an automobile and the resilience of said seat cushion is utilized in addition to the spring of the fabric tube.

We claim as our invention—

A seat comprising a frame formed with members having laterally-bent alining end portions, means for adjustably connecting said end portions, said members being further bent on an axis substantially parallel with said alining end portions and formed with slots adjacent the latter bends, a foldable connecting rod extending between said members and having its ends within said slots and pivoted to the members, and a connecting device between the remaining ends of the members arranged for longitudinal adjustment, together with a fabric tube mounted in embracing relation on said frame.

Signed at Des Moines, in the county of Polk and State of Iowa, this 3d day of July, 1920.

DAVID BENSON.
GEO. K. BRUCE.