July 8, 1969 W. S. RADFORD 3,454,302

SUPPORT DEVICE

Filed July 17, 1967 Sheet 1 of 2

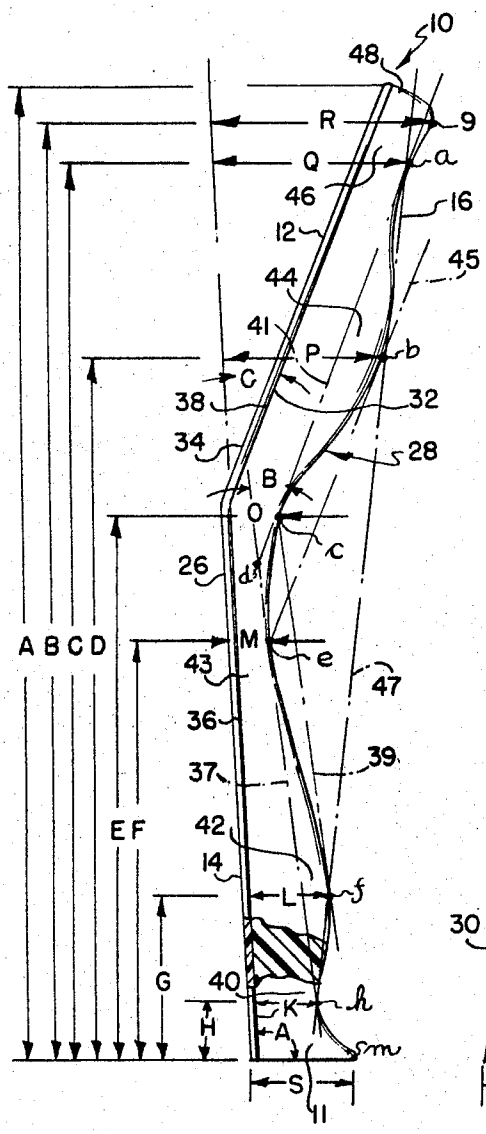


FIG. 1

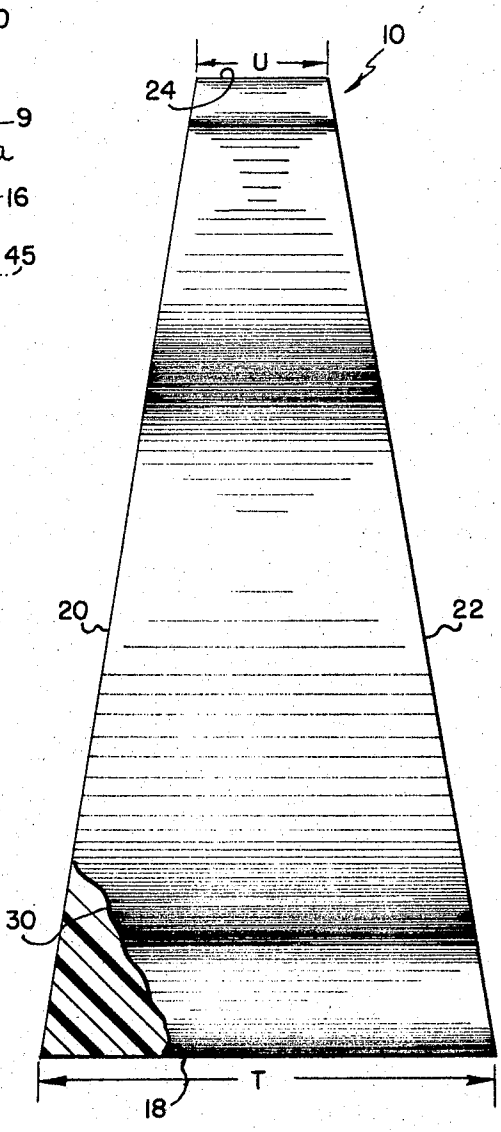


FIG. 2

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SUPPORT DEVICE

Filed July 17, 1967 Sheet 2 of 2

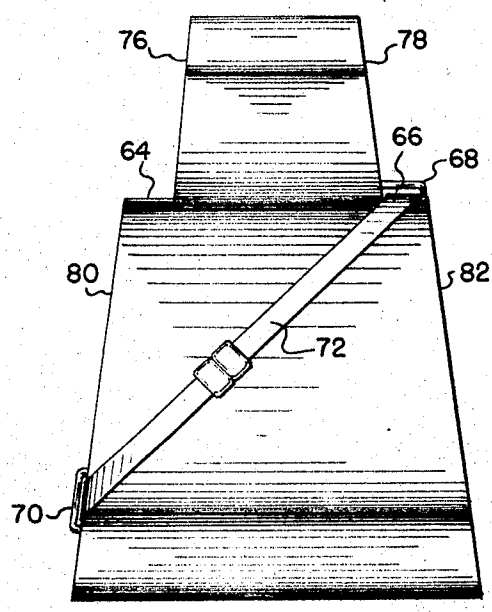


FIG. 3

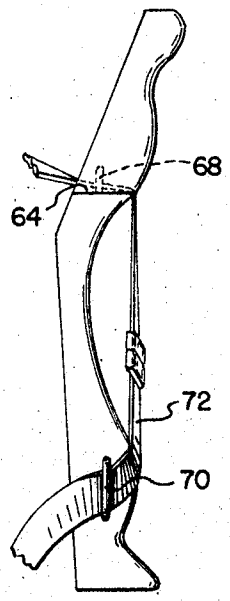


FIG. 4

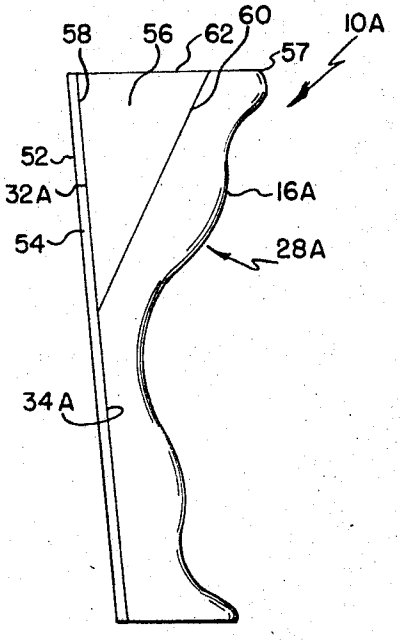


FIG. 5

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United States Patent Office 3,454,302 Patented July 8, 1969

3,454,302

SUPPORT DEVICE

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Filed July 17, 1967, Ser. No. 653,873
Int. Cl. A47c 7/02, 7/13, 1/10
U.S. Cl. 297—230 25 Claims

ABSTRACT OF THE DISCLOSURE

A therapeutic support device for supporting the head, neck and the back of a human body including a base portion adapted to rest on the seat of a chair, and an upright portion extending upwardly from said base portion. The front surface of the upright portion includes a plurality of alternately disposed convex and concave portions in merging relationship adapted to position and support specific parts of the body in predetermined relative position, thereby providing maximum comfort and improved posture, and when used in an automobile serves to prevent sudden movement of the upper portion of the body rearwardly should the automobile be struck from behind.

BACKGROUND OF THE INVENTION

This invention relates to a therapeutic support device, and more particularly to a device for supporting and positioning the posterior portions of the neck, head and back of a human body.

It has long been recognized that there is a need to provide a proper support for the human body when in the sitting position. This need is especially important to those persons whose occupations require them to remain seated over a prolonged period of time, such as truck drivers, cab drivers, etc. This need has also become increasingly more important due to the fact that there has been a great increase in a number of automobiles being driven by the ordinary citizen, and being driven over long distance on vacations, tours, and the like. Because of this substantial increase in the number of automobiles on the road, it has not only become necessary to provide a support which will provide comfort to the driver, but it has also become necessary to provide a support which will reduce or prevent serious injury as a result of collisions, and more particularly collisions where one automobile is struck in the rear by another automobile.

When the body has remained in the seated position for any considerable length of time, the natural tendency is for the body to sag or otherwise be improperly positioned so that discomfort and even pain may result.

Many previous attempts have been made to provide supports for the human body when in a seated position to attain increased comfort, but for the most part these devices have only met with partial success due to the fact that they have only attempted to solve part of the problem. Most of the devices are restricted to only portions of the body, whereas, other devices, although covering a substantial portion of the body, have not properly positioned the body. Instead, these devices have generally attempted to only provide cushioned supports, which initially give the impression of comfort, and only result in aggravating the discomfort which can be anticipated if a person is to remain in substantially the same position for any period of time. Similarly, many attempts have been made to provide headrests or supports for the head to prevent so-called "whiplash" injuries, but these devices have been directed primarily at preventing rearward movement of the head and have given no consideration to the proper positioning of the head, neck and back relative to one another while incorporating the aforementioned feature.

SUMMARY OF THE INVENTION

The present invention contemplates providing a scientifically structured support device for supporting the head, neck and back of the human body comprising a base portion and an upright portion extending upwardly from the base portion, the upright portion having a rear surface and a sinuously curved front surface extending over the full length of the device. The front surface includes upper, intermediate and lower concave portions in conjunction with upper and lower convex portions disposed in alternately merging relationship with one another. The upper concave and convex portions are disposed forwardly of the intermediate and lower concave portions and of the lower convex portion in a direction away from the rear surface when the support is in the installed position. The upper concave and upper convex portions are disposed with relation to the intermediate concave portion, lower convex portion, and lower concave portion so that a line drawn tangent to the curves of the upper concave portion and the intermediate concave portion is angularly disposed with relation to a line drawn tangent to the intermediate concave portion and the lower concave portion so that particular parts of the human back, head and neck are idsposed in an ideal support position relative to each other when in the seated position thereof. The invention provides a unique combination of geometric and dimensional proportioning for properly supporting the back, neck and head to reduce the probability of injury as a result of "whiplash." The unique support is the result of considerable research and extensive testing by doctors, manufacturers and drivers. The support provides maximum comfort, relieves tiredness, eliminates stiffness while driving, working or just sitting at home. The support also aids in the relief and rehabilitation of major and minor back and spinal conditions. It helps to alleviate nerve root aggravations due to neuro-muscular fatigue, and helps, therefore, to relieve mental fatigue which is often associated with such neuro-muscular fatigue.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a side elevational view of the support device made in accordance with the present invention, and partly in section;

FIG. 2 is a front view, partly in section, of the support device of the present invention;

FIG. 3 is a front view, on a reduced scale, of another embodiment of the present invention;

FIG. 4 is a side view of the embodiment shown in FIG. 3; and

FIG. 5 is a side elevational view of a further embodiment of the present invention.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

Referring to FIGS. 1 and 2 of the drawings, the back support of the present invention is illustrated generally at **10** and embodies a portable article adapted to be placed on a chair, car seat, or the like. The support **10** is adapted to support the torso of a human body, including the head, neck and back, in a predetermined position, whereby maximum comfort is achieved when the body in in a seated position.

The article comprises a unitary, one-piece device having a base portion **11** and an upright portion **13** extending from the base portion **11**. The upright portion **13** may have a generally flat biplanar back surface having an upper portion **12**, a lower portion **14**, and a front surface **16** which is sinuously curved in a manner to be described hereinafter. When in front elevation, as seen in FIG. 2, the support is polygonal in configuration having side surfaces **20** and **22**, a top surface **24**, and a bottom surface **18**

adapted to rest on the confronting surface of a chair or seat when the support is in use.

In a preferred embodiment, the interior of the support **10** comprises a resilient cushion member **28** and a substantially rigid back plate **26** which is adapted to maintain the cushion member **28** in a substantially fixed, elongated upright position. The back plate **26** may be of any suitable material, such as plexiglass or the like, having a uniform thickness of approximately ¼ inch. The cushion member **28** is preferably of polymeric foam, such as urethane foam, but may be of any suitable resilient material or combination of materials which will provide a relatively firm, yet resilient cushioned support. The cushion member **28** and the back plate **26** may be joined together in any suitable manner, such as by an adhesive or the like. The entire unit is preferably covered on all surfaces by a fabric cover member **30** or other suitable material, such as polyvinyl chloride, which may be in sheet form, as desired. The cover member **30** may be made in the form of a bag or envelope having an open end into which the back plate **26** and the cushion member **28** may be inserted, whereupon, the open end of the cover member **30** may be sealed closed in any suitable manner. Although any end of the cover member may be open for the insertion of the back plate **26** and the cushion **28**, preferably the opening should be in the bottom surface **18** which is unexposed to view when the cushion is in use. To this end, the support **10** is preferably trapezoidal in shape, in front elevation, as seen in FIG. 2, having generally angular side surfaces **20** and **22**, inclined toward one another in a direction away from the bottom surface **18** and terminating in a generally linear top surface **24** which is substantially parallel to the bottom surface **18**. This construction provides for a large cross-sectional area at the bottom end of the cushion, whereby the cover member **30** may be easily slipped over the narrower upper portion of the support and pulled down over the gradually widening lower portion of the support. In addition, this construction also provides a form of support which is more economical to manufacture and does not impair peripheral and/or rear vision when employed by the driver of an automobile.

In accordance with the invention, the back plate **26** is preferably of uniform thickness and includes generally planar lower and upper portions **36** and **38** which provide the rearward support for the flat back surfaces **14** and **12**, respectively. The lower portion **36** extends generally vertically upward from the bottom surface **18**. Preferably, the general plane of the portion **36** is disposed at an angle A in the range between 90 to 95 degrees (FIG. 1) with respect to the general plane of the bottom surface **18**. The upper portion **38** of the base plate **26** may extend angularly forwardly and upwardly from the lower portion **36**, thus providing increased strength to resist rearward movement of the upper portion of the support with respect to the lower portion. Although the upper portion **38** may be disposed at any angle with respect to the lower portion **36**, preferably, the angle C between the general plane of the lower portion **36** and the general plane of the upper portion **38** should be approximately in the range between about 10 to 15 degrees and preferably about 13 degrees, for a reason which will be related hereinafter.

The sinuously curved front surface **16** of the cushion member **28** includes a plurality of alternately disposed convex **42**, **44** and concave **40**, **43**, **46** portions forming a continuous surface and which are angularly disposed with respect to one another so as to automatically place certain portions of the head, neck and back of the occupant in a predetermined ideal support position with respect to one another. As shown, the front surface **16** of the cushion member **28** extends from a point *m* common to the front surface and bottom surface **18** generally inwardly and then curves gradually upwardly and outwardly so as to form a lower concave portion **40**. The

deepest point on the curve of the cavity **40**, designated at *h*, is disposed so as to coincide with the posterior mid-sacrum of the occupant. The curvature of the portion of cavity **40** from the point *h* to the point *m* is adapted to properly position the coccyx with respect to the mid-sacrum. The front surface **16** curves from the point *h* generally upwardly and outwardly and then generally inwardly and outwardly so as to form a lower convex portion **42** having an outermost point with respect to the back surface **32** of the cushion member **28** designated at point *f*. Point *f* is positioned at a predetermined angle and distance from the point *h* so as to properly orient the posterior mid-lumbar with respect to the posterior mid-sacrum. From the point *f* the front surface **16** extends generally upwardly and inwardly and then upwardly to a point *e*, then generally upwardly and forwardly to a point *c*, and then still forwardly and upwardly to a point *b* forming a central concave portion **43**. In addition to being the deepest point on the central concave portion **43**, the point *e* is also the point of tangency of a line **37** (FIG. 1) drawn tangent to the lower concave portion, at *h*, to the central concave portion **43**. The point *e* is adapted to coincide with the posterior mid-dorsum so as to dispose this part of an occupant's back with respect to the previously mentioned posterior mid-lumbar and posterior mid-sacrum. The surface **16** continues from the point *b* generally vertically upwardly to a point *a*, thereby completing the formation of an upper convex portion **46**, and then continues upwardly and forwardly terminating in a head portion **48**. The point *b* is the outermost projection of the upper convex portion **44** with respect to the back plate **26**, and is disposed so as to coincide with the posterior mid-cervical region and properly position this part of the occupant's back with respect to the previously mentioned parts. The point *a* is the deepest point on the upper concave portion **46** and is adapted to properly position the center of the posterior occiput. The front surface **16** may terminate at any point above the point *a*, but preferably is continued upwardly and outwardly to point *g* from whence it continues generally upwardly and then rearwardly in a direction generally perpendicular to the back plate **26** so as to form the substantially rounded head portion **48**.

Point *c*, as previously indicated, is located intermediate points *e* and *b* on the curve of the central concave portion **42**, and is preferably spaced apart from the back plate **26** a distance equal to the distance by which the point *e* is spaced from the back plate **26**.

The points *c*, *e*, *f* and *h* are positioned with respect to one another such that a line **39** drawn from the point *c* tangent to the lower convex portion **42**, at *f*, is generally parallel to a line **37** drawn tangent to the lower concave portion **40** and the ceneral concave portion **42** at the points *h* and *e*, respectively. The points *a*, *b*, *c*, and *e* are disposed in relation to one another such that a line **45** drawn from the point *b* tangent to the upper convex portion **44** at the point *b* will be generally parallel to line **41** drawn tangent to the central concave portion **42** at the point *c* on the upper concave portion **46** at the point *a*. The distance between the points *c* and *d* is preferably one-half the distance between the points *e* and *d*, whereas, the distance between the points *a* and *c* and *e* and *h* are preferably equal to one another.

As can be seen in FIG. 1, extensions of the lines **37** and **41** are disposed so that they intersect one another at a point *d*, and the extension of line **37** would extend beyond the point *d* so as to form an angle B. The angle B is preferably in the range between about 15 to 20 degrees and preferably 18 degrees. If the points *c*, *e*, *h* and *f* were connected to form a first trapezoid, and the points *a*, *b*, *c* and *e* were connected to form a second trapezoid having a common side *c–e*, the points *a*, *b*, *c*, *e*, *f* and *g* remain disposed in the same ideal angular relationship to one another for a given angle of B.

When the support is positioned properly for use, as

shown in FIG. 1, the point *g* is disposed outwardly of the point *a*, and the point *a* is disposed outwardly of point *d*. Point *b* is disposed generally vertically below point *a* with respect to the bottom surface **18** but outwardly of point *d*. Point *b* is also disposed outwardly of point *f*, which is disposed inwardly of point *d*. Point *h* is disposed inwardly of point *f*, but is disposed outwardly of point *c*, which is disposed outwardly of point *e*. It may also be seen from FIG. 1 that a straight line **47** will pass through the points *a*, *b*, *f* and *h*.

By way of example, the following Table A gives typical dimensions corresponding to the representative letters on the drawings for one size of support which would be satisfactory for most applications, that is, for persons in a height range from about 5 feet 5 inches to 6 feet tall.

Table A

Dimension location:	Inches
A	34
B	33
C	31½
D	24⅝
E	19⅛
F	15
G	6
H	2¼
K	2¼
L	2⅞
M	1¼
O	1½
P	5½
Q	7
R	7½
S	3½

It should be understood that although the support **10** has been described as having a bi-planar back surface, it may have a generally planar flat back surface **52** formed by a generally planar back plate **54**, as shown in FIG. 5. As shown in FIG. 5, the support **10A** may have a cushion member **28A** having a substantially straight back surface **32A** conforming to the straight front surface **34** of the back plate **54**. Cushion member **28A** may be of a single piece construction and/or may have a wedge-shaped filler member **56** to support the front surface **16A**, in the aforementioned proper position. The filler member **56** may include a generally flat back surface **58** adapted to be disposed adjacent the front surface **34A** of the back plate **54** in confronting relation, and a front surface **60** angularly disposed with relation to the back surface and adapted to position the front surface **16A** in the manner previously described. The top surface **62** of the filler member may be made to coincide with the top surface **57** of the cushion member **28A** so as to form a continuous generally linear top surface for the support. The wedge-shaped filler member **56** may be made of any suitable material, but preferably should be of a lightweight, resilient material, such as urethane foam, of which the cushion member **28A** may also be made. The filler member **56** may be removably inserted between the back plate **52** and the cushion member **28A** or may have applied to its back surface **58** and front surface **60** by a suitable adhesive so as to bond these surfaces with the confronting surfaces of the back plate **52** and the cushion member **28A**, as desired.

Although the support has been shown to be preferably of a trapezoidal configuration, when viewed in front elevation, it may be of any configuration which will provide sufficient contact with and support for the various portions of occupant's torso, as hereinabove referred to.

Another embodiment of the present invention is shown in FIG. 3. In this embodiment, the support **10B** has cutout portions defined by shoulders **64** and **66** which are generally parallel to the bottom surface **74**, and upper side surfaces **76** and **78** which extend generally upwardly from the innermost portion of the shoulders **64** and **66** generally parallel to the lower side surfaces **80** and **82**. One of the shoulders, such as **66**, may be provided with a strap-like support member **68**, which may be made of the same material as the cover, and which may be sewn or secured to the support in any suitable manner. Another strap **70** may be disposed along one side of the support, such as at **80**, and may be secured thereto in a manner similar to the strap **68**. Both straps **64** and **66** are adapted to receive the ends of a safety belt **70** therethrough. The safety belt may be secured to supports on the framework of an automobile in any conventional manner well-known in the art. The belt **70** is preferably disposed angularly and transversely of the front of the support so that one portion of the strap will pass over one shoulder and under the opposite arm of a person using the device.

By positioning and supporting the various parts of the body herein referred to, the support herein described will promote and maintain proper posture when used over an extended period of time, particularly for those persons who remain seated for long periods of time. This is accomplished due to the fact that although the support has a cushioned member, the density of the cushion member is such that the parts of the body are made to conform to the ideal configuration herein defined, and prevents the cushion from conforming to the shape or formation of the part of the body of the user.

The terms and expressions which have been used are used as terms of description and not of limitation, and there is no intention in the use of such terms and descriptions of excluding any equivalents of any of the features shown and described, or portions thereof.

I claim:

1. A support device for use in supporting the human body including back, neck and head, said device comprising,

a base portion and an upright portion extending generally upwardly from said base portion,

said upright portion having a rear surface and a sinuously curved front surface extending from top to bottom thereof,

said front surface including an upper, intermediate and lower concave portions, and upper and lower convex portions disposed in alternately merging relationship with one another,

said upper concave and convex portions being disposed forwardly of said intermediate and lower concave portions and of said lower convex portion in a direction away from said rear surface in the installed position thereof,

the outermost portion of the base is disposed forwardly of the outermost portion of said lower convex portion and rearwardly of the innermost portion of said upper concave portion, and

the outermost portion of said base portion is disposed rearwardly of the outermost portion of the upper convex portion.

2. A support device for use in supporting the human body including the back, neck and head, said device comprising,

a base portion and an upright portion extending generally upwardly from the base portion,

said upright portion having a rear surface and a sinuously curved front surface extending from top to bottom thereof,

said front surface including an upper, intermediate, and lower concave portions, and upper and lower convex portions disposed in alternately merging relationship with one another,

said upper concave and convex portions being disposed forwardly of said intermediate and lower concave portions and of said lower convex portion in a direction away from said rear surface in the installed position thereof,

a first line drawn tangent to said upper concave portion and said intermediate concave portion is disposed angularly forwardly with respect to a second line drawn tangent to said lower concave portion and said intermediate concave portion, and

said first line is generally parallel to a third line drawn tangent to said upper convex portion and intersecting the intermediate portion at the point of tangency of said second line.

3. A support device in accordance with claim **2**, wherein the upper concave portion is disposed forwardly of the upper convex portion in a direction away from said rear surface.

4. A support device in accordance with claim **2**, wherein the intermediate concave portion is disposed rearwardly of said upper and lower convex portions in a direction away from said front surfaces.

5. A support device in accordance with claim **4**, wherein

the intermediate concave portion is disposed rearwardly of the upper and lower concave portions in a direction away from said front surface.

6. A support device in accordance with claim **2**, wherein

said upper concave portion terminates upwardly in an outwardly curved head portion, the outermost portion of the head portion being disposed forwardly of the outermost portion of said upper convex portion in a direction away from said rear surface.

7. A support device in accordance with claim **9**, wherein

said point of tangency of said upper concave portion and said first line, said point of tangency of said third line and said upper convex portion, said point of tangency of said fourth line and said lower convex portion, and said point of tangency of said second line and said lower concave portion lie in the same general plane with a fifth line extending through said points.

8. A support device in accordance with claim **2**, wherein

said rear surface is generally planar.

9. A support device for use in supporting the human body including the back, neck and head, said device comprising,

a base portion and an upright portion extending generally upwardly from the base portion,

said upright portion having a rear surface and a sinuously curved front surface extending from top to bottom thereof,

said front surface including an upper, intermediate, and lower concave portions, and upper and lower convex portions disposed in alternately merging relationship with one another, and

said upper concave and convex portions being disposed forwardly of said intermediate and lower concave portions and of said lower convex portion in a direction away from said rear surface in the installed position thereof,

said first line is generally parallel to a third line drawn tangent to said upper convex portion and intersecting the intermediate portion at the point of tangency of said second line, and

said second line is disposed generally parallel to a fourth line drawn tangent to the lower convex portion and intersecting the intermediate portion at the point of tangency of said first line.

10. A support device for use in supporting the human body including the back, neck and head, said device comprising,

a base portion and an upright portion extending generally upwardly from the base portion,

said upright portion having a rear surface and a sinuously curved front surface extending from top to bottom thereof,

said front surface including an upper, intermediate, and lower concave portions, and upper and lower convex portions disposed in alternately merging relationship with one another, and

said upper concave and convex portions being disposed forwardly of said intermediate and lower concave portions and of said lower convex portion in a direction away from said rear surface in the installed position thereof,

a first line drawn tangent to said upper concave portion and said intermediate concave portion is disposed angularly forwardly with respect to a second line drawn tangent to said lower concave portion and said intermediate concave portion, and

the point of tangency of said first line with said intermediate portion and the point of intersection of said first and second lines is approximately one-half the distance between the point of tangency of said second line with a said intermediate portion and said point of intersection of said first and second lines.

11. A support device for use in supporting the human body including the back, neck and head, said device comprising,

a base portion and an upright portion extending generally upwardly from the base portion,

said upright portion having a rear surface and a sinuously curved front surface extending from top to bottom thereof,

said front surface including an upper, intermediate, and lower concave portions, and upper and lower convex portions disposed in alternately merging relationship with one another, and

said upper concave and convex portions being disposed forwardly of said intermediate and lower concave portions and of said lower convex portion in a direction away from said rear surface in the installed position thereof, and

said rear surface is bi-planar, having a lower portion extending generally vertically from said base portion and an upper portion angularly disposed with relation to said lower portion in a direction toward said front surface.

12. A support device for use in supporting the human body including the back, neck and head, said device comprising,

a base portion and an upright portion extending generally upwardly from the base portion,

said upright portion having a rear surface and a sinuously curved front surface extending from top to bottom thereof,

said front surface including an upper, intermediate, and lower concave portions, and upper and lower convex portions disposed in alternately merging relationship with one another, and

said upper concave and convex portions being disposed forwardly of said intermediate and lower concave portions and of said lower convex portion in a direction away from said rear surface in the installed position thereof,

a first line drawn tangent to said upper concave portion and said intermediate concave portion is disposed angularly forwardly with respect to a second line drawn tangent to said lower concave portion and said intermediate concave portion, and

the distance between the point of tangency of said first line with said upper concave portion and said intermediate portion is substantially equal to the distance between the point of tangency of said second line with said lower concave portion and said intermediate portion.

13. A support device for use in supporting the human body including the back, neck and head, said device comprising,

a base portion and an upright portion extending generally upwardly from the base portion,

said upright portion having a rear surface and a sinuously curved front surface extending from top to bottom thereof,

said front surface including an upper, intermediate, and lower concave portions, and upper and lower convex portions disposed in alternately merging relationship with one another, and

said upper concave and convex portions being disposed forwardly of said intermediate and lower concave portions and of said lower convex portion in a direction away from said rear surface in the installed position thereof,

a substantially rigid back plate member disposed in engagement with the rear surface of the upright portion,

said plate member having a bi-planar contour, in side elevation, and

said rear surface corresponding in contour to said back plate member.

14. A support device in accordance with claim **13**, including

a cover member disposed in closely encompassing relationship about said back plate member, said upright portion, and said base portion.

15. A support device for use in supporting the human body including the back, neck and head, said device comprising,

a base portion and an upright portion extending generally upwardly from the base portion,

said upright portion having a rear surface and a sinuously curved front surface extending from top to bottom thereof,

said front surface including an upper, intermediate, and lower concave portions, and upper and lower convex portions disposed in alternately merging relationship with one another, and

said upper concave and convex portions being disposed forwardly of said intermediate and lower concave portions and of said lower convex portion in a direction away from said rear surface in the installed position thereof,

a substantially rigid, generally planar back plate member disposed in engagement with the rear surface of said upright portion, and

said rear surface corresponding in contour to said plate member,

a block-like member disposed between said back plate and said upright portion,

said block-like member having a generally flat back surface adapted to conform to the inner surface of said back plate, and

a front surface angularly disposed with relation to said back surface so that a line drawn tangent to the upper concave portion and the intermediate portion of said upright portion is angularly disposed with relation to a line drawn tangent to said intermediate portion and said lower concave portion of said upright portion.

16. A support device for use in supporting the human body including the back, neck and head, said device comprising,

a base portion and an upright portion extending generally upwardly from the base portion,

said upright portion having a rear surface and a sinuously curved front surface extending from top to bottom thereof,

said front surface including an upper, intermediate, and lower concave portions, and upper and lower convex portions disposed in alternately merging relationship with one another, and

said upper concave and convex portions being disposed forwardly of said intermediate and lower concave portions and of said lower convex portion in a direction away from said rear surface in the installed position thereof, and

support means mounted on said device adapted to receive the free ends of a safety belt therethrough.

17. A support device for use in supporting the human body including the back, neck and head, said device comprising,

a base portion and an upright portion extending generally upwardly from the base portion,

said upright portion having a rear surface and a sinuously curved front surface extending from top to bottom thereof,

said front surface including an upper, intermediate, and lower concave portions, and upper and lower convex portions disposed in alternately merging relationship with one another,

said upper concave and convex portions being disposed forwardly of said intermediate and lower concave portions and of said lower convex portion in a direction away from said rear surface in the installed position thereof,

said upper concave portion being disposed forwardly of the upper convex portion in a direction away from said rear surface,

said intermediate concave portion being disposed rearwardly of said upper and lower convex portions in a direction away from said front surface, and

said intermediate concave portion being disposed rearwardly of the upper and lower concave portions in a direction away from said front surface.

18. A support device in accordance with claim **17**, including

a substantially rigid back plate member disposed in engagement with the rear surface of said upright portion and

said rear surface corresponding in contour to said back plate member.

19. A support device in accordance with claim **17**, including

a cover member disposed in closely encompassing relationship about said back plate member, said upright portion, and said base portion.

20. A support device in accordance with claim **18**, wherein

said back plate member includes a generally planar lower portion, and the transverse distance between the deepest point on the upper concave portion and the general plane of said lower portion is greater than the maximum transverse distance between the outermost point on the upper convex portion and the general plane of the lower portion.

21. A support device in accordance with claim **20**, wherein

the transverse distance between the outermost point on the upper convex portion and the general plane of the lower portion is greater than the transverse distance between the outermost point on the lower convex portion and the general plane of said lower portion.

22. A support device in accordance with claim **21**, wherein

the transverse distance between the deepest point on the upper concave portion and the general plane of the lower portion is greater than the transverse distance between the deepest point on the lower concave portion and the general plane of said lower portion.

23. A support device in accordance with claim **22**, wherein

the transverse distance between the deepest point on the intermediate concave portion and the general plane of said lower portion is less than the transverse distance between the deepest point on the lower concave portion and the general plane of said lower portion.

24. A support device in accordance with claim **23**, wherein

the transverse distance between the outermost portion of the base and the back plate is at least equal to the transverse distance between the innermost point on the lower concave portion and the general plane of the lower portion.

25. A support device in accordance with claim 17, wherein

said plate member is generally bi-planar in configuration, in side elevation, including an upper portion angularly disposed with respect to said lower portion in a direction toward said front surface.

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U.S. Cl. X.R.

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