

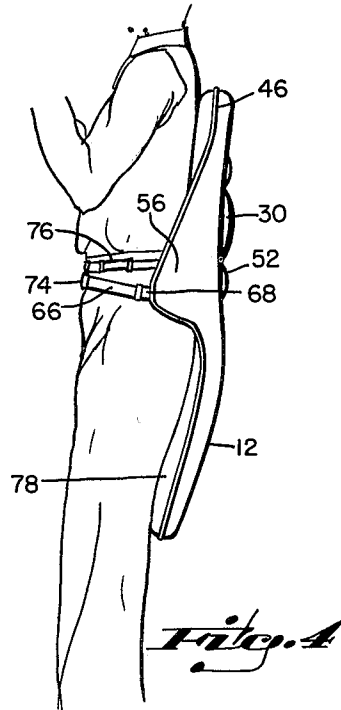
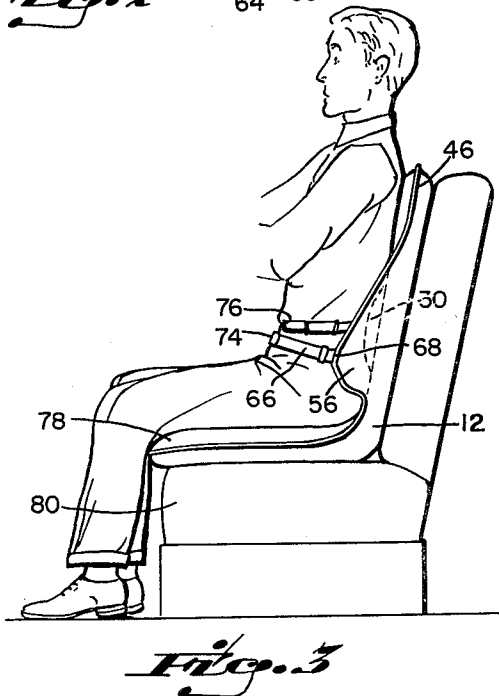
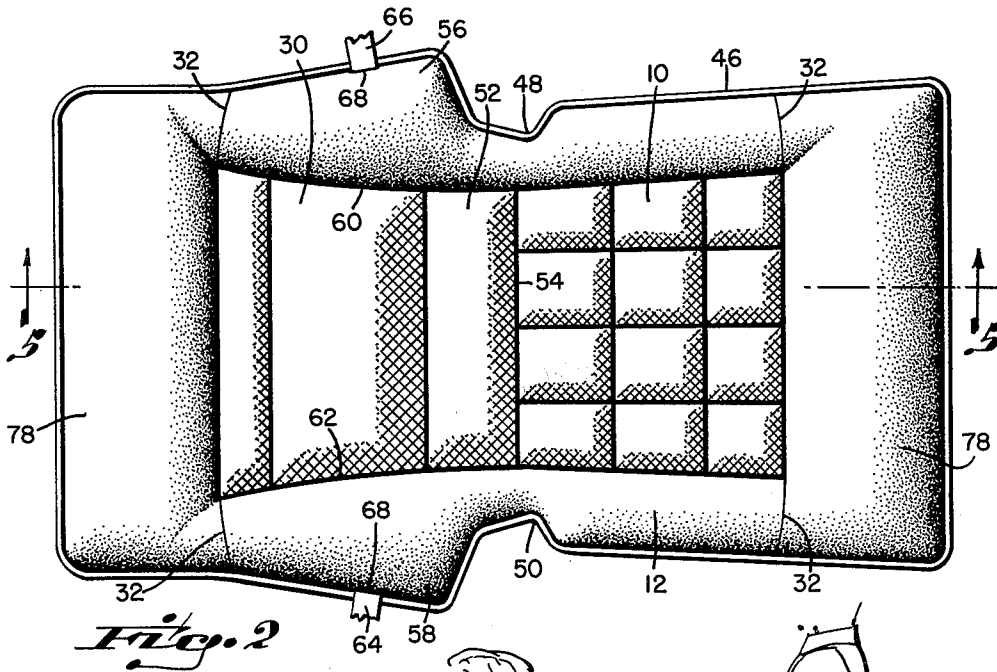
June 11, 1963

M. E. WILSON
BODY CUSHION

3,093,407

Filed Aug. 11, 1961

3 Sheets-Sheet 2



INVENTOR.
MINOR E. WILSON

BY

Warren Kinney, Jr.
ATTORNEY

June 11, 1963

M. E. WILSON
BODY CUSHION

3,093,407

Filed Aug. 11, 1961

3 Sheets-Sheet 3

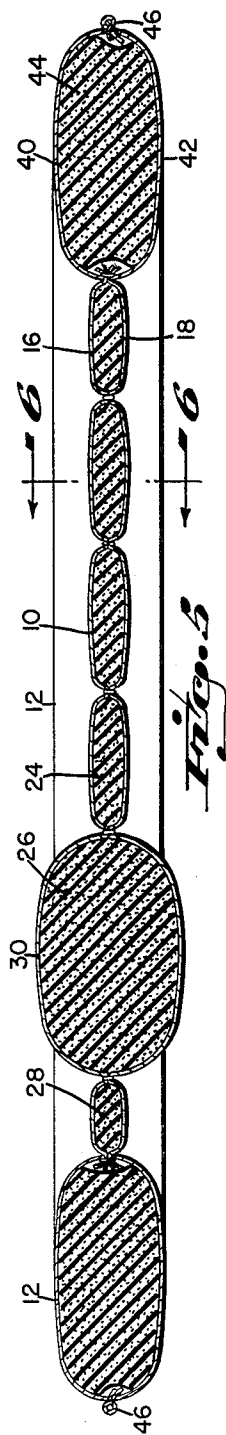


Fig. 5

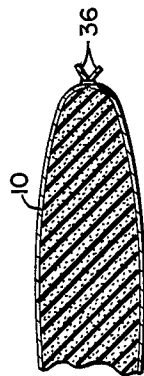


Fig. 7

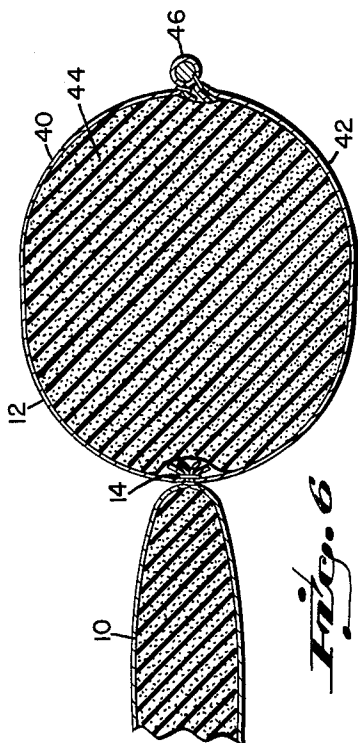


Fig. 6

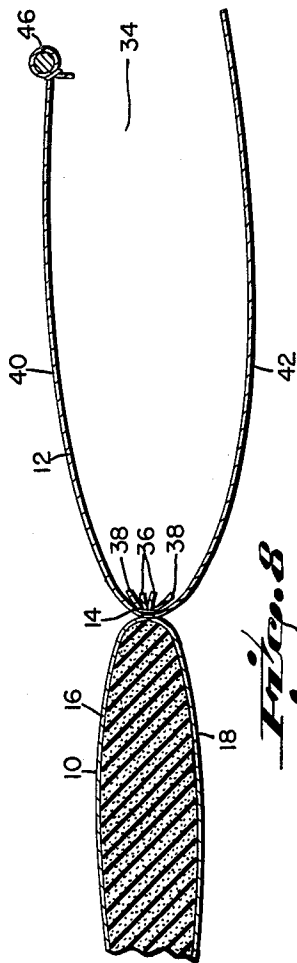


Fig. 8

INVENTOR.
MINOR E. WILSON

BY
Warren Kinney, Jr.
ATTORNEY

1

3,093,407

BODY CUSHION

Minor E. Wilson, Williamsburg, Ohio, assignor to Wilson Seat Company, Batavia, Ohio, a corporation of Ohio
Filed Aug. 11, 1961, Ser. No. 130,855
6 Claims. (Cl. 297—4)

This invention relates to a body cushion, constructed to minimize discomfort and fatigue and to enhance the convenience of cushioning the body of persons who for one reason or another may spend a considerable amount of time in a seated position, or who require body cushioning for relaxation or for health reasons.

An object of the invention is to provide a body cushion comprising a seat and a back portion embodying certain characteristics, which may be attached to the person of the user rather than to a seat or backrest, thereby enabling the user to move about or shift his position upon a conventional seat, without disorganizing or disheveling the cushion arrangement. This advantage is of particular importance when the body cushion is worn by the driver of a truck or other transport vehicle, whose attention should not be diverted to the arranging or rearranging of cushions while the vehicle is in motion.

Another object of the invention is to provide a body cushion of the character stated, which incorporates properly located extra padding to support the weakest areas of the back and abdomen of the user, and lateral wings or side supports for the user's body to promote correct posture and lend firm and comfortable support to the vital body organs most seriously placed under strain and fatigue as the result of prolonged sitting, sometimes accompanied by road shock or vibration.

A further object is to so construct the body cushion as to relieve strain and pressure upon the legs and knees of the user, and to provide proper support therefor, in the interests of comfort and a minimum degree of fatigue.

Another object is to simplify and expedite fabrication of the body cushion, and to enhance the durability, appearance and comfort thereof.

The foregoing and other objects are attained by the means described herein and illustrated upon the accompanying drawings, in which:

FIG. 1 is a perspective view of the improved body cushion of the invention, the back portion being angularly inclined to the seat portion.

FIG. 2 is a plan view of the body cushion, showing the back portion and the seat portion in coplanar relationship.

FIG. 3 is a side elevational view of the device strapped to the body of a user seated upon a vehicle seat or the like.

FIG. 4 is a side elevational view of the device strapped to the body of a user in standing position.

FIG. 5 is a cross-sectional view on an enlarged scale, taken on line 5—5 of FIG. 2.

FIG. 6 is a fragmentary enlarged cross-section taken on line 6—6 of FIG. 5.

FIG. 7 is a fragmentary cross-section in detail, showing the left-hand section of FIG. 6 prior to attachment thereof to the section at the right of FIG. 6.

FIG. 8 is a view similar to FIG. 6, indicating a step in assembly of the body cushion.

The body cushion as herein disclosed in FIG. 2, comprises a middle or insert section 10 padded and quilted longitudinally and transversely as will be explained, and a circumferential padded border section 12 which initially is made separately from the insert section and stitched or otherwise attached thereto in completing the assembly. Stitching for the purpose of assembly is indicated at 14 in FIGS. 6 and 8.

The insert section may be constructed of front and

2

rear sheets 16 and 18, which confine between them pads of soft resilient filler material such as Urethane foam. The seat portion 20 of the insert may be formed by sandwiching a single sheet of Urethane foam or similar filler material between two sheets, and then stitching through the layers to provide a tufted or quilted surface as illustrated upon the drawings. Alternatively, of course, the tufts may be formed by pocketing individual pads of filler material between the sheets.

The back portion 22 of the insert section may preferably be constituted of several elongate transverse pads 24, 26 and 28, covered with the sheets 16 and 18, the stitching between these pads extending transversely in substantial parallelism with one another. It will be noted that the padding 26, flanked by the pads 24 and 28, is much thicker than the others and thereby forms a bolster 30 across the back portion designed to afford added support for that portion of the user's back which is slightly above the hip-bones. This construction furnishes firm support for the user's weakest back and abdominal muscles, inducing restful relaxation while promoting correct posture.

The entire insert including the bolster, the rolls flanking it above and beneath, and the quilted or tufted seat portion, may be assembled as a unit in readiness for attachment to the circumferentiating border section 12. If desired, the insert cover sheets 16 and 18 may be varied in color or in the weave pattern, for purposes of ornamentation or differing service requirements. In this connection it should be understood that the body cushion of the invention is intended for use in many different environments, as by vehicle and tractor drivers, sports and boating enthusiasts, invalids in wheel chairs and the like. It finds application also as an office chair cushion, lawn chair cushion, baby bed, beach cushion, and various other uses not necessary to enumerate herein.

The border section 12 of the device may be constructed in the form of a circumferential frame within which the insert section may be placed and attached. The material of the border section should be tough and durable, such as fabric-backed plastic sheet. It may be cut and shaped in sections which are welded or adhesively joined together along lines such as 32, FIG. 2, to form a continuous channel 34 open along its outermost edges for the reception of padding material, as suggested by FIG. 8.

Before filling of channel 34 with padding material, the padded insert 10 is to be placed within the frame-like border section 12 and secured therein, as by means of the stitching 14 which extends entirely about the perimeter of the insert. This stitching may pass through the free edges 36 of the insert cover sheets 16 and 18, and through the free edges 38 of the cover sheets 40 and 42 of the border section.

After completing the attachment aforesaid, suitable padding material 44 is packed within the border section through channel 34, whereupon the channel may be closed by stitching or otherwise and then finished with a reinforced beading 46 which extends completely about the perimeter of the border section.

In shaping the border section, there is to be provided opposed indentations 48 and 50 which reduce the width of the body cushion at a location approximately midway between its ends. These indentations occur preferably at the line of meeting of the quilted or tufted portion of the seat, and the adjacent elongate pad or roll 52 which is beneath bolster 30. Along this transverse line of meeting, indicated at 54, the body cushion may be flexed as in FIG. 3, or if desired, it may be folded upon itself with the seat and back sections disposed in parallelism, to facilitate carrying or storing.

3

In the direction of the back section, and beginning at the indentations 48-50, the sides of the border section are abruptly widened to increase the width of the body cushion, this resulting in the formation of laterally extended padded wings or side supports 56 and 58 which taper gradually inwardly toward the upper end of the back rest portion. The wings are subject to limited flexing toward and from one another, along hinge lines 60 and 62 extending the full length of the back rest portion of insert 10. These wings, as indicated by FIG. 3, may be pulled against the sides of the user's body to support the hips and the small of the back.

To hold the wings in body-supporting position, according to FIG. 3, there is provided a pair of elastic straps indicated at 64 and 66, each having an end secured to an outer edge of a wing, as at 68, the remaining free ends 70 and 72 thereof being provided with cooperative clasp elements as shown for connecting the free ends of the straps over the abdomen of the wearer. By this means, the body cushion may be so applied to the person of the wearer as to remain in place even though the wearer may rise from a seated to a standing position as FIG. 4 indicates. A clasp element is indicated at 74. The character 76 indicates the usual trousers belt of the wearer, in FIGS. 3 and 4.

The forward portion 78 of the seat section of the body cushion is generously padded and of ample dimensions to overhang the forward edge of a vehicle seat 80 or the like, thereby to support and cushion the user's legs behind the knees in order to avoid the occurrence of temporary lameness resulting from prolonged sitting.

From the foregoing explanation, it should readily be understood that a person driving a truck or bus, as may be depicted by FIG. 3, enjoys full support and comfort provided by the body cushion of the invention. In addition, the driver may move about upon the driving seat 80, and may even arise from it repeatedly with the assurance that the body cushion will always be in proper position when the sitting position is resumed. The driver need never be concerned about cushion disarrangement, a displacement from the proper location upon the vehicle seat, since the cushion moves with the wearer and is held in proper seating position by the elastic straps which encircle the body.

As suggested by FIG. 4, the user of the device may stand upright, or may walk about without removing the cushion from his person, and when he is ready to return to the sitting position the cushion will naturally fall into proper place for supporting and cushioning the body upon a seat to be occupied. In certain respects, the present cushion in use resembles a "bucket seat," and provides generally the same measure of body support.

When not in use, the device of the invention may readily be folded and carried with ease. Moreover, it is reversible since the wings and the back portion may be hingedly moved in either direction about the hinge lines 60, 62 and 54. Accordingly, should one surface of the cushion become worn or damaged, the opposite surface will be available for use.

It is to be understood that various modifications and changes may be made in the structural details of the device, within the scope of the appended claims, without departing from the spirit of the invention.

What is claimed is:

1. A body cushion comprising in combination, a padded insert section having opposite sides and opposite ends, and a hinge portion traversing the insert section from side to side, a circumferential padded border section having opposite sides and opposite ends spaced apart to provide a well for reception of the insert section, and means securing the insert section within the well, with corresponding sides and ends of the sections in abutment with one another to form a composite structure, and wherein the opposite sides of the border section are constricted at locations adjacent to the hinge portion of the insert sec-

4

tion, and the border section includes outwardly extended flexible wings adjacent to the constricted portions thereof for embracing the sides of a wearer's body when the border section is strapped upon the body of the wearer.

2. A body cushion comprising in combination, a padded insert section having opposite sides and opposite ends, and a transverse hinge intermediate said ends dividing the insert section to provide a padded seat portion and a padded back rest portion, a thickened padded bolster in the back rest portion of the insert section and extending from one side to the other of said insert section, a circumferential padded border section having opposite sides spaced apart and opposite ends spaced apart, to provide a well for reception of the insert section, said border section being constricted at its opposite sides to define a seat portion and a back rest portion of the border section, flexible padded side wings extending laterally outwardly from the opposite sides of the back rest portion of the border section, said wings being located adjacent to the constrictions aforesaid and having outer free edges opposite the ends of the padded bolster, means securing the insert section within the well of the border section, with corresponding sides and ends of the sections in abutment with one another to form a composite structure, and strap means secured to the outer free edges of the wings, to subtend the back rest portions of the insert and border sections, the strap means being substantially aligned with the bolster for pulling the bolster against the back of the wearer while contracting the wings against the wearer's sides at the hips.

3. A body cushion comprising in combination, a padded insert section having opposite sides and opposite ends, and a transverse hinge intermediate said ends dividing the insert section to provide a padded seat portion and a padded back rest portion, a thickened padded bolster in the back rest portion of the insert section and extending from one side to the other of said insert section, a circumferential padded border section having opposite sides spaced apart and opposite ends spaced apart, to provide a well for reception of the insert section, said border section being constricted at its opposite sides to define a seat portion and a back rest portion of the border section, flexible padded side wings extending laterally outwardly from the opposite sides of the back rest portion of the border section, said wings being located adjacent to the constrictions aforesaid and having outer free edges defining the maximum width of the body cushion, means securing the insert section within the well of the border section, with corresponding sides and ends of the sections in abutment with one another to form a composite structure, and strap means secured to the outer free edges of the wings to subtend the back rest portions of the insert and border sections, said strap means serving when tightened over the abdomen of the wearer, to contract the wings against the wearer's sides at the hips.

4. The device as set forth in claim 3, wherein the strap means is elastic and adjustable as to length.

5. A body cushion comprising in combination, a padded insert section having opposite sides and opposite ends, and a transverse hinge intermediate said ends dividing the insert section to provide a padded seat portion and a padded back rest portion, the seat portion having a forward edge portion generously padded to provide firm support for the legs and knees of a user seated thereon, a thickened padded bolster in the back rest portion of the insert section and extending from one side to the other of said insert section, a circumferential padded border section having opposite sides spaced apart and opposite ends spaced apart, to provide a well for reception of the insert section, said border section including hinge means at its opposite sides defining a seat portion and a back rest portion of the border section, flexible side wings extending laterally outwardly from the opposite sides of the back rest portion of the border section, said wings being located

5

adjacent to the hinge means last mentioned, and having outer free edges, strap means secured to said outer free edges of the wings to subtend the back rest portions of the insert and border sections, said strap means serving when tightened over the abdomen of the wearer, to contract the wings against the body of the wearer adjacent to the hips, and means securing the insert section within the well of the border section, with corresponding sides and ends of the sections in substantial abutment one with another and in substantial coplanar relationship.

6. The device as set forth in claim 5, wherein the strap means is so related to the bolster as to pull the bolster against the back of the wearer while at the same time contracting the wings against the wearer's sides.

5

10

15

D. 102,328
1,117,528
1,254,808
1,256,783
1,836,302
2,446,006
2,607,400
2,710,646
2,829,386

References Cited in the file of this patent

6

UNITED STATES PATENTS

Hanna ----- Dec. 15, 1936
Solomon ----- Nov. 17, 1914
Jones ----- Jan. 29, 1918
Fuller ----- Feb. 19, 1918
Bloomfield ----- Dec. 15, 1931
Hendricks ----- July 27, 1948
Witz ----- Aug. 19, 1952
Kirby ----- June 14, 1955
Peer ----- Apr. 8, 1958

FOREIGN PATENTS

Germany ----- June 25, 1908
Denmark ----- Feb. 2, 1959

199,301
86,469