Luggage selectively provides a reclining chair for the traveler. The luggage has a wheeling configuration and has a backward-tilted, stationary configuration including a sitting configuration. The luggage includes a case including a top wall, a bottom wall and a back wall defining a backplane, and an extendable and retractable top handle. A front support and a pair of wheels support the case in the stationary position wherein the backplane is tilted backward from the vertical. A brace assembly is movable between a storage position wherein the brace assembly is in the backplane and a sitting position extending backward from the backplane and downward to contact the ground for preventing the luggage in the stationary position from toppling backward when a person or object is sitting on the top wall and leaning against the handle in the extended position.
WHEELED LUGGAGE AND RECLINING CHAIR

FIELD OF THE INVENTION

[0001] This invention relates in general to luggage, such as a suitcase, and more specifically involves luggage selectively serving as a reclining chair for the traveler.

BACKGROUND OF THE INVENTION

[0002] Wheeled luggage, such as suitcases, having retractable and extendable handles are well known in the art, and the desire to have the luggage also serve as a seat is also expressed in the many patents on the subject.

[0003] However, the prior art devices suffer shortcomings. Several prior art luggage devices offer a seat to the user such that the user must balance in a very upright posture or the luggage and user will topple over. Sitting in such an upright position is not nearly as relaxing or useful as sitting in a reclining position.

[0004] Therefore, there has been a continuing need for luggage capable of supporting a user in a reclined seated position. It is further desirable that the seating characteristics not detract significantly from the ordinary performance of the luggage. It is particularly desirable that the carry-on luggage adaptable for sitting upon still meet the requirements of carry-on luggage.

SUMMARY OF THE INVENTION

[0005] The invention is luggage that selectively provides a reclining chair for a traveler. The luggage has a wheeled configuration and has a backward-tilted, stationary configuration including a sitting configuration.

[0006] The luggage includes a case including a top wall, a bottom wall and side walls, including a back wall. The back wall defines a plane. A front support including a ground contact portion supports the case in the stationary position wherein the backplane is tilted backward from the vertical. Wheels including a ground contact portion support the back of the case in the stationary position and wheelingly support the case in a wheeling position wherein the backplane is tilted backward from the stationary position such that the front support does not contact the ground. A handle attached to the back wall is upwardly extendable and retractable to facilitate wheeled manipulation of the case.

[0007] A brace assembly includes an elongate portion including a front portion pivotally attached to the case and a back portion including a ground contact portion. The brace assembly is movable between a storage position, wherein the brace is in the backplane, and a sitting position, wherein the elongate portion extends backward from the backplane and downward and the ground contact portion of the brace contacts the ground for preventing the luggage in the stationary position from toppling backward when a person or object is sitting on the top wall and leaning against the handle in the extended position.

[0008] In a first illustrative embodiment, the brace assembly includes a deployment handle for operating the brace. In a second illustrative embodiment, the elongate portion of the brace assembly telescopes upon deployment. In a third illustrative embodiment, the brace assembly deploys similar to a folding table leg.

[0009] Other features and many attendant advantages of the invention will become more apparent upon a reading of the following detailed description together with the drawings wherein like reference numerals refer to like parts throughout.

BRIEF DESCRIPTION OF THE DRAWINGS

[0010] FIG. 1 is a top, right, back perspective view of a first embodiment of the wheeled luggage with reclining chair of the invention in the sitting position.

[0011] FIG. 2 is a right side elevation view of the luggage of FIG. 1 showing, in phantom, the brace assembly in the storage position.

[0012] FIG. 3 is a back elevation view of the luggage of FIG. 1.

[0013] FIG. 4 is a top, right, back perspective view of a second embodiment of the wheeled luggage with reclining chair of the invention in the sitting position.

[0014] FIG. 5 is a right side elevation view of the luggage of FIG. 4 showing in phantom the brace assembly in the storage position.

[0015] FIG. 6 is a partially cut away, top, right, back perspective view of a third embodiment of the wheeled luggage with reclining chair of the invention in the sitting position.

[0016] FIG. 7 is a right side elevation view of the luggage of FIG. 6 showing a user sitting thereupon and showing in phantom the brace assembly in the storage position.

DETAILED DESCRIPTION OF THE INVENTION

[0017] First, with quick reference to FIG. 7, there is shown an example of the wheeled luggage 10 of the invention as used for sitting. FIG. 7 is a right side elevation view of an embodiment of the wheeled luggage 10 in the sitting position and showing a user 99 in reclined sitting position thereupon.

[0018] Returning to the other drawings, and more particularly to FIGS. 1-3 thereof, there is shown a first embodiment 10A of the wheeled luggage with reclining chair 10 of the invention. FIG. 1 is a top, right, back perspective view of luggage 10A in the sitting position with a brace assembly 60, such as handle-deployable brace assembly 60A, deployed. FIG. 2 is a right side elevation view of the luggage 10A of FIG. 1 showing, in phantom, brace assembly 60A in the storage position. FIG. 3 is a back elevation view of FIG. 1.

[0019] Luggage 10 generally includes a case 20 for holding articles, a front support 40, wheel means, such as a pair of wheels 45, a handle 50, and a brace assembly 60, such as handle-deployable brace assembly 60A.

[0020] Case 20 is of a type well-known in the art and typically called a suitcase, trolley case, traveler's case, cabin case, or carry-on case. Typically, case 20 is a right parallelepiped with slightly rounded corners. Case 20 includes a front 22, a back 24, a top 25 including a top wall 26, a bottom 27 including a bottom wall 28 and side walls 30 connecting top wall 26 and the bottom wall 28. Side walls 30 are adapted for suitably supporting top wall 26 spaced above bottom wall 28 such that a user 99 may sit on top wall 26. Side walls 30 include a right side wall 38, a left side wall 31, a front wall 32 on front 22 of case 20, and a back wall 33 on back 24 of case 20. Back wall 33, in general, defines plane 34 and the term backplane 35 is meant to include the space of a couple of inches on either side of the plane 34 defined by back wall 33.
Case 20 includes suitable means, such as zippers, doors, or lids, not shown, for gaining access to its interior as are well known in the art. Case 20 may include a frame covered with flexible material, such as leather or fabric, or may be substantially constructed of a single material, such as of plastic or aluminum.

Front support 40 is attached to case 20, such as to front 22, such as to the front of bottom wall 28, and includes a contact portion 42 for contacting the ground 90 for supporting case 20 in a stationary position wherein plane 35 is tilted backward from the vertical through an angle theta, θ. In the stationary position, plane 35 is tilted back at least three degrees and, preferably, is tilted back about ten degrees or greater. Although in the exemplary embodiment, front support 40 is shown distinctly as a foot or leg protruding from case 20, it need not be so distinct and may be integral with case 20.

Wheel means, as are well known in the art, are attached to case 20 for wheeling case 20. Wheel means includes a pair of spaced wheels 45 attached to back 24 of case 20 such as at or near the juncture of bottom wall 28 and back wall 33. Wheels 45 rotate about a transverse axle 46 and include a contact portion 47 for contacting ground 90. Wheels 45 support back 24 of case 20 in the stationary position and wheelingly support case 20 in a wheeling position wherein plane 35 is tilted backward from the stationary position such that front support 40 does not contact ground 90. In the wheeling position, case 20 is typically manipulated by a top handle 50T, as further described below.

Case 20 may include one or more handles 50, such as carrying handle 50C and top handle 50T, for carrying and manipulating case 20. Carrying handle 50C, of a type well known in the art, is shown stowed in a recess 39 in right side wall 38. Carrying handle 50C moves outward to a more easily gripped position for carrying luggage 10.

Top handle 50T is of a type well-known in the art. Top handle 50T is attached to back wall 33 and generally includes an elongate portion 52 having a lower end 54 and an upper end 56 and a grip 58 attached to upper end 56. Top handle 50T is movable between a lower, retracted position, (shown in phantom as 50T′ in FIG. 3) wherein the grip 58 is proximal case 20, such as by being in recess 59 in top wall 26, and an extended position, as shown in solid lines, wherein grip 58 is distal top wall 26 and elongate portion 52 is in plane 35. In the extended position, grip 58 is used by a user to easily manipulate luggage 10 in the wheeling position. Elongate portion 52 of top handle 50T, as shown, retracts into sleeves in back wall 33. However, other configurations, as are known in the art, are compatible with the inventive concept. For example, elongate portion 52 may also be telescopic, or top handle 50T may be hinged near top wall 26 and fold to a lower position.

Handle-deployable brace assembly 60A generally includes an elongate portion 61 and restraining means 80, such as strut 81, for restraining elongate portion 61 at the sitting position. Elongate portion 61 generally includes a front portion 62 and a back portion 70. Front portion 62 includes a deployment handle 63 having a front end 64 pivotally attached to back wall 33, a midsection 65 including a pivot point 66, and a back end 67 for gripping by a user 99. Back portion 70 includes a front end 72 pivotally attached to pivot point 66 of midsection 65 of deployment handle 63, a midsection 74, and a back end 76 including a ground contact portion 78 for contacting ground 90 in the sitting position. Strut 81 includes a front end 82 pivotally attached to back wall 33 and a back end 83 pivotally attached to back portion 70 of elongate portion 61.

Brace assembly 60A is movable between a storage position, best seen in phantom in FIG. 2, and the sitting position, shown in FIGGS. 1-3. In the storage position, brace assembly 60A is preferably in backplane 35, or is substantially in backplane 35 such as by being substantially parallel to and proximal backplane 35, and pivot point 66 of deployment handle 63 is above front end 64 of deployment handle 63. Preferably, back wall 33 includes a recess or recesses 36 for containing brace assembly 60A in the storage position.

In the illustrative embodiment, deployment handle 63 is disposed proximal top wall 26 and is a U-shaped member such that back end 67 of deployment handle 63 is easily gripped by user 99 to move brace assembly 60A from the storage position to the sitting position. Back portion 70 comprises a pair of spaced elongate members, such as rods 71, each pivotally attached to a pivot point 66 on midsection 65 of handle 60A. It can be seen that handle 60A of other shapes can be used. For example, handle 60A may be a narrow U-shaped handle attached to a single rod 71 or could be a simple bar attached to one or more rods 71.

Handle-deployable brace assembly 60A is moved from the storage position to the sitting position by the user gripping back end 67 of handle 63 and rotating it outward and backward about the pivot of front end 64 until pivot point 66 is below front end 64. During this movement, strut 81 pushes back portion 70 backward such that back portion 70 is moved backward and downward to encounter ground 90. In the sitting position shown in FIG. 1, ground contact portion 78 of back end 76 contacts ground 90 for preventing luggage 10 in the stationary position from toppling backward when user 99 is sitting on top wall 26 and leaning against handle 50 in the extended position. A stop, such as the cross piece 68 on back end 67 of deployment handle 63, prevents back portion 70 from further rotation about pivot point 66. Strut 81 functions as a restraining means for restraining elongate portion 61 at the sitting position. In the sitting position, ground contact portion 42 of front support 40, ground contact portion 47 of wheels 45, and ground contact portion 78 of brace assembly 60 define a plane. The fact that all of the contact portions 42, 47, 78 contact ground 90 in the sitting position is important as it prevents rocking movements of luggage 10 and, therefore, greatly enhances the stability of luggage 10 in the sitting position.

Handle-deployable brace assembly 60A is moved to the storage position by simply gripping back end 67, such as cross piece 68, of deployment handle 63 and rotating it upward and forward. The proximity of deployment handle 63 to top 25 of case 20 facilitates manipulation of brace assembly 60A in that user 99 need not lean over or stoop excessively to deploy brace assembly 60A.

FIG. 4 is a top, right, back perspective view of a second embodiment 10B of the tilted chair wheeled luggage 10 of the invention, in the sitting position, including a telescoping brace assembly 60B. FIG. 5 is a right side elevation view of the luggage 10B of FIG. 4, showing in phantom telescoping brace assembly 60B′ in the storage position. Brace assembly 60B is movable between the storage position in a recess 36 in back wall 33 and the sitting position bracing luggage 10B for sitting upon by a user 99. Detent means well known in the art, such as detent clip 37 in recess 36, retains brace assembly 60B in recess 36.
Brace assembly 60 includes elongate portion 61 including a front portion 62 and a back portion 70. Front portion 62 includes a front end 64 pivotably attached to back wall 33 and a back end 67. Back portion 70 includes a front end 72 telescoping engaged with front portion 62 and a back end 76 including a ground contact portion 78. Back portion 70 is movable from a storage position telescoped within front portion 62 to the sitting position extended further from front portion 62. Detent means, such as spring biased button 69, as is well known in the art, selectively holds back portion 70 in the sitting position. Restraining means 80, such as a flexible tension member, such as cord 84 having a front end connected to case 20 and a back end connected to front portion 62, such as to back end 67, restrains brace 60B at the sitting position.

Telescoping brace assembly 60B is moved from the storage position to the sitting position by first pulling on elongate portion 61 so as to overcome detent clip 37 and rotate elongate portion 61 about the pivot of front end 64 and, second, by extending back portion 70 until back portion 70 is engaged by detent button 69.

FIG. 6 is a partially cut away, top, right, back perspective view of a third embodiment 10C of the tilted chair wheeled luggage 10 of the invention in the sitting position. FIG. 7 is a right side elevation view of the luggage 10C of FIG. 6 showing in phantom stored brace assembly 60C in the storage position in a recess 36 in back wall 33. User 99 is shown sitting on top wall 26 and reclining against handle 50T. Brace assembly 60C generally comprises an elongate portion 62 and restraining means 80, such as folding support 85, for restraining brace assembly 60C in the sitting position. Brace assembly 60C functions in a manner well known in other arts, that is, in a manner similar to folding table legs. Although elongate portion 61 is shown as a U-shaped member, it can be understood that it may be a single rod or post. Elongate portion 61 includes a front portion 62 including a front end 64 pivotably attached to back wall 33, and a back portion 70 having a back end 76 including a ground contact portion 78 and a cross piece 79. Folding support 85 includes a first member 86 and a second member 87. First member 86 includes a front end pivotably connected to back wall 33 and a back end. Second member 87 includes a front end pivotably connected to the back end of first member 86 and a back end pivotably connected to elongate portion 61. Brace assembly 60C is moved from the storage position within recess 36 to the sitting position by user 99 gripping back end 76, such as cross piece 79, and moving it backward and downward. Folding support 85 moves to a slightly over center position where a stop 88 on one of the members 86, 87 prevents folding in the opposite direction and retains brace assembly 60C in the sitting position. To retract brace 60C to the storage position, the center pivot of folding support 85 is pushed downward to under center. Then elongate portion 61 is grasped and swung into recess 36. A detent means, such as a clip or spring 37 in recess 36 releasably retains brace assembly 60C in the storage position.

Having described the invention, it can be seen that it provides a very convenient device for providing sitting relaxation while traveling.

Although particular embodiments of the invention have been illustrated and described, various changes may be made in the form, composition, construction, and arrangement of the parts herein without sacrificing any of its advantages. Therefore, it is to be understood that all matter herein is to be interpreted as illustrative and not in any limiting sense, and it is intended to cover in the appended claims such modifications as come within the true spirit and scope of the invention.

1. Luggage having a stationary configuration and a wheeling configuration; the stationary configuration including a tilted sitting configuration; said luggage comprising:
   a case including:
   a front;
   a back;
   a top including:
   a top wall;
   a bottom including:
   a bottom wall; and
   side walls connecting said top wall and said bottom wall and suitably supporting said top wall spaced above said bottom wall for sitting upon by a user, including:
   a front wall on said front of said case; and
   a back wall on said back of said case defining a backplane;
   a front support on said case including:
   a contact portion for contacting the ground for supporting said case in the stationary position wherein said backplane is tilted backward from the vertical;
   wheel means including:
   a contact portion for contacting the ground; said wheel means attached to said case and supporting said back of said case in the stationary position and wheelingly supporting said case in a wheeling position wherein said backplane is tilted backward from the stationary position such that said front support does not contact the ground,
   a handle attached to said back wall to facilitate manipulation of said case by a user, including:
   an elongate portion having:
   a lower end; and
   an upper end;
   and
   a grip attached to said upper end; said handle movable between a lower, retracted position wherein said grip is proximal said case and a higher, extended position wherein said grip is above said top wall and said elongate portion is in the plane of said back wall; and
   a brace assembly including:
   a brace including:
   an elongate portion including:
   a front portion pivotably attached to said case; and
   a back portion including:
   a ground contact portion; said brace movable between a storage position wherein said brace is in said backplane and a sitting position wherein said elongate portion extends backward from said backplane and downward and said ground contact portion of said back portion contacts the ground for preventing said luggage in the stationary position from toppling backward when a person or object is sitting on said top wall and leaning against said handle in the extended position.
2. The luggage of claim 1 wherein:
said back wall includes a recess wherein said brace assembly is disposed in the storage position.
3. The luggage of claim 1 wherein:
said backplane is tilted back at least three degrees.
4. The luggage of claim 1 wherein:
said backplane is tilted back at least ten degrees.
5. The luggage of claim 1 wherein:
said brace assembly includes:
restraining means for restraining said brace at the sitting position.
6. The luggage of claim 1 wherein:
said front portion of said elongate portion of said brace includes:
an upper portion having:
a front end pivotably attached to said case; and
a back end; and
said back portion of said elongate portion of said brace includes:
an upper end pivotably attached to said back end of said upper portion.
7. The luggage of claim 5 wherein:
said back end of said upper portion of said front end of said elongate portion of said brace includes:
a grip for moving said brace between the storage position and the sitting position.
8. The luggage of claim 1 wherein:
said elongate portion comprises:
a plurality of telescoping sections.
9. The luggage of claim 8 wherein:
said brace assembly includes:
restraining means for restraining said brace at the sitting position.
10. The luggage of claim 9 wherein:
said restraining means comprises:
a folding support comprising:
a first member including:
a front end pivotably connected to said case; and
a back end; and
a second member including:
a front end pivotably connected to said back end of said first member; and
a back end pivotably connected to said elongate portion of said brace.
11. The luggage of claim 9 wherein:
said restraining means comprises:
a flexible tension member.
12. Luggage having a stationary configuration and a wheeling configuration; the stationary configuration including a tilted sitting configuration; said luggage comprising:
a case including:
a front;
a back;
a top, including:
a top wall;
a bottom including:
a bottom wall; and
side walls connecting said top wall and said bottom wall and suitably supporting said top wall spaced above said bottom wall for sitting upon by a user including:
a front wall on said front of said case; and
a back wall on said back of said case defining a backplane;
a front support attached to said case including:
a contact portion for contacting the ground for supporting said case in the stationary position wherein said backplane is tilted backward from the vertical;
wheel means including:
a contact portion for contacting the ground; said wheel means attached to said case and supporting said back of said case in the stationary position and wheelingly supporting said case in a wheeling position wherein said backplane is tilted backward from the stationary position such that said front support does not contact the ground,
a handle attached to said back wall to facilitate manipulation of said case by a user including:
an elongate portion having:
a lower end; and
an upper end; and
a grip attached to said upper end; said handle movable between a lower, retracted position wherein said grip is proximal said case and a higher, extended position wherein said grip is above said top wall and said elongate portion is in said backplane; and
a brace assembly including:
an elongate portion including:
a front portion including:
a deployment handle including;
a front end pivotably attached to said case a midsection including:
a pivot point; and
a back end for gripping by user;
a back portion including:
a front end pivotably attached to said pivot point of said midsection of said deployment handle;
a midsection; and
a back end including:
a ground contact portion; and
a strut including:
a front end pivotably attached to said case; and
a back end pivotably attached to said midsection of said elongate portion; said brace assembly movable between a storage position, wherein said brace assembly is in said backplane; and said pivot point of said deployment handle is above said front end of said deployment handle, and a sitting position, wherein said pivot point of said deployment handle is below said front end, said elongate portion extends backward from said backplane and downward, and said ground contact portion of said back end contacts the ground for preventing said luggage in the stationary position from toppling backward when a person or object is sitting on said top wall and leaning against said handle in the extended position.
13. The luggage of claim 12 wherein:
said back wall includes a recess wherein said brace assembly is disposed in the storage position.
14. The luggage of claim 12 wherein:
said plane of said back wall is tilted back at least three degrees.
15. The luggage of claim 12 wherein:
said plane of said back wall is tilted back at least ten
degrees.
16. The luggage of claim 12 wherein:
said brace assembly includes:
restraining means for restraining said brace at the sitting
position.
17. The luggage of claim 16 wherein:
said restraining means includes a stop on said back end of
said deployment handle.
18. Luggage having a stationary configuration and a wheeling
configuration; the stationary configuration including a
titled sitting configuration; said luggage comprising:
a case including:
a front;
a back;
a top including
a top wall
a bottom including:
a bottom wall
side walls connecting said top wall and said bottom wall
and suitably supporting said top wall spaced above said
bottom wall for sitting upon by a user including:
a front wall on said front of said case; and
a back wall on said back of said case defining a plane;
a front support attached to said case including:
a contact portion for contacting the ground for supporting
said case in the stationary position wherein said back-
wheel means including:
a contact portion for contacting the ground; said wheel
means attached to said case and supporting said back of
said case in the stationary position and rolling support-
ing said case in a wheeling position wherein said back-
plane is tilted backward from the vertical and said front
support does not contact the ground.
a handle attached to said back wall to facilitate manipu-
ation of said case by a user including:
an elongate portion having:
a lower end; and
an upper end; and
a grip attached to said upper end; said handle movable
between a lower, retracted position wherein said grip is
proximal said case and a higher, extended position
wherein said grip is above said top wall and said elon-
gate portion is in the plane of said back wall; and
a brace assembly including:
a brace including:
an elongate portion including:
a front end attached to said case; and
a back end including:
a ground contact portion; said brace movable
between a storage position wherein said brace is
in said backplane and a sitting position wherein
said elongate portion extends backward from
said backplane and downward and said ground
contact portion of said back end contacts the
ground for preventing said luggage in the sta-
tionary position from toppling backward when a
person or object is sitting on said top wall and
leaning against said handle in the extended posi-
tion.
19. The luggage of claim 18 wherein:
said plane of said back wall is tilted back at least three
degrees.
20. The luggage of claim 18 wherein:
said plane of said back wall is tilted back at least ten
degrees.
* * * * *