

April 20, 1965

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3,179,465

CONVERTIBLE BEACH CHAIR-SUIT CASE COMBINATION

Filed Sept. 25, 1962

2 Sheets-Sheet 1

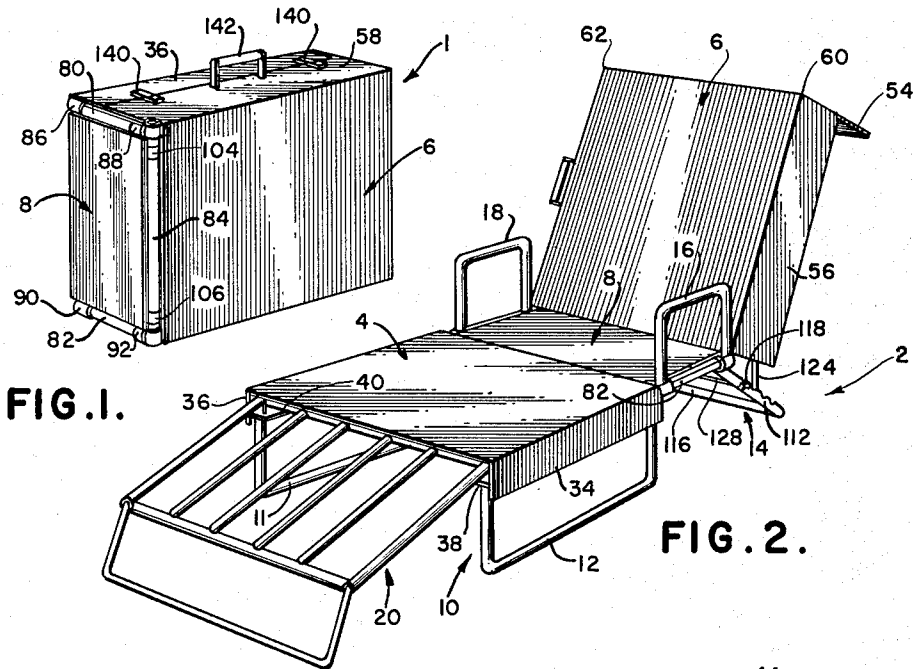


FIG. 1.

FIG. 2.

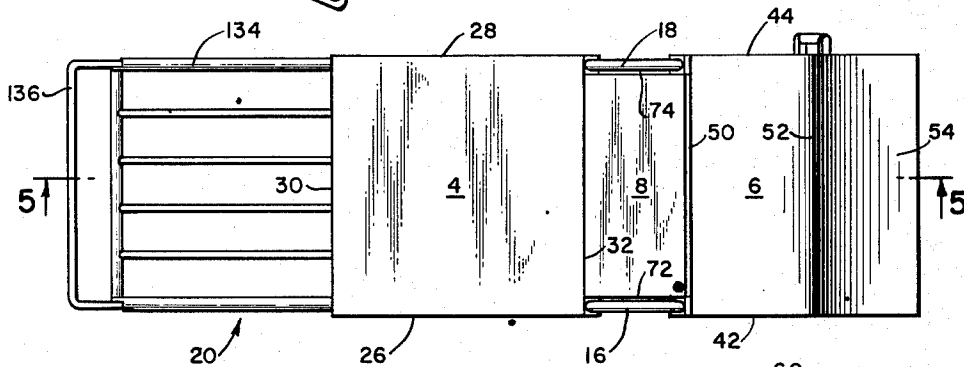


FIG. 3.

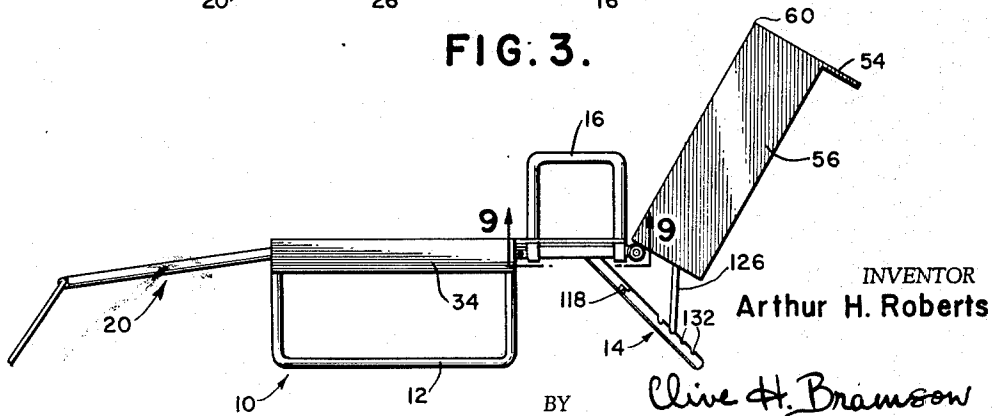


FIG. 4.

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2 Sheets-Sheet 2

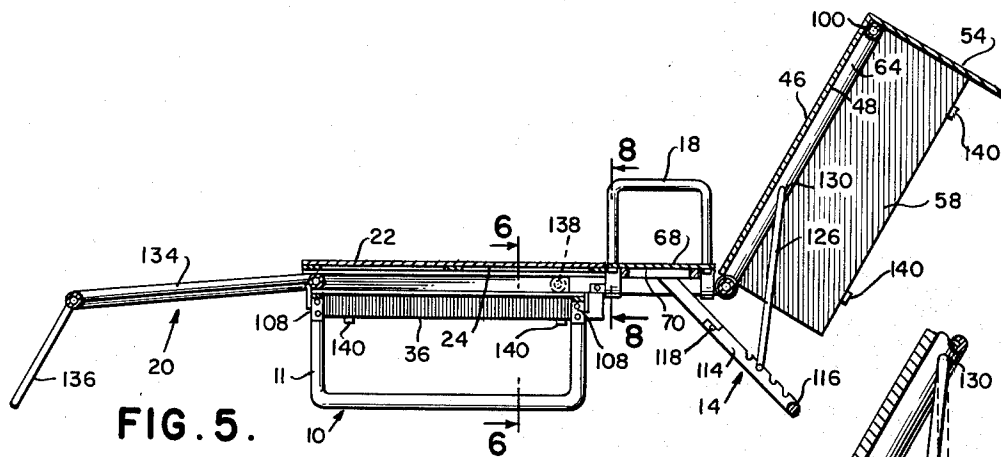


FIG. 5.

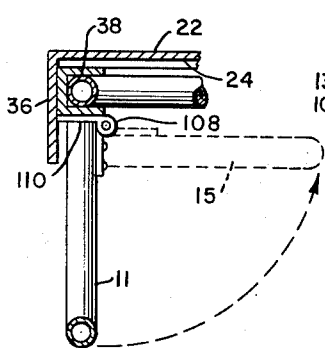


FIG. 6.

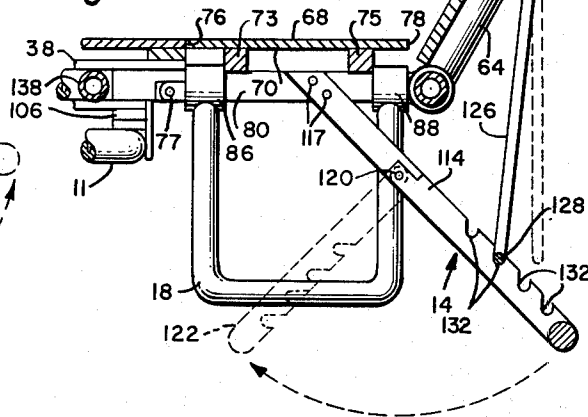


FIG. 7.

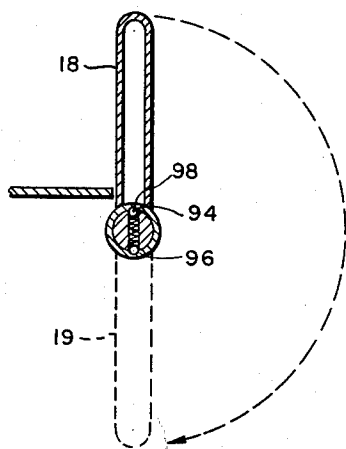


FIG. 8.

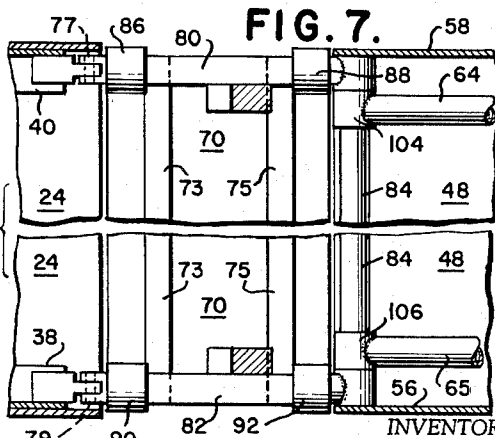


FIG. 9.

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3,179,465
**CONVERTIBLE BEACH CHAIR-SUIT CASE
 COMBINATION**

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4 Claims. (Cl. 297-17)

This invention relates to collapsible beach chairs and more particularly to a beach chair of conventional appearance comprising, however, a structure enabling the conversion thereof into a suit case of parallelepiped configuration, said suit case providing a substantial volume of carrying space in the manner of a common grip designed specifically for the carrying function.

Consonant with the foregoing, the instant invention has for its primary object the provision of a new and useful convertible beach chair-suit case combination which is conventional of appearance either in the beach chair or suit case operative position.

Another object of the present invention is to provide a combination of the foregoing dual character which is readily convertible from one form to the other by one person in a simple and expedient manner.

A further object of the present invention resides in the provision of a beach chair-suit case combination both light in weight and durable of construction.

With the foregoing and various other objects and features in view, which will be readily apparent from the following description and explanation, the instant invention consists in certain novel features in design, construction, and combination of elements, all of which will be more fully and particularly referred to and described hereinbelow following.

Referring to the accompanying drawings in which similar reference characters refer to corresponding parts and elements throughout the several figures,

FIGURE 1 is a perspective view of the instant invention shown in the folded suit case operative form;

FIGURE 2 is a perspective view of the instant invention shown in the unfolded beach chair operative form;

FIGURE 3 is a top plan view of the beach chair embodiment;

FIGURE 4 is a side elevational view of the beach chair embodiment;

FIGURE 5 is a sectional view of the beach chair embodiment taken along line 5-5 of FIGURE 3;

FIGURE 6 is a fragmentary and enlarged view in cross-section taken along line 6-6 of FIGURE 5;

FIGURE 7 is an enlarged illustration of a portion of the device showing the foldable nature of the elements of one of the beach chair supporting members;

FIGURE 8 is an enlarged fragmentary view of the arm rest structure taken along line 8-8 of FIGURE 5; and

FIGURE 9 is a fragmentary plan view taken along line 9-9 of FIGURE 4.

As thus illustrated, the convertible beach chair-suit case combination is designated generally by numeral 1 in its suit case form and by numeral 2 in its beach chair form, reference being made to FIGURES 1 and 2 of the drawings, respectively.

Essentially, the structure according to this invention is, in combination, comprised of rectangular seat portion 4, rectangular back portion 6, intermediate section 8, first support member 10, second support member 14, arm rest members 16, 18 and foot rest portion 20.

With reference to said seat portion 4 in detail, it will be observed that said element includes obverse surface 22, reverse surface 24, sides 26, 28 and forward and rearward ends 30 and 32, respectively, a pair of side sections 34, 36 integral with said sides 26, 28 respectively, and depend-

ing at right angles therefrom, and a pair of inwardly facing guide channel members 38, 40 secured longitudinally to said side sections 34, 36, respectively, and positioned adjacently of the reverse surface 24 of said seat portion 4.

Back portion 6, shown as a side of the suit case in FIGURE 1 of the drawings, will be observed in detail by referring to FIGURES 2, 3 and 5, wherein said element is seen comprised of sides 42, 44, obverse and reverse surfaces 46 and 48, respectively, forward and rearward ends 50 and 52, respectively, end section 54 integral with said rearward end and depending normally therefrom, a pair of side sections 56, 58 integral with said sides 42, 44 respectively, and depending at right angles therefrom, said end section and said side sections being united at said rearward end to form corners 60 and 62 with said back portion.

Disposed between said seat portion 4 and said back portion 6 in the beach chair operative form or as an end wall in the suit case operative form, is intermediate section 8 shown in FIGURES 2 and 1, respectively therein accomplishing either function. More specifically said intermediate section includes obverse and reverse surfaces 68 and 70, sides 72, 74 and forward and rearward ends 76 and 78, respectively.

Referring now to FIGURES 7 and 9 of the drawings, a second frame structure comprised of parallel tubular members 80 and 82 and transverse tubular member 84 integrally disposed therebetween at the ends thereof adjacent rearward end 78, is seen depending spacedly with respect to reverse surface 70 of said intermediate section 8, spacing blocks 73, 75 being interposed therebetween for securing said frame structure to said intermediate section. Parallel tubular members 80 and 82 are further connected with said inwardly facing channel members 38 and 40, respectively, the unions therebetween being 90° offset pivot connections 77 and 79. Accordingly, then, it will be appreciated that said intermediate section and said seat portion are pivotally related, said members being pivotally 90° by reason of the offset pivot arrangements utilized.

Said pair of arm rest members 16, 18 are pivotally secured to said frame structure by sleeve connectors 86, 88, 90 and 92 as shown in said figures, and are adapted thereat for 180° angular rotation as shown in FIGURE 8 wherein arm rest member 18 is illustrated in its upwardly disposed position and in its downwardly disposed position, the latter being represented in broken line designation by numeral 19. As further observed in FIGURE 8, indents 94 and 96 are provided surfacedly of those regions of said parallel tubular members 80 and 82 in registry with said sleeve connectors, at 180° opposing positions, to receive balls 98 provided internally of each sleeve connector, thus serving as locking means suitably retaining said arm rest members in either position as shown.

A first tubular frame structure, shown in vertical section in FIGURES 5 and 7 and in fragmentary plan view in FIGURE 9, is secured to reverse side 48 of back portion 6 thus providing structural rigidity thereto and further providing the hinged relation between said intermediate section and said back portion to be described hereinbelow. More specifically, said first tubular frame structure is comprised of a pair of parallel tubular members 64, 65 having transverse tubular member 100 disposed therebetween at the ends thereof adjacent forward end 52 of said back portion 6, the ends of said tubular members adjacent forward end 50 of said back portion being pivotally secured to said transverse tubular member 84 by virtue of the hinged connection furnished by sleeve connectors 104 and 106. Accordingly, it will be appreciated that said back portion and said intermediate section are, therefore, pivot-

ally related, said back portion being capable of either assuming depending perpendicularity with respect to said intermediate section, this attitude being significant for conversion of the beach chair configuration to that of a suit case, or of forming an obtuse angle with said intermediate section while serving as a back rest of the beach chair embodiment as shown in the drawings. Thus, said back portion, in accomplishing said conversion, is rotatable approximately 180° with respect to said intermediate section.

To the end of supporting the seat and back portions and the intermediate section in firm, spaced relation with respect to a ground surface, first and second support members 10 and 14 are provided as shown in FIGURES 2, 4, 5 and 7 of the drawings.

With reference to FIGURE 2, it will be observed that said first support member includes a pair of tubular U-shaped legs 11 and 12, said legs being hingedly secured to channel guide members 36 and 38, respectively, by means of bracket hinges 108, one typical hinged connection being disclosed in detail in FIGURE 6 of the drawings. As illustrated therein, leg 11 is adapted to pivot through an angular movement of 90°, flat portion 110 of said bracket hinge serving as a stop thereby retaining said leg in the vertical downward supporting position. The broken line retracted position 15 is assumed when conversion of the beach chair embodiment to the suit case form is desired, at which time said tubular U-shaped legs 11 and 12 are foldable into juxtaposition adjacent reverse side 24 of said seat portion.

Referring both to FIGURES 2 and 5, it will be understood that second support member 14, being comprised of parallel legs 112 and 114 and transverse base member 116 extending therebetween at one end thereof, is U-shaped of configuration, the other end of said legs being secured by bolts 117 to parallel bars 80 and 82 of said first tubular frame structure, said legs being rigidly extended angularly therefrom as shown in the drawings, and further extending beneath said back portion in its effective supporting position. Said transverse base member and the section of said parallel legs terminating at offset pivot regions 118, 120, are adapted to fold in the direction of said seat portion as shown in FIGURE 7, this foldable unsecured portion of said second support member being designated therein as broken line portion 122.

A U-shaped strut comprised of a pair of parallel arms 124, 126 and a transverse member 128 extending therebetween at the depending end thereof, coacts with said second support member to permit adjustment of said back portion 6 with respect to its angle of inclination and to further support said back position against forces acting thereagainst. To that end said strut is pivotally connected to parallel tubular members 64, 65, at points 130, whereas said transverse member 128 may be selectively positioned within notches 132 provided surfacedly of each of said parallel legs as shown, thereby affording means for regulating the obtuse degree of inclination of said back portion with respect to said intermediate section in accordance with the desire of the user.

Referring now to FIGURE 3 of the drawings, it will be noted that said foot rest portion 20 includes a main tubular frame 134 and an extensible forward section 136, said forward section being telescopically receivable within the side peripheral portions of said main tubular frame; it being further appreciated that said main tubular frame is slidably receivable within said inwardly facing guide channel members 38 and 40, said frame being thus adapted to slide rearwardly of said channel members to the position shown at 138 in FIGURES 5 and 7 of the drawings.

Should it become desirable to convert the beach chair embodiment 2 into the suit case embodiment 1, it is merely necessary to retract the foot rest into the channel members as described above, fold the legs of the first support member into juxtaposition beneath the seat portion, reverse the position of the arm rest members by pivoting said

members through 180° to thereby assume the position shown in FIGURE 7, remove the strut from the second support member thereafter rotating it about its pivot points to a position between parallel tubular members 64, 65 and in the same plane therewith, fold second support member as shown in FIGURE 7 and rotate the seat and back portions through 90° and approximately 180°, respectively, with respect to the intermediate section, said seat and back portions thereby assuming a parallel and opposing relation, fasteners 140 being provided to enable said suit case to be held in the closed position shown in FIGURE 1, and handle 142 being provided to facilitate transporting the suit case in the conventional manner.

It being understood that the foregoing detailed description is exemplary of the preferred construction of the invention, it will be appreciated that variations may be made in the shape and nature of the materials of construction, e.g., the tubular components may be of solid form or of any other suitable form as well and that numerous other modifications may be made by those skilled in the art without actually departing from the invention. The appended claims, therefore, are intended to cover all such equivalent variations as come within the true spirit and scope of the foregoing disclosure.

What is claimed is:

1. A suit case and beach chair combination, said combination being comprised of a rectangular seat portion having an obverse and a reverse surface, sides, and a forward and a rearward end, and a pair of inwardly facing guide channel members secured adjacently of the reverse surface of said seat portion; and a rectangular back portion having an obverse and a reverse surface, sides, and a forward and a rearward end, and a first frame structure secured to the reverse side of said back portion; a rectangular intermediate section, said intermediate section having an obverse and a reverse surface, sides, and a forward and a rearward end, said intermediate section being hingedly disposed between said seat and back portions; first support members including a pair of U-shaped legs, hinge means depending from said inwardly facing guide channel members, said first support members being hingedly associated with said guide channel members and foldable into juxtaposition adjacent said reverse surface of said seat portion; a second frame structure depending adjacently from the reverse surface of said intermediate section, said second frame structure including a pair of parallel tubular bars, said parallel tubular bars being parallel with respect to the sides of said intermediate section and secured to the reverse surface thereof; a pair of arm rest members pivotally secured to said second frame structure for 180° rotational movement, a second support member of U-shaped configuration and having a pair of parallel legs and a transverse base member extending therebetween at one end thereof, the other end of said parallel legs being secured to said second frame structure and extending angularly therefrom, pivot means intermediate the ends of said parallel legs, said pivot means rendering the unsecured end of said second support member foldable in the direction of said seat portion, and notches provided surfacedly of each of said parallel legs and positioned between said pivot means and said transverse member; a U-shaped strut having a pair of parallel arms and a transverse member extending therebetween at one end thereof, the other end of said parallel arms being pivotally connected to said frame structure contiguous with the reverse side of said rectangular back portion, the transverse member of said strut being removably receivable within said notches; and a foot rest portion extending outwardly of the forward end of said rectangular seat portion, said foot rest portion being slidably receivable within said pair of inwardly facing guide channel members; said combination being collapsible into a parallel-piped configuration.

2. A suit case and beach chair combination, said combination being comprised of a seat portion having an ob-

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verse and a reverse surface, and a pair of inwardly facing guide channel members secured adjacently of the reverse surface of said seat portion; and a back portion having an obverse and a reverse surface, and a first frame structure secured to the reverse surface of said back portion; an intermediate section, said intermediate section having an obverse and a reverse surface, said intermediate section being hingedly disposed between said seat and back portions; a first support member hingedly associated with said guide channel members and foldable into juxtaposition adjacent said reverse surface of said seat portion; a second frame structure depending adjacently from the reverse surface of said intermediate section, a pair of arm rest members pivotally secured to said second frame structure for 180° rotational movement; a second support member extending angularly from said second frame structure; a strut member pivotally depending from said first frame structure, said strut member and said second support member being cooperatively related to permit adjustment of the angle of inclination of said back portion with respect to said intermediate section; said combination being collapsible into a parallelepiped configuration.

3. A suit case and beach chair combination, said combination being comprised of a seat portion having an obverse and a reverse surface, and a guide frame structure secured adjacently of the reverse surface of said seat portion; a back portion having an obverse and a reverse surface; a first frame structure secured to the reverse surface of said back portion; an intermediate section having an obverse and a reverse surface, said intermediate section being hingedly disposed between said seat and back portions, said seat and back portions being rotatable 90°

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and approximately 180°, respectively, with respect to said intermediate section, a first support member hingedly associated with said guide frame structure and foldable into juxtaposition adjacent said reverse surface of said seat portion; a second frame structure depending adjacently from the reverse surface of said intermediate section; support means cooperatively connecting said first and second frame structures to permit retention of said back portion at an obtuse angle with respect to said intermediate section; said combination being collapsible into a parallelepiped configuration.

4. A suit case and beach chair combination as set forth in claim 3 wherein said support means includes a first member pivotally depending from said back portion and a second member extending from said intermediate section whereby said first and second members coact to permit adjustment of the angle of inclination of said back portion with respect to said intermediate section.

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