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BEACH CABANA

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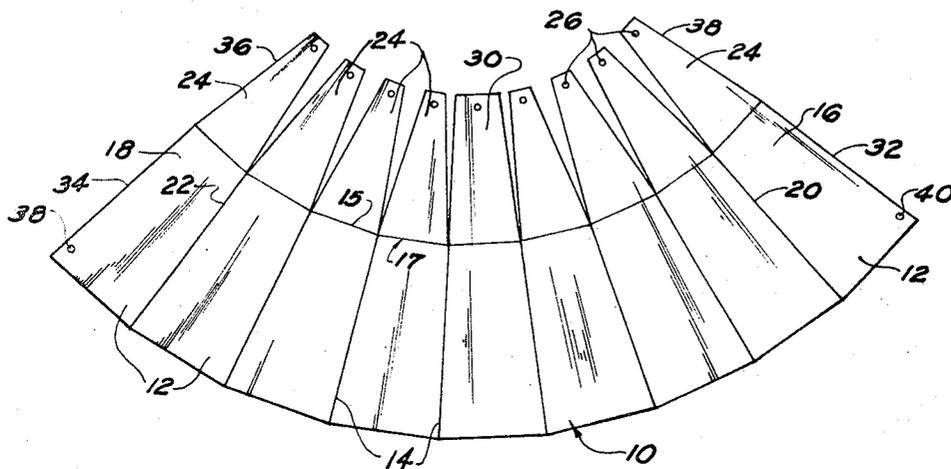


Fig. 1

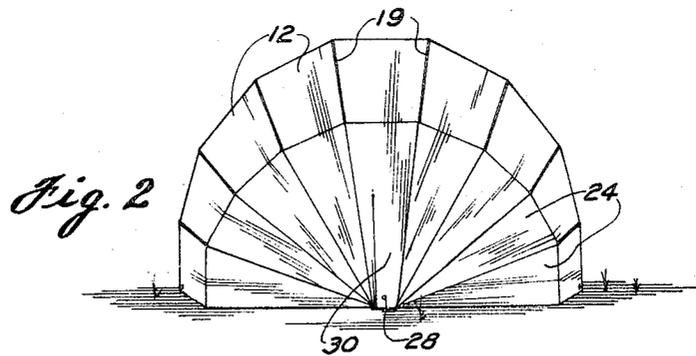


Fig. 2

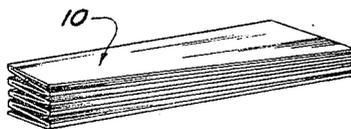


Fig. 3

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BEACH CABANA

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ABSTRACT OF THE DISCLOSURE

The present invention relates to a shelter member that can be used as a portable beach cabana and includes a plurality of wall sections hingedly connected along adjacent edges wherein the two outer unconnected side edges are adapted for contact with a supporting surface such as the ground. Furthermore, a plurality of tongue portions are hingedly connected to said wall sections along a common front between the outer side supporting edges. These tongue portions are secured to one another at their outer extremities when the shelter is assembled so that the wall sections form the top and sides of the shelter and the tongue portions form the rear wall thereof.

Summary of the invention

A first feature of the present invention resides in the provision of a multiwalled cabana which is of relatively simple construction, easy to erect and collapse, and very effective in shielding one from the elements.

Another feature of the present invention resides in the provision of a plurality of longitudinal walls which when properly positioned act to provide both support for the structure and shielding from the elements.

A further feature of the present invention resides in the fact that only one fastener is required to secure the cabana in its effective configuration.

Another feature of the present invention resides in the provision of a multiwalled cabana which may be collapsed in fan-fold fashion to give a neat and compact package for carrying purposes.

Other objects, features and advantages of the present invention will become apparent from the following description, taken in conjunction with the accompanying drawings.

Brief description of the drawings

FIG. 1 is a top plan view of the beach cabana in an unfolded and unassembled position;

FIG. 2 is a perspective view of the rear of the beach cabana as assembled;

FIG. 3 is a perspective view of the beach cabana in a folded unassembled position ready for transporting.

Description of the illustrative embodiment

The beach cabana 10 as shown in FIGS. 1-3, comprises a plurality of elongate flat wall sections 12 having converging side edges 14 joined to other converging side edges of other wall sections. The narrower base edges 15 of the wall sections 12 thus complement each other to form an arcuate inwardly convex base edge 17. Two wall sections 16 and 18 form the ends of the row of joined wall sections and are joined to the other wall sections along only one converging side, 20 and 22, respectively. The wall sections 12 may alternatively be formed from one piece of foldable sheet material cut into a slightly semicircular shape. Nonparallel elongate creases extending between the two arcuate edges may then be induced in the piece of material.

The wall sections 12 are joined together by a means 19 which permits pivoting of the wall sections along their joints. When the basic material employed for the con-

struction of the walls is corrugated cardboard, as in this embodiment, the joining means 19 may be a pressure-sensitive cloth tape. If the basic material is heavier, the joining material will have to be stronger. Elongate hinges may be used on any heavier material employed.

Pivotaly joined to the inwardly convex edge 17 of the joined wall sections 12 are a plurality of elongate flat tongues 24 each coextensively aligned at its proximal end with an end of one of the wall sections. The tongues 24 further have side edges which converge toward the distal end of the tongues at a rate faster than the convergence of the converging side edges of the wall sections 12. Consequently, the tongues 24 are not joined along their converging side edges but may pivot about their line of attachment independently of each other. In the distal portion of each tongue, an aperture 26 is formed so that when the wall sections and tongues are positioned as shown in FIG. 2, and later described, each aperture will align with the aperture formed in the central tongue 30. A suitable threaded fastener 28 may then be passed through this series of apertures for securing the tongues and thus, correspondingly, the wall sections together in a rigid configuration.

Preferably, the wall sections 12 and the tongues 24 are constructed from an inexpensive light-weight rigid material such as corrugated cardboard. The tongues 24 may then be formed as extensions of wall sections 12 and be pivotal about a crease induced at the end of the junction between adjacent wall sections. If other material is used to form the wall sections and tongues, the tongues should be hingedly attached to the wall sections for pivoting about the line of attachment. Other materials usable for the wall and tongue sections include sheet plastic, plywood, aluminum and other lightweight metals, foam plastic, a fabric covered tubular frame, fiberboard, and noncorrugated cardboard. Other easily transportable materials are equally within the scope of this invention.

The use of a plurality of tongues and wall sections formed from regular commercial carton grade laminar cardboard sheet material create a cabana of suprisingly rigid but lightweight construction. The cardboard material preferably comprises two thin facing sheets and a corrugated stiffener lamination sandwiched therebetween. By cutting such cardboard so that the corrugation passageways run lengthwise of the tongues and wall sections, and by edge joining the adjacent wall sections as previously described, each wall section will support and brace the other thereby creating a remarkably strong and rigid structure which is also light in weight.

If commercial grade corrugated cardboard is employed as the basic construction material, one sheet will suffice for the formation of both wall sections and tongues. A die may be designed to stamp out a configuration such as shown in FIG. 1. The die may also induce creases into the cardboard at the proper locations so that in use the cabana could be assembled as previously described. Each wall section and tongue could pivot about its crease.

Further, it may be desirable to coat the exterior and interior surfaces of the cabana wall sections and tongues with a waterproofing epoxy resin paint. The cabanas could then withstand all forms of inclement weather.

In use, the beach cabana is assembled by partially folding the wall sections 12 inwardly to form a truncated half cone. The inwardly convex edge 17 would then become a vertically arched joint. The distal portions of the tongues 24 are then alternately positioned inside of the distal portion of the central tongue 30 so that each aperture 26 aligns with the aperture 26 of the central tongue 30. If the cabana is constructed so that there are a pair of central tongues, one of that pair must be designated as the central tongue and each tongue should

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then be positioned therein as previously described. Threaded fastener 28 is then passed through the series of aligned apertures and secured in that position by a wing nut (not shown). The cabana wall sections and tongues are thus rigidly configured. The outside edges 32 and 34 of wall sections 16 and 18 form the base of the sides of the beach cabana and the lower edges 36 and 38 of the tongues extending from the wall sections 16 and 18 form the base of the rear portion of the beach cabana. Tongues 24 should be of a width sufficient to provide a rear portion of the beach cabana which is completely closed.

The assembled cabana may now be easily lifted and placed in any desirable position. The truncated half cone shape provides an alcove for refuge from the harsh effects of extended exposure to hot sun, cold wind or rain.

The cabana further includes means for securing the cabana to a beach or back yard. Such means are shown in this embodiment as apertures 38 and 40 formed adjacent the outside edges of wall sections 18 and 16. Through these apertures, one may pass such securing means as a rope which may be spiked to the ground thus securing the cabana.

When storing, the cabana is first disassembled and flattened as shown in FIG. 1. The tongues 24 are then folded under the corresponding wall sections 12. The wall sections 12 are then fan-folded together as in FIG. 3 so that the wall sections are stacked one on top of the other. The resulting article is quite compact and easily transportable.

While the specific embodiment chosen for illustration of the inventive concept shows both wall sections and tongues having converging side edges, it should be understood that the present invention further includes wall sections of rectangular configuration giving a cabana of cylindrical shape and tongues hingedly attached to the outwardly convex edge of the joined wall sections giving a cabana of truncated half cone shape with a narrow entrance.

It will be apparent that the particular embodiment of the invention shown and described herein is of an illustrative character and that various modifications in construction and arrangement of parts may be made within the spirit and scope of the following claims.

Having thus described the invention, what is claimed and desired to be secured by Letters Patent is:

1. A beach cabana comprising:

- (a) a plurality of elongate wall sections positioned side by side and joined together along adjacent side edges, each outer elongate wall section having an unjoined outer side edge formed substantially along a linear path to provide a support engaging surface;
- (b) a plurality of elongate tongues joined individually to adjacent ends of said wall sections along a common front between the two outer side edges; and
- (c) means for joining the distal ends of said tongues together after said wall sections have been arced inwardly causing the distal ends of said tongues to position themselves adjacent one another.

2. A beach cabana as recited in claim 1 wherein said plurality of wall sections have converging side edges and are formed from one elongate piece of inherently stiff material, said material being first cut into a slightly semicircular shape so that there are opposing inwardly and outwardly convex edges, and then creased transversely a plurality of times, each section of material between a pair of creases or a crease and the ends of the material forming one elongate wall section.

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3. A beach cabana as recited in claim 2 wherein the creases converge toward the inwardly convex edge of the material and are spaced apart from one another an equal distance.

4. A beach cabana as recited in claim 3 wherein said elongate tongues are extensions of the corresponding wall sections, each elongate wall section being creased transversely along the line of formation of a tongue so that the tongue may be pivoted at that line.

5. A beach cabana as recited in claim 4 wherein said elongate tongues have apertures defined in the distal portions thereof and have side edges which converge toward the distal portion of the tongues at a rate faster than the convergence of the side edges of the corresponding wall sections.

6. A beach cabana as recited in claim 5 wherein said means for securing said tongues together comprises a threaded fastener which may be passed through said apertures of said tongues after each distal portion of each tongue is overlapped so that the apertures align.

7. A beach cabana as recited in claim 6 which further includes means for securing the cabana to the ground.

8. A beach cabana as recited in claim 7 wherein said wall sections are comprised of laminated corrugated cardboard which is coated with a water-proofing paint.

9. A beach cabana comprising:

- (a) a plurality of elongate flat wall sections of inherently stiff material, said wall sections having converging side edges and being positioned side by side in converging fashion, two of said wall sections having substantially straight ground-engaging side edges;
- (b) a plurality of elongate flat substantially triangular tongues of inherently stiff material, each of said tongues being pivotally joined to the narrower end of a wall section and each further having therein an aperture defined in the distal portion thereof;
- (c) means for pivotally joining adjacent wall sections together along their adjacent edges; and
- (d) means for securing said tongues together in partial overlapping relationship when said wall sections are bent inwardly and said apertures in said tongues are aligned.

10. A shelter member comprising:

- (a) a plurality of wall sections hingedly connected along adjacent edges, the two outer unconnected side edges being adapted for contact with a supporting surface; and
- (b) a plurality of tongues hingedly connected to said wall sections along a common front between said outer side edges and being secured to one another at their outer extremities when said shelter member is assembled, said wall sections forming the top and sides of said shelter and said tongues forming the rear wall thereof.

11. A shelter member as recited in claim 10 wherein said shelter is further formed so as to be in substantially a single plane in its disassembled expanded condition.

12. A shelter member as recited in claim 11 wherein said shelter in its disassembled state is readily foldable into a stacked arrangement for easy storage and mobility.

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KENNETH DOWNEY, *Primary Examiner.*