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Applicant: **EVER-WEAR INC., 1601 South Indiana Avenue, Chicago Illinois 60616 (US)**

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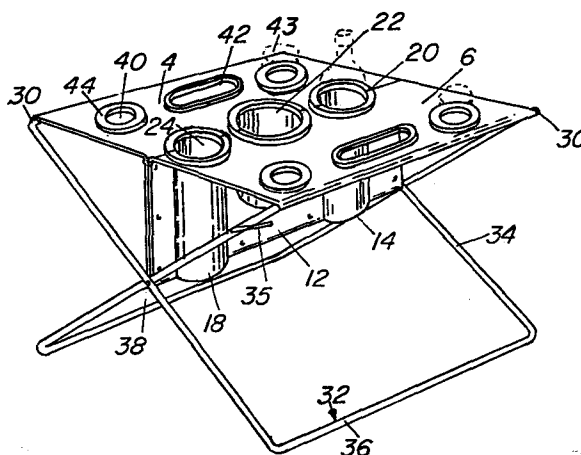
Inventor: **Soren, Leon, 7303 North Keeler Avenue, Lincolnwood Illinois 60646 (US)**
Inventor: **Brickman, Harold, 2911 West Catalpa Avenue, Chicago Illinois 60625 (US)**

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Representative: **Adams, William Gordon et al, RAWORTH, MOSS & COOK 36 Sydenham Road, Croydon Surrey CR0 2EF (GB)**

Foldable tables.

A foldable table comprising a table portion with leg means (32) attached to the table portion and foldable for transportation purpose, the table portion comprising a centre portion having article receiving openings (20, 22 and 24), support means (12) below the openings for the support of articles located in them, and flexible side portions (4, 6) extending from opposite sides of the centre portion and foldable upwardly from the centre portion to define the folded condition of the table. When unfolded, the leg means supports the flexible side portions at or towards the outer edges thereof. The openings combined with the support means are intended to receive beverage consumption items such as bottles, ice buckets, glasses and the like.



FOLDABLE TABLES

This invention relates to foldable tables.

5 Foldable tables are disclosed in United States Patent Specifications Nos. 4,122,780; 4,177,738 and Design No. 252,659. In each of these, there is disclosed a foldable bar table in which openings are provided to receive glasses, cups, bottles, implements and the like.

10 It is an object of the present invention to provide a foldable table in which beverage items and a wide variety of items used in connection with beverage consumption can be conveniently stored, and which, when opened, makes these items readily available for use and arrangement on the table. A further object is to provide a foldable bar table which, when collapsed, stores items used for beverage consumption securely so as to prevent damage to them.

20 According to the present invention, there is provided a foldable table comprising a table portion with leg means attached to the table portion and foldable for transportation purposes, the table portion comprising a centre portion having at least one article receiving opening, support means for the support of an article located in said opening and flexible side portions extending from opposite sides of the centre portion and foldable upwardly from the centre portion to define the folded condition of the table, and the leg means is displaceable to the unfolded condition in which the leg means supports the flexible side portions at or towards the outer edges thereof remote from the centre portion and

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said support means is below said opening.

5 For a better understanding of the invention and to show how the same may be carried into effect, reference will now be made, by way of example, to the accompanying drawings, in which:-

10 Figure 1 is a perspective view of a first form of a foldable table shown in its unfolded or in use condition,

Figure 2 is a perspective view of the embodiment of Figure 1 in the folded or closed condition for storage or transportation purposes,

15 Figure 3 is a side view of the embodiment of Figure 1 in the folded condition,

Figure 4 is a side view of the embodiment of Figure 1 in the unfolded condition,

20 Figure 5 is a perspective view of a second form of foldable table shown in the unfolded condition,

25 Figure 6 is a perspective view of the embodiment of Figure 5 in the folded condition,

Figure 7 is a side view of the embodiment of Figure 5 in the folded position,

30 Figure 8 is an end view of the embodiment of Figure 5 in the unfolded condition,

Figure 9 is a perspective view of a third form of foldable

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table shown in the unfolded condition,

Figure 10 is a perspective view of the embodiment of Figure 9 in the folded condition,

5 Figure 11 is an end view of the embodiment of Figure 9 in the folded condition,

10 Figure 12 is an end view of the embodiment of Figure 9 in the unfolded condition,

Figure 13 is a perspective view of a fourth form of foldable table showing it in the unfolded condition,

15 Figure 14 is an end view of the embodiment of Figure 13 showing it in the unfolded condition,

20 Figure 15 is an end view of the embodiment of Figure 13 showing it in the folded condition,

Figure 16 is a side view of the embodiment of Figure 13 showing it in the unfolded condition, and

25 Figure 17 is a side view of the embodiment of Figure 13 showing it in the folded condition.

30 Referring firstly to Figures 1 to 4, a table surface portion is provided by a pair of panels 4 and 6. The panels may be made of any suitable material which is relatively strong yet flexible, and is best formed as a relatively thick material of the order of 2 mm (1/16 inch) thick. Materials suitable for this purpose would be various plastics, such as vinyl or fabrics. Colours

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and/or use of a patterned material can be selected as desired.

5 The panels 4 and 6 are joined at their inner ends to form a
seam 8. Depending downwardly at the seams 8 are portions
of the panels trapped or held between two complementary
rigid panels 10 and 12, each formed with portions 14, 16
and 18 bowed outwardly so that when the panels 10 and 12
10 are secured to each other, a number of article-receiving
openings forming pockets or receptacles 20, 22 and 24 are
provided. The panels 10 and 12 may be formed of any
suitable material, such as a plastics, metal or wood.
When secured together by any suitable means, such as by
the use of fasteners as, for example, rivets or bonded by
15 adhesive, they trap the panels 4 and 6 at their upper ends
and form the receptacles 20, 22 and 24. Each of the
panels is provided with a bottom which together form the
bottom of the receptacles.

20 The receptacles, 20, 22 and 24 are dimensioned to hold
beverage consumption items such as bottles. The
receptacle 22 particularly may be dimensioned to receive
an ice bucket insulated by foamed material or air. As may
best be seen in Figure 2, the table panels 4 and 6 are
25 dimensioned to "blouse" outwardly when the table is
collapsed or folded. The construction permits the table
to collapse to occupy a relatively small upright space for
storage and transportation purposes. In addition, the
"blousing out" of the panels provides space therebetween
30 to accommodate the upper ends of the items, such as bottles
or the like held in the receptacles 20, 22 and 24.

The outer edges of the table panels 4 and 6 are provided

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with loops 28 which may be formed by moulding, stitching or the use of adhesives. Extending through each of the loops 28 in the embodiment illustrated is the top horizontal side 30 of each of a pair of rectangular frames 32 which constitute the legs or supporting structure for the table. Each frame is formed from rod or tubing and includes an upper side 30, a pair of downwardly extending sides 34 and a bottom side 36. The sides 34 are pivotally joined intermediate their ends at 38 by a pin or other means which extends through the sides and into an opening or cavity formed at the bottom of the juncture of the panels 10 and 12. A pin 35 may be provided on one of these sides 34 to limit movement of these sides as the table is collapsed to prevent the legs from swinging past each other.

Openings of various shapes and sizes may be provided in the table panels 4 and 6 dimensioned to receive glasses or cups as desired. Such openings are shown, for instance, at 40 in the various Figures. Because it is intended that the openings receive beverage holding containers, such as glasses or cups, they would usually be circular and because such items usually taper from top to bottom, they would be dimensioned so that when a glass or cup is inserted in one of the openings, it would not pass all of the way through but a portion of it would extend above the surface of the table. Further openings 42 are provided in each one of the table panels, the openings 42 being elongate for the purpose to be described hereinafter. The shape, location and number of openings 40 may, of course, be varied. Because it is contemplated that the table panels be formed of a somewhat flexible material, it may be desirable to provide strength or reinforcing elements

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around the openings 40. To this end, rings 44 of a relatively rigid plastics material may be bonded, using any suitable means around the periphery of the openings thereby to provide such strengthening features. Such strengthening means may be provided on either the upper or lower surfaces of the table panels or both.

If desired, pockets may be provided at each end of the rigid panels 10 and 12 to accommodate bar utensils such as stirrers, ice tongs, bottle openers and the like for storage and use purposes. The pockets would, of course, be exposed and available when the table is in the folded condition.

The frame 32 comprising the supporting legs of the table, while shown as a rectangular construction, could be made omitting the bottom side 36 so that each frame is three-sided or U-shaped rather than rectangular.

The elongate openings 42 which, as with the other openings may be provided with reinforcing rings 48, may be used for carrying handles by the user, the openings 42 being dimensioned to receive comfortably the fingers of the user. Alternatively, the openings 42 may be dimensioned and positioned to expose a portion of the sides 30 to be used as a carrying handle.

Figures 5 to 8 illustrate a second embodiment, in which the table panels 4' and 6', as before, are fabricated out of any suitable material providing the strength and thickness desired. Likewise, as before, each panel includes openings 40', the edges of which are strengthened by the provision of reinforcing rings 44'. In this embodiment,

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the inner ends of the panels 4' and 6' are secured by any suitable means to a rigid centre piece 50 which may be formed by moulding plastics, or of shaped metal or wood. The centre piece 50 includes a bottom 52, sides 54 and a top 56. Openings 58 of various sizes and shapes may be provided in the top 56 with some of the openings dimensioned to receive beverage bottles, another to receive an ice bucket, while still others to receive implements used for the consumption of beverages.

In this embodiment, legs 60 in the form of panels, are provided, which legs are attached to the rigid centre piece 50 at their inner ends by any suitable hinging means. Each leg is provided at its upper end with a notch 62. Extending at the outer end of each panel 4' and 6' is a rod or pole 64 secured in the panel by means of a loop formed at the outer end of the panel. As may be seen in Figure 6, in the folded position for storage or transport, the legs 60 are rotated about their pivotal connection with the rigid centre piece 50 to a position up against the sides of the rigid centre piece 50. For these purposes the panels 4' and 6' are folded upwardly and a matching opening 66 at their outer ends exposing the rod 64, whereby it may conveniently be used as a handle. In this form any beverage serving device, such as bottles, an ice bucket, glasses or implements will be retained in the rigid centre piece passing through the openings 58 in its upper surface. When it is desired to use the table of this embodiment, the legs 60 are pivoted outwardly to the position shown in Figure 5. The table panels 4' and 6' are folded downwardly and the end of the rods 64 engaged in the notches 62 whereby a sturdy table structure is provided exposing the beverage consumption devices stored

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in the rigid centre piece 50 for use and also exposing the openings 40 for the purpose of accommodating cups, glasses or tumblers.

5 Figures 9 to 12 illustrate a third embodiment of table, in
which the table panels 4" and 6" again have their inner
ends secured by any suitable means to a rigid centre piece
50". Supports for the outer ends of the table panels are
provided by rods 49 extending through passages of folds at
10 those ends. In this embodiment, the rigid centre piece 50'' is
formed with an upper flat surface and openings 58.
Attached to the rigid centre piece 50" or formed
integrally therewith are a plurality of receptacles 66 for
receiving, as before, beverage consumption devices such as
15 bottles holding beverages or an ice bucket. Once again
the number and shapes of the receptacles in the rigid
centre piece may be selected as required. Again as before,
reinforced openings 40" can be provided in the table
panels 4" and 6" to accommodate glasses, tumblers and
20 cups.

In this embodiment, the table legs are provided by bent
wire, rod or tubing of sufficient strength and are
constructed as follows. A first set of legs 68 is
25 constituted by a bottom or surface engaging portion 70
having an inner upwardly extending portion 72 and an
outward upwardly extending portion 74. The upper end of
the portion 74 is secured by any suitable means to an
outer edge of the rigid centre piece 50". The other leg
30 of the set 68 is constructed in the same manner with a
surface engaging portion 76, an inner outwardly extending
portion 78 and an outer upwardly extending portion 80.
The inner upwardly extending portions 72 and 78 of each

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leg of the set 68 are attached to each other by threaded fasteners or other suitable means 82 and, therefore, are fixed with respect to each other and the rigid centre piece 50".

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Another set of legs are constructed to have what might be described as a generally "L" shaped configuration. The bottom part of the "L" of each leg consists of a surface engaging portion 86, an inner upwardly extending portion 88, an outer upwardly extending portion 90 and an upper horizontal portion 92 with a portion 94 extending upwardly therefrom. The other leg of the set is similarly formed with a lower horizontal surface engaging portion 96, an outward upper portion 98, an upper horizontal portion 100, an inner upward portion 102 and with an upwardly extending portion 104 from the upper horizontal portion 100. The upward portions 94 and 90 and 98 and 104 are each attached to each other by rivets or other suitable means 106. Each of the upwardly extending portions 94 and 102 are provided with bent upper ends 108 engaging in openings in the table panels 4" and 6".

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The inner upwardly extending portions 88 and 102 of the leg set are rotatably mounted in tubes 110 attached to the inner upwardly extending portions 72 and 78 of the leg set 68. Figures 9 and 12 illustrate this embodiment in the open position and ready for use as a table. When it is desired to fold this table for storage or transportation, the table panels 4" and 6" are folded upwardly as before, disengaging those panels from the upper bent ends 108 of the leg set 84. When this is done, each leg of the set 84 may then be rotated in their respective tubes 110 to the position shown in Figures 10 and 11. A "U" shaped bracing

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member 112 has its ends rotatably mounted in the leg portions 92 and 100 to help maintain them in their proper position whether the table is open for use or folded.

5 Figures 13 to 17 show a fourth form of foldable table, which has a table panel 2 formed from a flexible material such as canvas or plastics. Formed in a generally rectangular shape, the table panel is formed with loops 4''' and 6''' at its opposite ends. The loops encompass
10 cross bars 7 and 9 of a first and second pair of legs 34 and 34A formed generally as U-shaped structures. The loops in the table structure may be formed by sewing, bonding, by the use of an adhesive, or by thermally bonding a plastics material.

15 The legs 34 and 34A are pivotally mounted to each other as shown at 38 for rotation. The table panel 2 when open provides a flat surface. An opening or a plurality of them such as shown at 20, 22 or 24, is/are provided in the
20 table surface to receive articles used in the consumption of beverages or food. As with the previous embodiments, openings such as those shown at 20 may, for instance, be of a size to permit glasses or other drinking containers to pass partially therethrough so that if a tapered glass
25 is used, its top will extend above the table surface to be grasped by a user. The openings 22 can be of a size to receive bottles of various sizes. The opening 24 can be dimensioned to permit an ice bucket to be supported therein. Any one or all of the openings may be surrounded
30 by a strengthening ring such as shown at 44'''. The strengthening rings, even those of the earlier embodiments, can each consist of a plastics or fibre ring encompassing the opening and bonded around the periphery

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of the opening for strength and/or appearance purposes.

Providing support for all or some of the articles extending through the openings in the table surface is a
5 second or bottom flexible panel 25. This panel consists of three sections. These include a left-hand section 27, a centre section 29 and a right-hand section 31. The outer ends of the left and right-hand sections are attached to the table panel along lines slightly inward of
10 the loops 4''' and 6'''. These attachments may be achieved by sewing or bonding in some other fashion.

When the table is in the open position, the section 27 extends downwardly at an angle towards the centre while the
15 centre section 39 is substantially horizontal. The section 31 extends upwardly at an angle from the centre section to the line of its attachment to the table panel. To provide a level article supporting surface, the lower panel is provided at its centre portion 29 with an
20 overlying portion 33 extending over its width and length. The portion 33 is attached to the centre portion 29 along its lines of juncture with the portions 27 and 31 and forms a pocket 35 into which a stiffening member 37, such as a sheet of relatively stiff fibreboard or plastics may
25 be inserted. By this means the centre portion is made to be relatively rigid and capable of supporting an article resting thereon without excessive bending. In other words, when the table is open, as may be seen, the table panel is held in a relatively taut position, being
30 stretched somewhat by the open position of the legs 34 and 34A. In this position, the ice bucket passing, for instance, through the opening 24 and bottles passing through the openings 22 will rest on or be supported by

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the relatively rigid portion 29. Glasses, not shown, will extend partially through the openings 20. In the open position, the tops of the bottles will extend above the surface of the table panel so that they may be handled by a user.

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The table may be folded by grasping the cross-bars 7 and 9 at the cutaway portions 45 and 47 provided at approximately the centre of the table panel 2, to bring them together to cause the legs 34 and 34A to pivot about 38. The centre portion 29 of the lower panel will move downwardly, causing the articles resting thereon to move downwardly through the openings 22 and 24, so that any articles passing through those openings and resting on the centre panel will now be completely enclosed by the folded table panels. In this position the table, together with the articles it encases, may then be easily transported to a storage location until its use is desired again. As may be seen in Figure 7, the dimensions are such that the bottles and ice bucket shown in dotted lines are now housed within the area enfolded by the table panel 2.

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CLAIMS

1. A foldable table comprising a table portion with leg means attached to the table portion and foldable for transportation purposes, the table portion comprising a centre portion having at least one article receiving opening, support means for the support of an article located in said opening and flexible side portions extending from opposite sides of the centre portion and foldable upwardly from the centre portion to define the folded condition of the table, and the leg means is displaceable to the unfolded condition in which the leg means supports the flexible side portions at or towards the outer edges thereof remote from the centre portion and said support means is below said opening.

2. A table as claimed in claim 1, wherein said flexible side portions are such as to move outwardly with respect to one another when the table is moved to its folded condition so as to be able to encompass an item protruding from the or each opening.

3. A table as claimed in claim 1 or 2, wherein an opening is provided in each of said flexible side portions in order to receive containers therein.

4. A table as claimed in claim 1, 2 or 3, wherein each flexible side portion has an opening therein at or towards its outer edge to permit engagement by a user to permit transportation of the table.

5. A table as claimed in any one of the preceding claims, wherein the edge of the or each opening is

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strengthened by a reinforcing ring.

5 6. A table as claimed in any one of the preceding claims, wherein said leg means include portions extending along the outer edges of said flexible side portions to provide support for the table portion when the table is in its unfolded condition.

10 7. A table as claimed in any one of the preceding claims, wherein said leg means is formed by tubing or bent rod.

15 8. A table as claimed in any one of the preceding claims, wherein said support means is formed by said centre portion, which is substantially rigid, said centre portion forming an article-receiving receptacle extending from said opening in the centre portion.

20 9. A table as claimed in any one of the preceding claims, wherein said leg means are in the form of two substantially rectangular frames having respective pairs of sides joined to one another intermediate their ends.

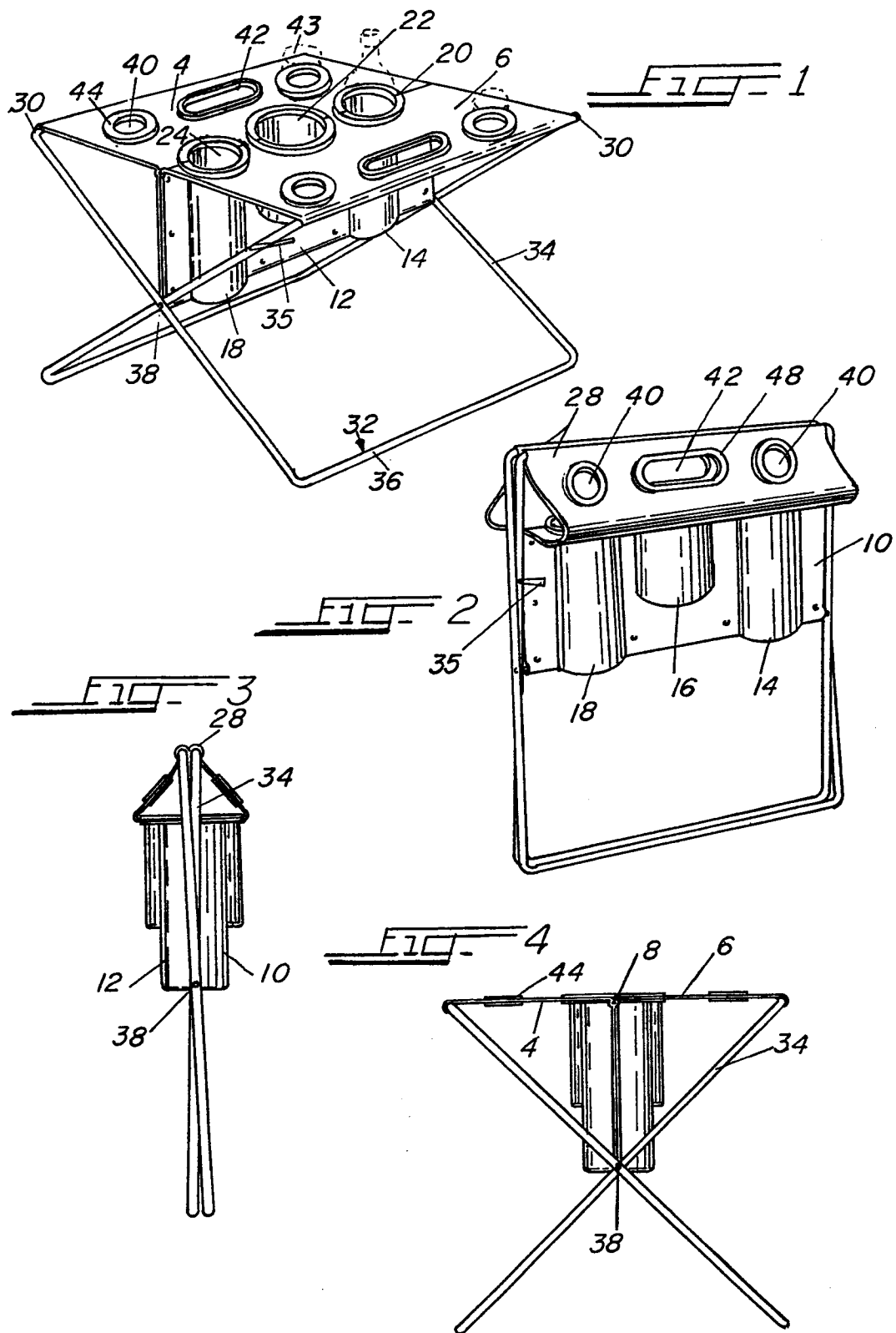
25 10. A table as claimed in any one of the preceding claims except claims 7 and 9, wherein said leg means are in the form of leg panels having inner ends thereof hinged to said centre portions so as to allow unfolding of the table by an outward hinging movement, outer ends of the leg panels being engageable with the flexible side portions at or near their outer edges.

35 11. A table as claimed in any one of claims 1 to 7, wherein said leg means includes two pairs of legs

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pivotally joined intermediate their ends with a cross-bar connecting each leg of a pair, said centre and side portions of said table portion forming a table panel formed from a flexible material attached at opposite ends to said cross-bars, said support means being formed by a lower panel extending below said table panel and attached at its opposite ends to said table panel, said lower panel having a relatively rigid centre section extending below the or each opening and having side panels inclined upwardly to the bottom of said table panel when said table is in an unfolded condition.

12. A table as claimed in claim 11 without claim 2, wherein when the table is moved to its folded condition by pivoting said legs, said table panel and said lower section are spaced from said centre portion of the table portion to provide space sufficient completely to enclose an article placed in and protruding from the or each opening.



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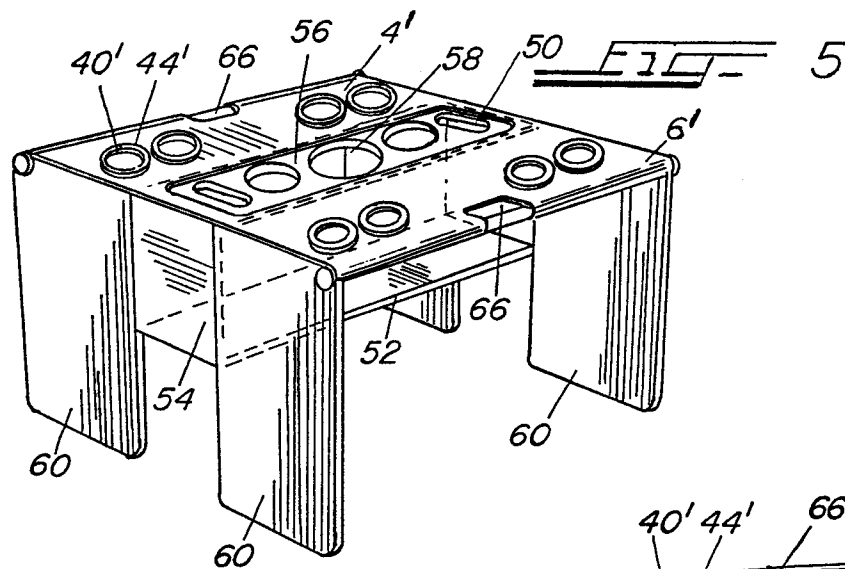
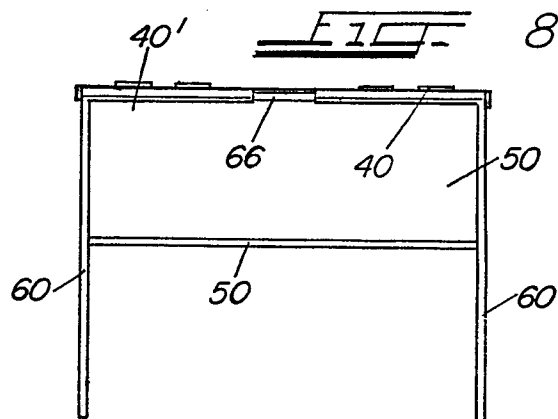
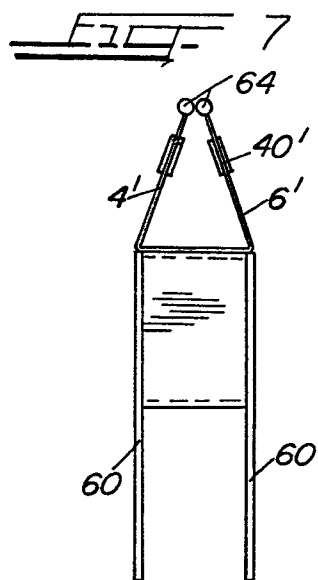
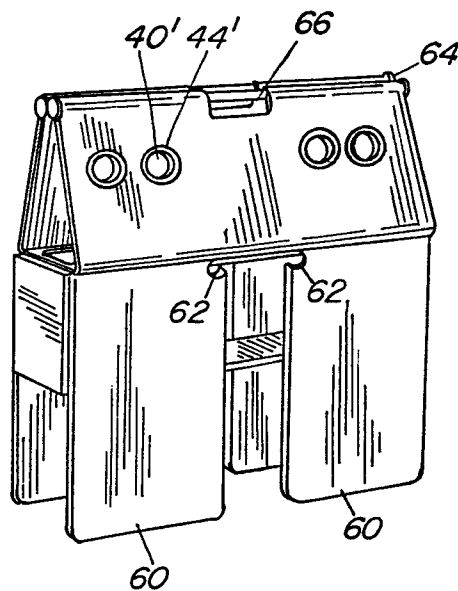


FIG. 6



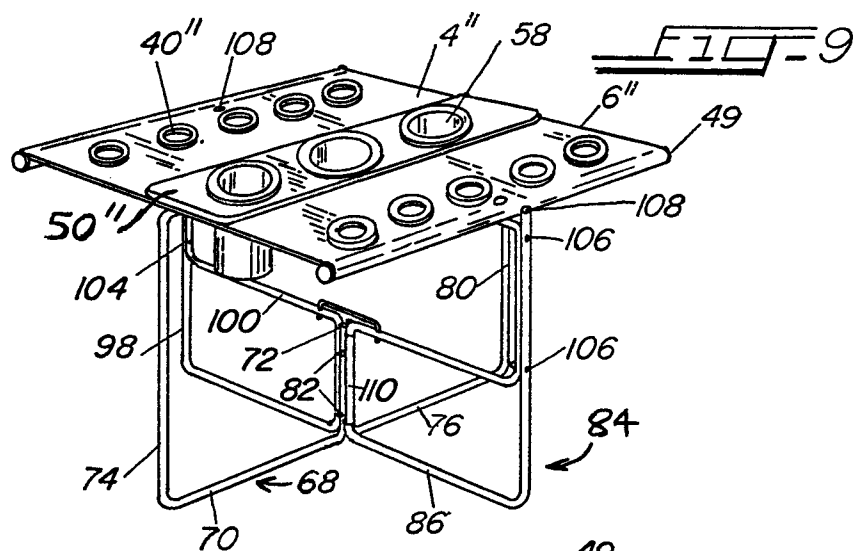


FIG. 10

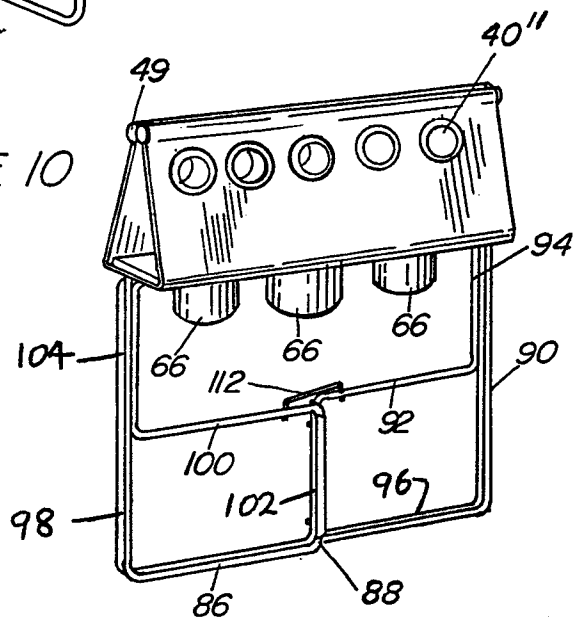


FIG. 11

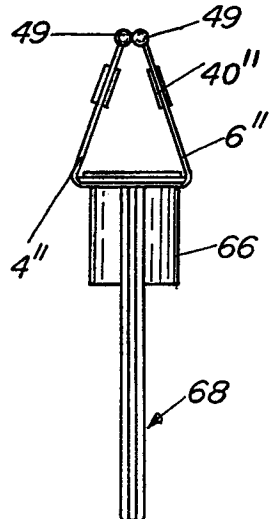
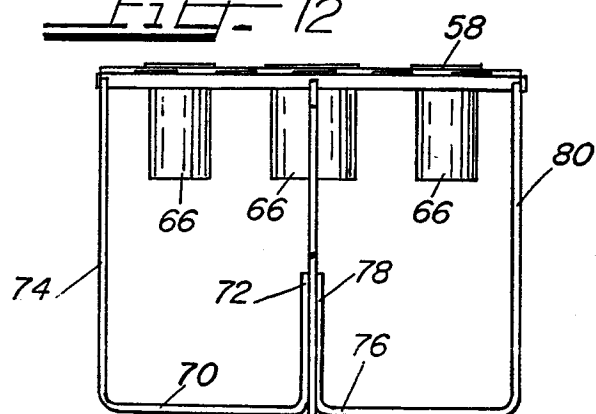


FIG. 12



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FIG. 13

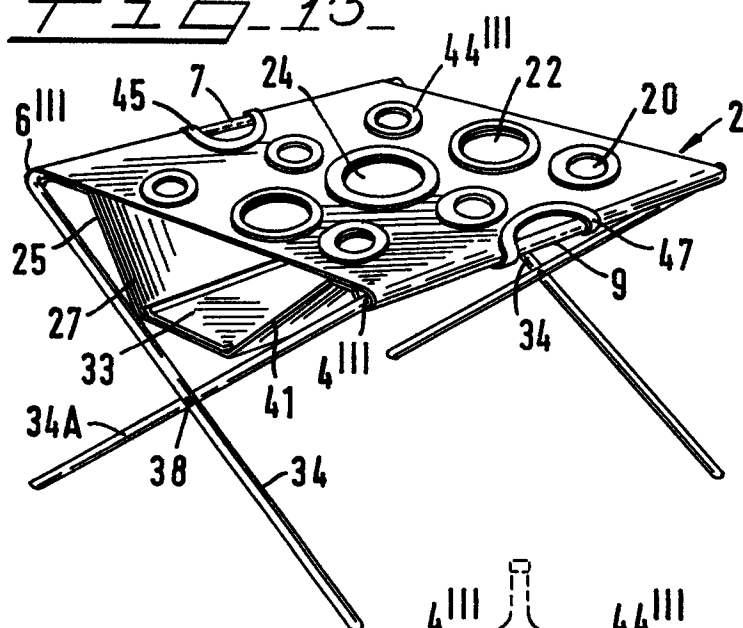


FIG. 15

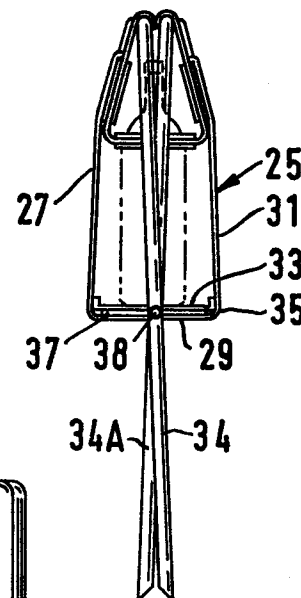


FIG. 16

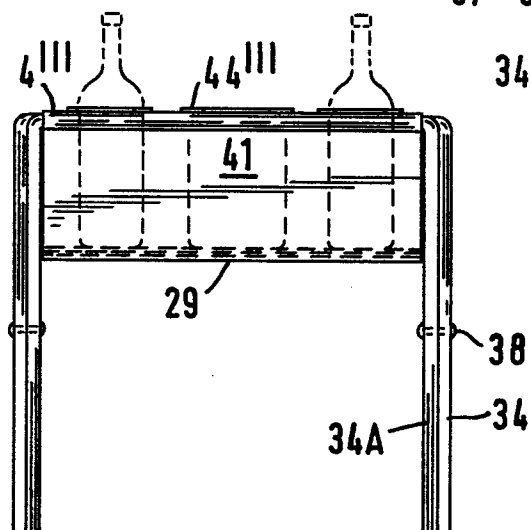


FIG. 17

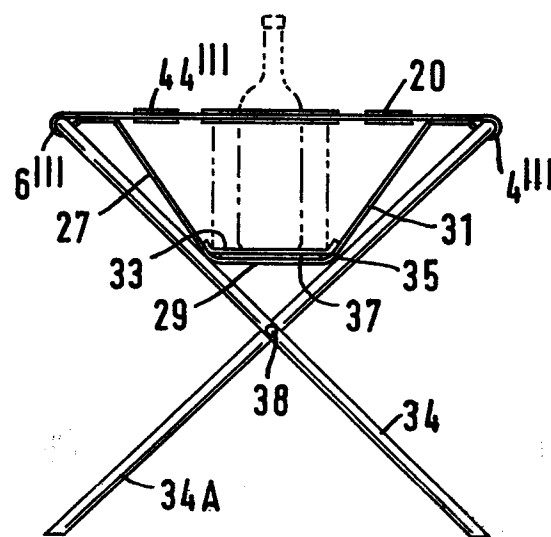
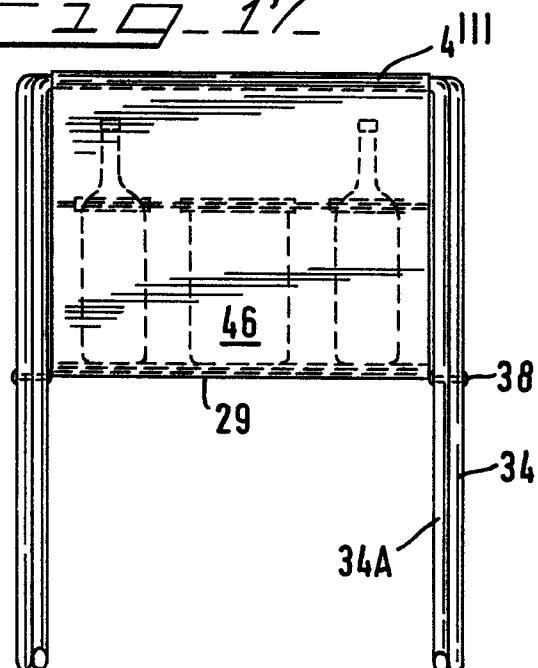


FIG. 14