June 3, 1969 D. B. HARDING 3,447,167

PORTABLE TOILET CABANA

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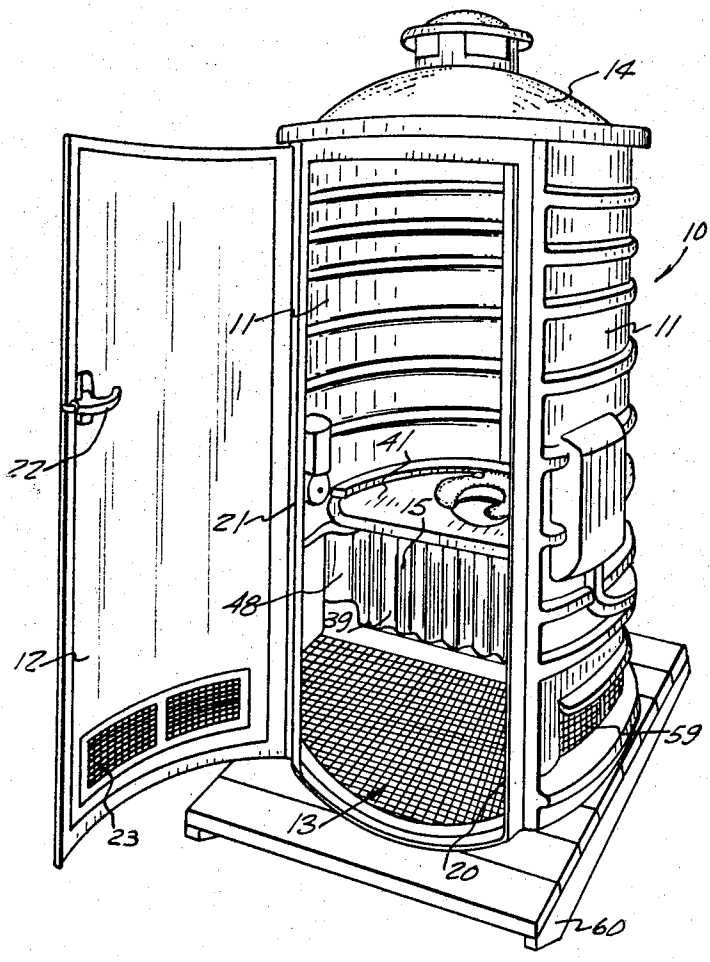


FIG. 1

FIG. 2

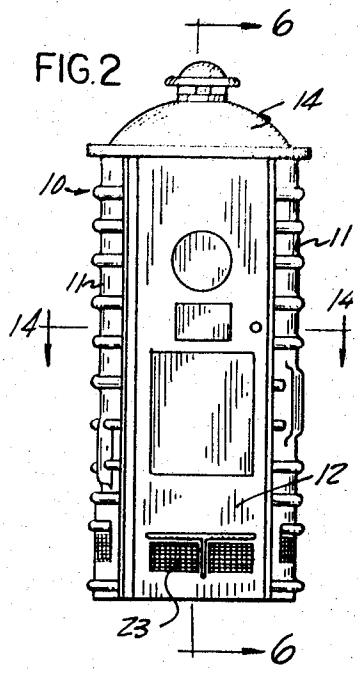
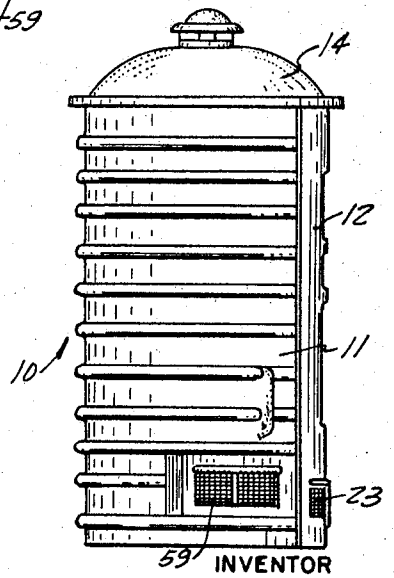


FIG. 3



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FIG. 4

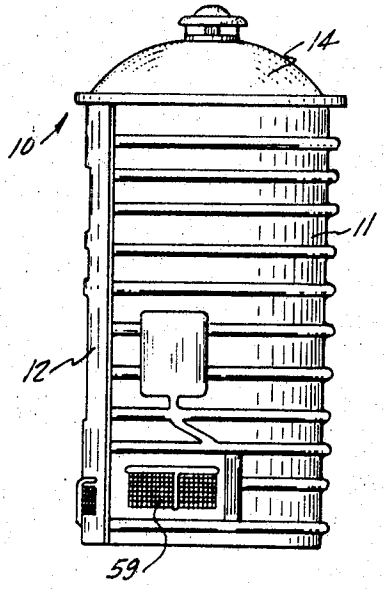


FIG. 5

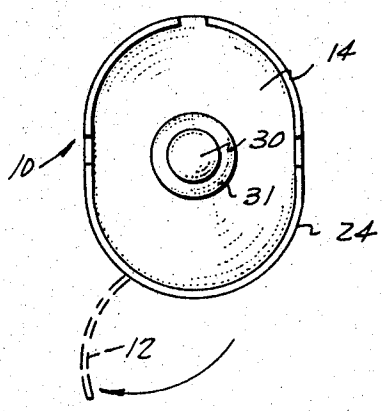


FIG. 6

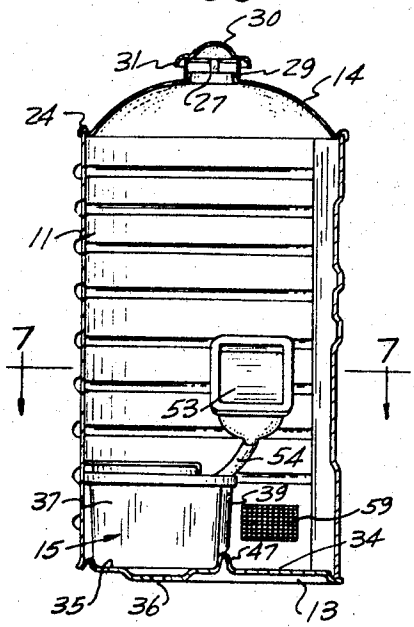
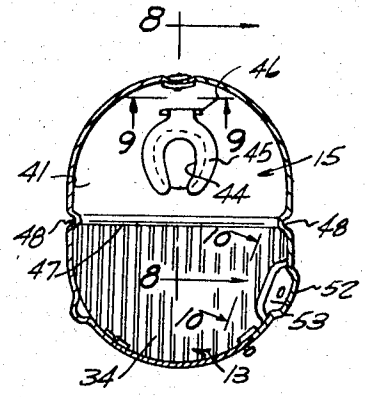


FIG. 7



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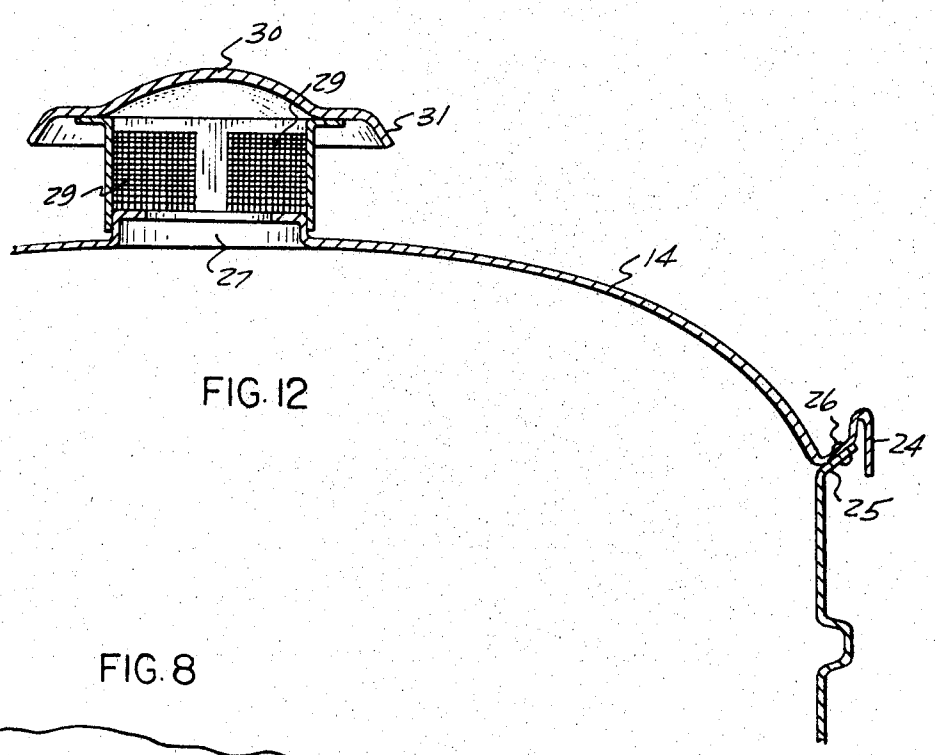


FIG. 12

FIG. 8

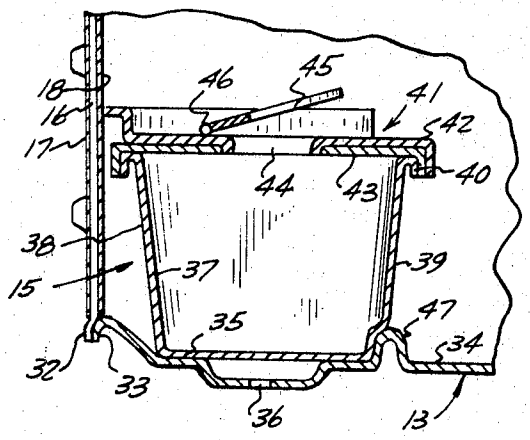
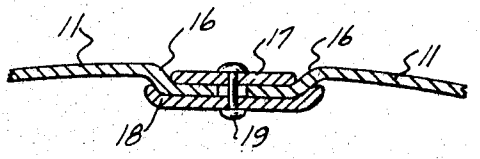


FIG. 9



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FIG. 10

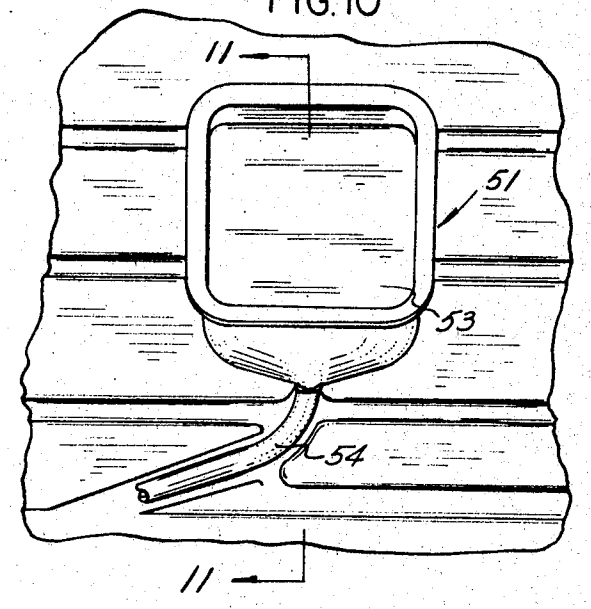
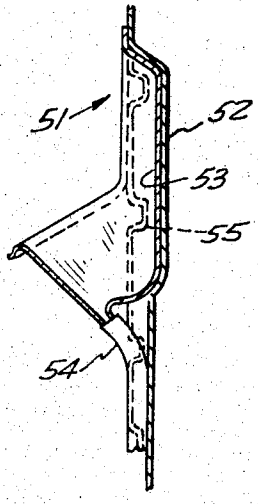


FIG. 11



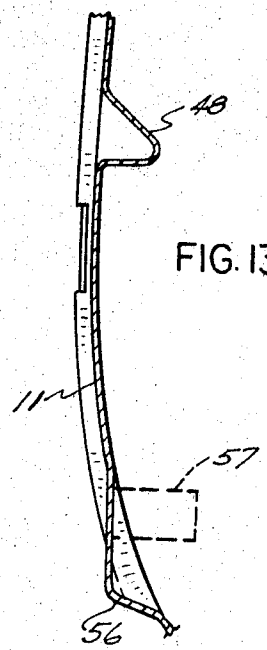
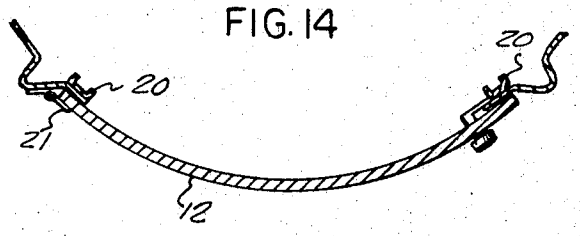


FIG. 13

FIG. 14



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PORTABLE TOILET CABANA

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Int. Cl. A47k *11/00*; E04h *14/00*
U.S. Cl. 4—116 5 Claims

ABSTRACT OF THE DISCLOSURE

A portable cabana for outdoor chemical type toilets, formed of light-weight, thin, sheet plastic panels, configured for rigidity, and suitably indented to form toilet, toilet paper and urinal receiving sockets, joined together at their edges to form an unframed, approximately eliptical in horizontal cross-section closed structure.

Background of invention

Conventional "out-house" types of toilets used, for example, at construction and recreation sites, have been conventionally made of wood or metal, resulting in large, heavy structures, difficult to move or formed to be immovable. These structures have generally been formed of a suitable framing covered with wood or metal panels and with the toilet and urinal formed integral therein. Because of the nature of their construction as well as the nature of their materials, they have tended to deteriorate rapidly and have been virtually impossible to keep completely clean, sanitary and insect proof.

For use at construction sites, as well as temporary recreation sites, such out-house type of toilets have been made of smaller size, but these still have had the disadvantage of being heavy, difficult to move, and formed as above, of materials and structures which deteriorate rapidly and are unsanitary.

Summary of invention

This invention relates to a portable cabana useful with portable outdoor toilets, formed of light-weight, rigid plastic panels assembled without framing, which cabana is particularly resistant to weather and insect deterioration and is so formed as to be relatively easy to clean and maintain in a sanitary condition.

Hence, it is an object of this invention to provide a portable cabana, useful for containing a portable chemical toilet, formed of large size, rigid, plastic panels interconnected to form an unframed, rigid building structure, particularly shaped to provide the maximum interior space and minimum exterior exposed surfaces with an attendant minimum wind resistance.

Another object of this invention is to provide a cabana formed of large, unframed panels of rigid plastic, which panels may be easily replaced, in the event of damage, but which are so formed as to resist normal weather deterioration, insect attacks, and which cabana is provided with an interior toilet tank receiving socket for holding a removable toilet tank and also is formed with integral indentations to receive urinal and toilet paper constructions.

Summarizing, the invention contemplates the formation of a rigid, unframed, cabana, formed of large plastic panels, which cabana is approximately eliptical in cross-sectional shape, and is provided with integral reinforcement configurations, toilet tank receiving sockets, urinal assembly sockets and the like, the entire structure being extremely light-weight and indestructible under normal conditions, as well as simple to maintain in a sanitary condition.

These and other objects and advantages of this invention will become apparent upon reading the following description, of which the attached drawings form a part.

Drawings

FIG. 1 is a perspective view of the cabana, mounted upon a pallet, with the door opened to show the interior and toilet location.

FIG. 2 is a front elevational view of the cabana, and

FIG. 3 is a right side elevational view.

FIG. 4 is a left side elevational view, and

FIG. 5 is a top plan view.

FIG. 6 is an elevational cross-sectional view taken in the direction of arrows **6—6** of FIG. 2, to an enlarged scale, and

FIG. 7 is a cross-sectional plan view taken in the direction of arrows **7—7** of FIG. 6.

FIG. 8 is an enlarged cross-sectional view showing the toilet tank within the cabana.

FIG. 9 is an enlarged fragmentary cross-sectional view showing the joint between the side panels and taken in the direction of arrows **9—9** of FIG. 7.

FIG. 10 is an elevational view of the urinal construction, and

FIG. 11 is a cross-sectional view taken in the direction of arrows **11—11** of FIG. 10.

FIG. 12 is an enlarged fragmentary, cross-sectional view of the roof construction.

FIG. 13 is an enlarged fragmentary, cross-sectional view of a portion of the left side panel.

FIG. 14 is an enlarged fragmentary, cross-sectional view showing the door constructions.

Detailed description

The cabana **10** is formed of a pair of side panels **11**, a front or door panel **12**, a floor panel **13**, and a roof cover panel **14** which together provide a structure which is approximately circular, but actually more eliptical in cross-sectional shape, and arranged to contain therein a chemical toilet **15**, (see FIG. 1).

As shown in FIG. 9, the rear, vertical edges **16** of the side panels **11**, are bent and gripped between joint strips **17** and **18** and held therein by means of rivets **19**.

Suitable strips are fastened to the front edges of the side panel to form a door frame **20** to one side of which a hinge **21** is fastened for securing the door panel **12**. As shown in FIG. 1, the door panel is provided with a combination handle-lock **22** and at its lower end with screened vents **23**.

Referring to FIG. 12, the roof cover panel **14** is in the shape of a downwardly bowed dish having an upwardly and then downwardly bent peripheral edge flange **24** which receives the upper edges **25** of the side panels **11**. Suitable mechanical fastening means, such as rivets **26**, interconnect the flanges **24** to the upper edges **25**.

A central opening **27** is formed in the roof panel and a vent is secured to the panel over the central opening. The vent is formed of a cylindrically shaped, vertically extending tube **28**, having screened openings **29**, and covered by a downwardly dished cover **30** having wide overhang edges **31**.

The lower edges of the side panels are provided with downwardly extending flanges **32** (see FIG. 8) which connect with peripheral edge flanges **33** formed on the floor panel.

The floor panel is divided roughly in half, with a forward half **34** having a roughened surface formed thereon by means of suitably corrugating or bending the plastic forming the panel, and a rear socketed half **35**, having a lower drain opening **36** (see FIG. 8). The tank **37** of the chemical toilet **15** snugly fits within the socket. This tank

is formed with a curved rear wall **38** and a substantially flat, vertically corrugated front wall **39**, to form an approximate semi-circular in cross-section tank with a peripheral rim or flange **40** upon which a removable cover **41** is positioned. Such cover is preferably formed of an upper sheet **42** secured to a lower sheet **43** having an outer flanged edge to fit over the rim **40** of the tank for thereby sealing the cover against the tank.

The cover is provided with a central toilet opening **44** over which a conventional toilet seat **45** is mounted by means of a conventional toilet seat hinge **46**.

The floor socket is provided with a forward rim or bend **47** which snugly fits under the lower ends of the vertical corrugations in the front wall **39** for additionally supporting the tank **30**.

The side panels **11** are each provided with deeply inwardly extending side indentations **48** (see FIG. 7) which together embrace and frictionally hold the tank in position within the socket so that the tank can be removed only by lifting it upwardly and then outwardly.

One of the side panels **11** is provided with an outwardly bowed chamber **52** (see FIG. 11) which receives a urinal bowl **53** having a discharge tube **54** extending into the toilet tank **37**. The tube is positioned within a groove **55** integrally formed in the side panel **11**.

The side panels are also corrugated with integral, vertically spaced apart, horizontally extending corrugations which provide rigidity but which are so formed as to maintain ease of cleaning the structure. In addition, suitable screened vents **59** may be formed in the side panels.

The cabana assembly may be rested upon a floor or upon the ground, but preferably it would be rested upon and secured, as by screws, to a conventional wooden pallet **60** so that it may be easily lifted up upon a truck and carried from place to place as needed, making it more usable for short periods of time at varied locations.

While there are a number of suitable plastics available to form the panels, one particularly suitable one is of the class identified as linear polyethylene in sheet form of about ¼ inch in thickness to provide the required rigidity and strength while maintaining lightness. This material is smooth so that the entire structure is easily washed or otherwise cleaned and will not deteriorate under ordinary weather conditions.

As can be seen, the overall construction can be closed up so that, for all practical purposes, it is insect proof and it may be easily maintained in a sanitary, clean condition at all times particularly since there are no sharp crevices or edges which would otherwise tend to accumulate dirt and dust.

The eliptical cross-section not only rigidifies the structure, but also permits the structure to be arranged relative to the wind so as to reduce the force of wind upon it, which might otherwise tend to knock-over a structure of this type, which has no foundation.

This invention may be further developed within the scope of the following claims. Accordingly, it is desired that the foregoing description be read as being merely illustrative of an operative embodiment of this invention, and not in a strictly limited sense.

I now claim:

1. A portable cabana comprising a pair of opposed, curved side panels having rear vertical edges joined together and spaced apart front edges bridged by a curved door panel hingedly connected to one of the front edges and closing against the other of the vertical edges to form an eliptical horizontal cross-section;

a unitary floor panel having its peripheral edge secured to the lower edges of the side panels;

and a roof cover panel forming the cabana roof and joined at its peripheral edge to the upper edges of the side panels;

said panels each being formed of a single sheet of thin, rigid plastic material;

the panels together forming a rigid, unframed structure said cabana further characterized by the addition of a depressed socket formed in the rear half portion of the floor panel receiving the lower portion of a toilet tank having a curved rear wall positioned adjacent the side panels and a substantially flat front wall spanning the cabana from side to side thereof;

deep indentations formed in each side wall adjacent the opposite sides of the toilet tank to embrace and hold the tank against forward movement.

2. A construction as defined in claim **1**, and including integral horizontally arranged spaced-apart corrugations formed in the side walls along their entire height.

3. A construction as defined in claim **1**, and said toilet tank being removably fitted into said socket for manual removal thereof.

4. A construction as defined in claim **1**, and including an outwardly bowed portion formed in one of the side walls to form a chamber, spaced above the floor, to receive a urinal bowl;

with an outwardly bowed channel formed in said one side wall, extending from the bottom of the bowl portion to the toilet tank location for receiving and holding a urinal bowl conduit extending into the toilet tank.

5. A construction as defined in claim **1**, and said roof cover panel being in the form of a downwardly curved dish, having an upwardly and then downwardly bent peripheral edge flange receiving and securing to the upper edges of the side panels;

an opening formed in the center of the roof cover panel and a vent secured thereto, said vent being in the form of an approximately cylindrical shaped, vertically arranged tube, having screened openings formed therein and covered by a downwardly dished cover member of a substantially greater diameter of said tube.

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U.S. Cl. X.R.

4—119; 52—34, 82, 204, 244, 247