March 18, 1958 J. J. CLEMENT 2,827,217

RECEPTACLE

Filed Feb. 1, 1957 3 Sheets-Sheet 1

FIG. 1

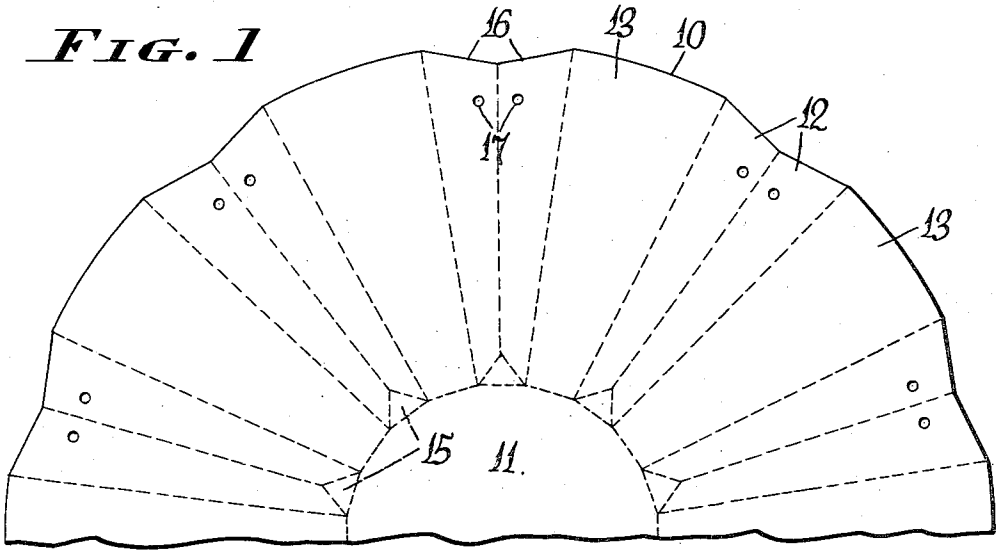


FIG. 2

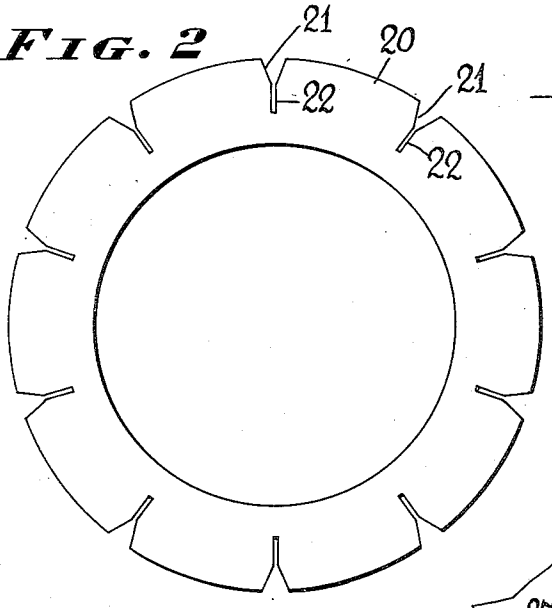


FIG. 5

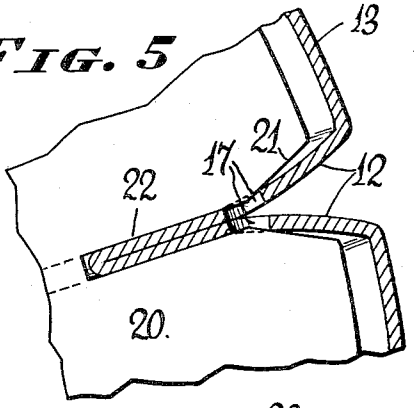


FIG. 7

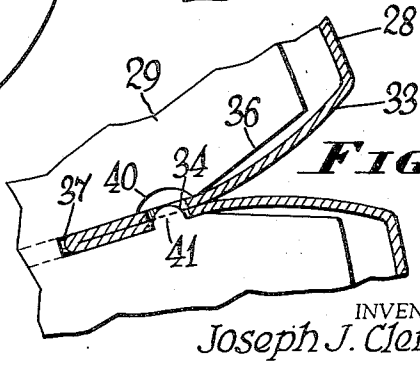
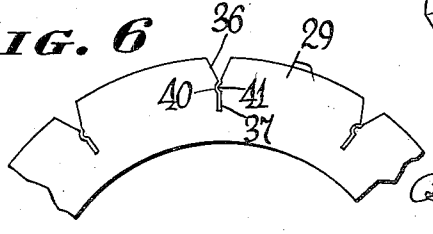


FIG. 6



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March 18, 1958 J. J. CLEMENT 2,827,217

RECEPTACLE

Filed Feb. 1, 1957 3 Sheets-Sheet 2

FIG. 3

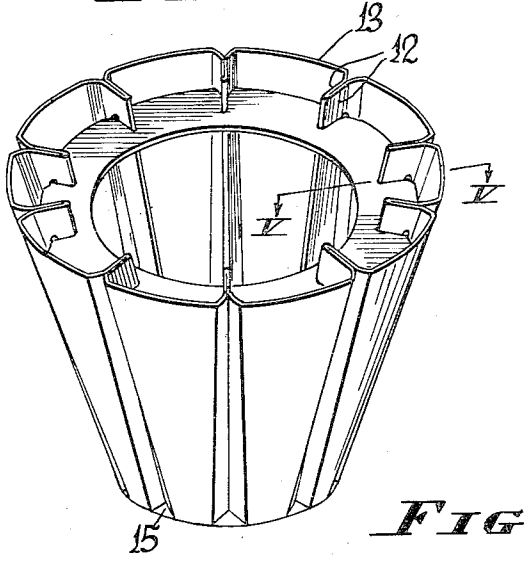


FIG. 16

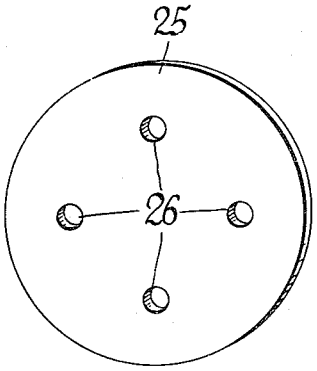


FIG. 4

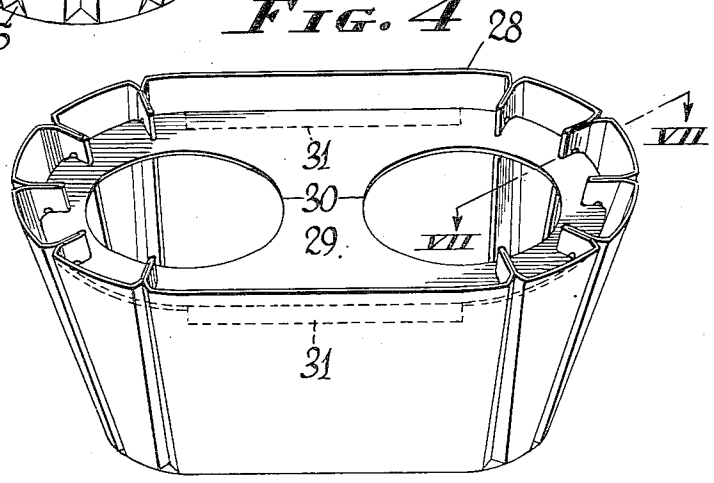
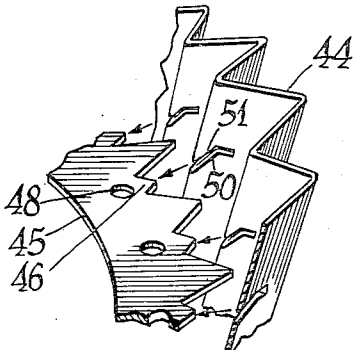


FIG. 8



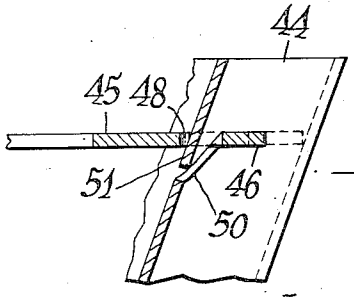


FIG. 9

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March 18, 1958 J. J. CLEMENT 2,827,217

RECEPTACLE

Filed Feb. 1, 1957 3 Sheets-Sheet 3

FIG. 10

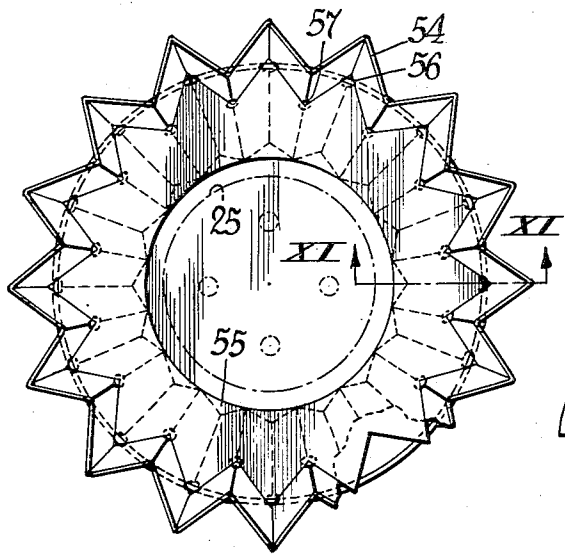


FIG. 11

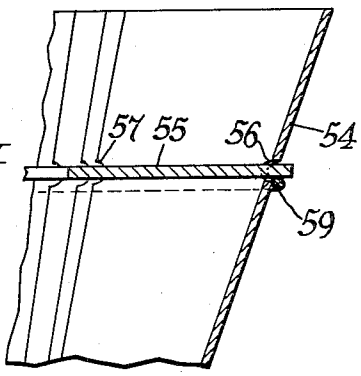


FIG. 12

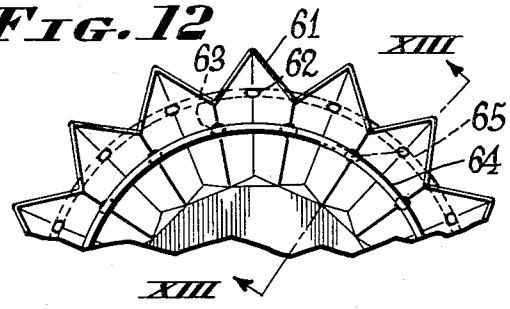


FIG. 13

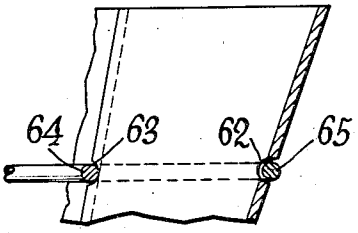


FIG. 14

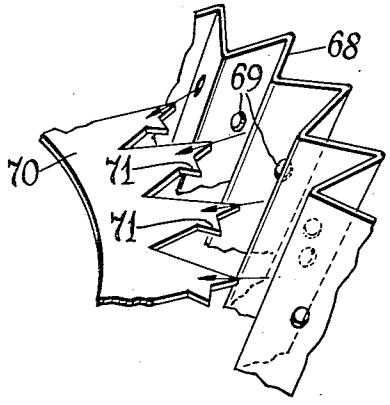
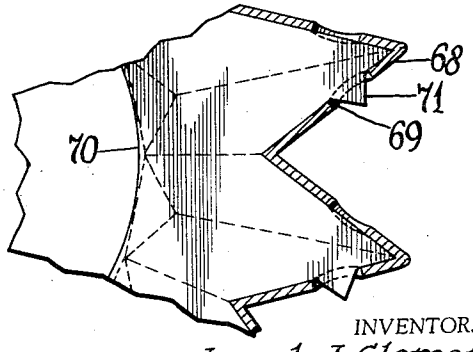


FIG. 15



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United States Patent Office 2,827,217 Patented Mar. 18, 1958

2,827,217

RECEPTACLE

Joseph J. Clement, Williamsville, N. Y.

Application February 1, 1957, Serial No. 637,715

1 Claim. (Cl. 229—1.5)

This invention relates to receptacles for flower pots, such receptacles being generally called "planters."

Planters are made in various forms, many being of ornamented metal and therefore of substantial cost and of a permanent type. On the other hand there is a substantial demand for less permanent and more economical receptacles of this class and more recently planters of molded plastic material have been made available. Even planters of this type do not meet certain requirements. Florists, for instance, find it highly desirable to deliver potted plants to the customer in a receptacle which conceals the usually unsightly flower pot and prevents leakage therefrom. Plastic planters do not meet this need both because of undue cost and because of the substantial space which a supply of such planters requires.

The present invention provides an extremely economical receptacle for potted plants and one which may be set up as needed from flat paper or cardboard blanks which are suitably waterproofed and decorated. Furthermore, the cost of the receptacles of the present invention is but a fraction of the cost of any planters available up to now. The receptacles of the present invention may be decorated in flat blank form by printing, spraying, stenciling or by any other method which may be employed in decorating flat sheets of paper or the like.

Many other objects and advantages of the planters of the present invention will appear to those skilled in the art to which the invention pertains from a consideration of the several embodiments thereof which are depicted in the accompanying drawings and described in the following detailed specification. However, it is to be understood that the invention is not limited to the specific forms thus set forth by way of example and illustration, nor otherwise excepting as defined in the appended claim.

In the drawings:

Fig. 1 is a fragmentary view of a generally circular blank for fabricating one form of the planter of the present invention;

Fig. 2 is a plan view of a retaining and spacing ring adapted to be employed in the planter set up from the blank of Fig. 1;

Fig. 3 is a perspective view of a planter set up from the blanks illustrated in Figs. 1 and 2;

Fig. 4 is a perspective view of a planter generally similar to the planter of Fig. 3 but of oblong shape and adapted to hold two flower pots;

Fig. 5 is a fragmentary cross sectional view on the line V—V of Fig. 3 but on a considerably enlarged scale, showing the means by which the parts are locked in assembled position;

Fig. 6 is a fragmentary plan view of the retaining and spacing ring of the planter of Fig. 4;

Fig. 7 is a fragmentary cross sectional view on the line VII—VII of Fig. 4 on an enlarged scale and showing the means for locking the parts in assembled position, such means constituting a modification of the means illustrated in Fig. 5;

Fig. 8 is a fragmentary perspective view of a modified

planter construction showing a further modification of the means for maintaining the parts in assembled position;

Fig. 9 is a fragmentary vertical cross sectional view through the interlocking means of Fig. 8;

Fig. 10 is a top plan view of a further embodiment of the planter of the present invention with the parts in assembled condition;

Fig. 11 is a fragmentary vertical cross sectional view on the line XI—XI of Fig. 10 showing the means for maintaining the parts assembled;

Fig. 12 is a fragmentary top plan view of a still further embodiment of the planter of the present invention in assembled condition;

Fig. 13 is a fragmentary cross sectional view on the line XIII—XIII of Fig. 12;

Fig. 14 is a fragmentary disassembled perspective view of a further modification of the assembly means of the planter of the present invention;

Fig. 15 is a fragmentary top plan view of the planter of Fig. 14 with portions thereof in cross section; and

Fig. 16 is a perspective view of base member upon which a flower pot may rest in the receptacle.

Like characters of reference denote like parts throughout the several figures of the drawings and, referring first to the embodiment of Figs. 1, 2, 3 and 5, the numeral **20** in Fig. 1 designates a generally circular blank scored as shown to form a circular central bottom-forming portion **11**, accordion pleat portions **12** and unpleated intervening side wall portions **13**. The portions designated **15** in Fig. 1 form gussets at the bottoms of the pleats to facilitate formation thereof and to maintain the circularity of the bottom of the receptacle as appears in Fig. 3. It will be noted that the margin of the blank **10** is indented at the pleat portions as at **16** so that top of the finished container is flat and regular, likewise as shown in Fig. 3.

The blank **10** may be waterproofed and decorated in various ways. In a preferred form a paper base sheet may be provided with a waterproof surface of polyethylene by spraying or by laminating a sheet of polyethylene or similar material to the paper. The surface of the paper which is treated in this manner will comprise the inner surface of the container. The opposite surface of the paper base sheet may have adhesively applied thereto a sheet of aluminum foil or other metallic foil or may be decorated in any of a wide variety of ways known in the paper decorating art, including crimping and embossing.

It will be noted that the pleat portions **12** are provided, near their upper or outer ends, with perforations **17**, which serve as interlocking means in a manner which will presently appear.

Fig. 2 illustrates a relatively stiff cardboard ring member **20** which is provided with V-shaped marginal notches **21** having relatively narrow inwardly extending slots **22** at their inner ends. A notch **21** is provided in ring member **20** for each pair of pleat portions **12** of blank **10**.

In setting up the receptacle or planter of Figs. 1, 2, 3 and 5 the pleat portions **12** of blank **10** are tucked one after the other into the notches **21** and slots **22** of ring member **20**, which automatically forms the frusto-conical side wall of the device as clearly shown in Fig. 3. When each pleat is tucked firmly in place the perforations **17** thereof will register with the angular projections occurring at the junctures of the notches **21** and the slots **22** of ring member **20** and the parts thus interlock as clearly shown in Fig. 5 to a degree sufficient to maintain the parts in the finally assembled position shown in Fig. 3.

The central opening in ring member **20** serves to center a flower pot and retain the same securely against shifting in the planter. As appears in Fig. 5, the diameters of the parts and the depths of the pleats and notches in this embodiment of the invention are such that an annular space is present between the periphery of ring member **20**

and the adjacent interior wall of the receptacle. This permits watering the plant from the bottom of the pot, as is considered highly desirable, by introducing water through this annular space.

Fig. 16 shows a disc **25** which may conveniently and economically comprise all or a part of the material cut from ring member **20** to form the central opening therein. Disc **25** is perforated as at **26** and is placed in the bottom of the receptacle so that the flower pot rests thereon, thus facilitating drainage from the pot and serving as a reinforcing base for stiffening the receptacle.

Reference will now be had to the form of the planter of the present invention depicted in Figs. 4, 6 and 7. As is clearly shown in Fig. 4, this embodiment of the invention provides an oblong planter which accommodates two flower pots. The blank which forms the receptacle proper, the latter being designated by the numeral **28**, is basically the same as the blank shown in Fig. 1 excepting for the oblong shape and the absence of pleat formations along the side wall portions. The ring member **29** of Fig. 4 is shaped to fit the oblong receptacle and provided with two circular openings **30** for locating and retaining a pair of flower pots. In the form illustrated in Fig. 4 the ring member **29** is provided with down-bent stiffening flanges **31** along its side edges.

As appears from Figs. 6 and 7, the manner in which the pleat formations are interlocked with the notches in the ring member is somewhat modified. It is to be noted that this interlocking method is not peculiar to the planter of Fig. 4 but is shown here merely for convenience of illustration and is interchangeable with the method described in connection with the planter of Figs. 1, 2 and 5.

In the embodiment of Figs. 4, 6 and 7 the pleats **33** have perforations **34**, see Fig. 7, just as in the case of the preceding embodiment. Also, the ring member **29** has notches **36** and narrow slots **37** extending inwardly therefrom. However, the notches and slots of the ring member **29** have complementary indentations and protuberances, designated respectively by the numerals **40** and **41**, at the junctures of the notches **36** and slots **37**. The manner in which the protuberances engage the perforations **34** when the pleats **33** are tucked into the notches and slots is believed to be clearly shown in Fig. 7. The indentations merely facilitate tucking the pleats in the slots past the protuberances.

In the succeeding modifications of Figs. 8 through 15 the blanks are formed and scored to provide continuous accordion pleats without the unpleated portions such as at **13** in Figs. 1 and 3. Apart from this the several following modifications differ in the provision which is made for retaining the pleats of the receptacle portion of the planter in engagement with the notches of the ring member.

Referring now to the embodiment shown in Figs. 8 and 9, the pleats of a receptacle **44** fit into sawtooth notches formed in the outer margin of a ring member **45**. The sawtooth notches of ring member **45** have projections as at **46** in Fig. 8 and perforations are formed in the ring member adjacent to each projection **46** as at **48** in Fig. 8. The inwardly projecting portions of the pleats of the receptacle **44** are formed with angular notches **50** which form downward projections **51**. When the pleats of receptacle **44** are assembled in the sawtooth notches of ring member **45** the downward projections **51** of the pleats enter the perforations **48** of the ring member to lock the receptacle and the ring member into the same general relative assembled positions as in the preceding embodiments.

Referring now to the further modified form of the planter of the present invention illustrated in Figs. 10 and 11, the receptacle with its pleated side walls is designated **54** and the ring member with its sawtooth marginal formations is designated **55**. In this embodiment the accordion pleats of receptacle **54** are provided with horizontally alined perforations **56** and **57** which occur at the folds of the pleats. The points of the sawtooth formations of ring member **55** project into the perforations **56** and the root portions of these sawtooth formations engage the perforations **57**. A rubber band **59** is stretched about the receptacle **54** adjacent to the projecting points of the sawtooth formations of the ring member **55** as clearly shown in Fig. 11. In the alternative, a wire ring or similar retaining member may be used instead of the rubber band **59**.

In the embodiment of Figs. 12 and 13 the heavy cardboard ring member found in each of the preceding modifications is dispensed with. As in the embodiment of Figs. 10 and 11, an accordion pleated receptacle **61** is provided with horizontally alined perforations **62** and **63** at the folds of the pleats thereof. A circular wire ring **64** is placed within the receptacle **61** to seat in the several perforations **63** and a rubber band **65** is stretched about the receptacle to seat in the perforations **62**. Here again the rubber band **65** may be replaced by a wire ring or similar retaining member.

In the embodiment of Figs. 14 and 15 a pleated receptacle **68** similar to those of the embodiments of Figs. 10 and 12 is employed. In this instance, however, the perforations are formed in the sides of the pleats as at **69**, instead of in their fold portions. In this embodiment a ring member **70** has marginal sawtooth formations as in Figs. 8 and 10 but each of the sawtooth formations has a lateral projection as at **71** in Figs. 14 and 15. Upon assembly of the pleats over the sawtooth formations the projections **71** fit into the perforations **69** as clearly shown in Fig. 15.

I claim:

In a planter adapted to be set up as required from flat blanks of sheet material, a receptacle member comprising a bottom wall and a continuous side wall thereabout formed with upwardly extending accordion pleats whereby the receptacle member is seamless and substantially leakproof, a ring member comprising a relatively stiff sheet having a central aperture for receiving and locating a flower pot and a notched outer periphery adapted to interfit with the pleats of the side wall of the receptacle member and form a shaping guide for said side wall, perforations in said pleats, and projections on said peripheral notches engageable therewith for retaining said pleats in interfitting engagement with the notches of said ring member.

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