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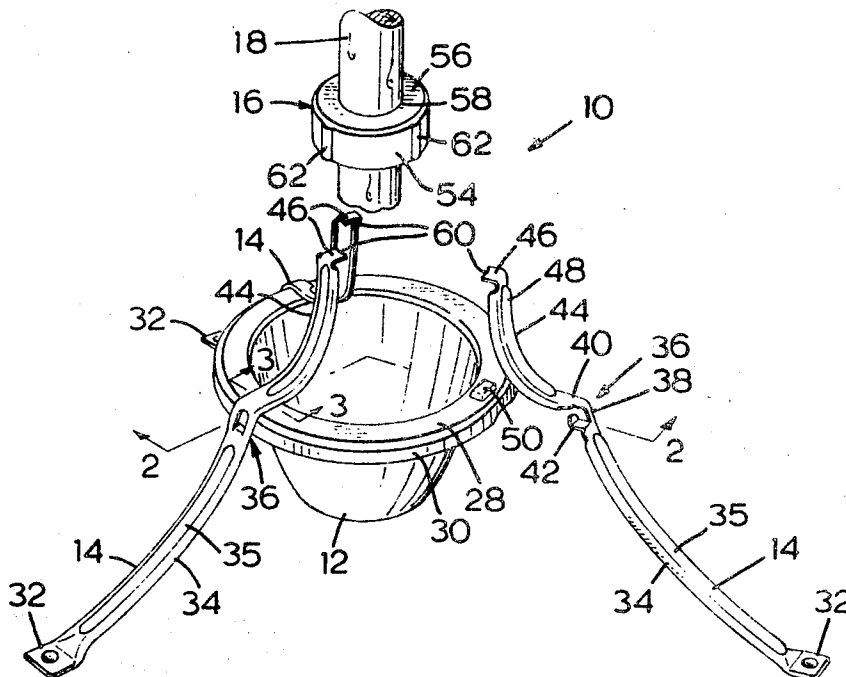
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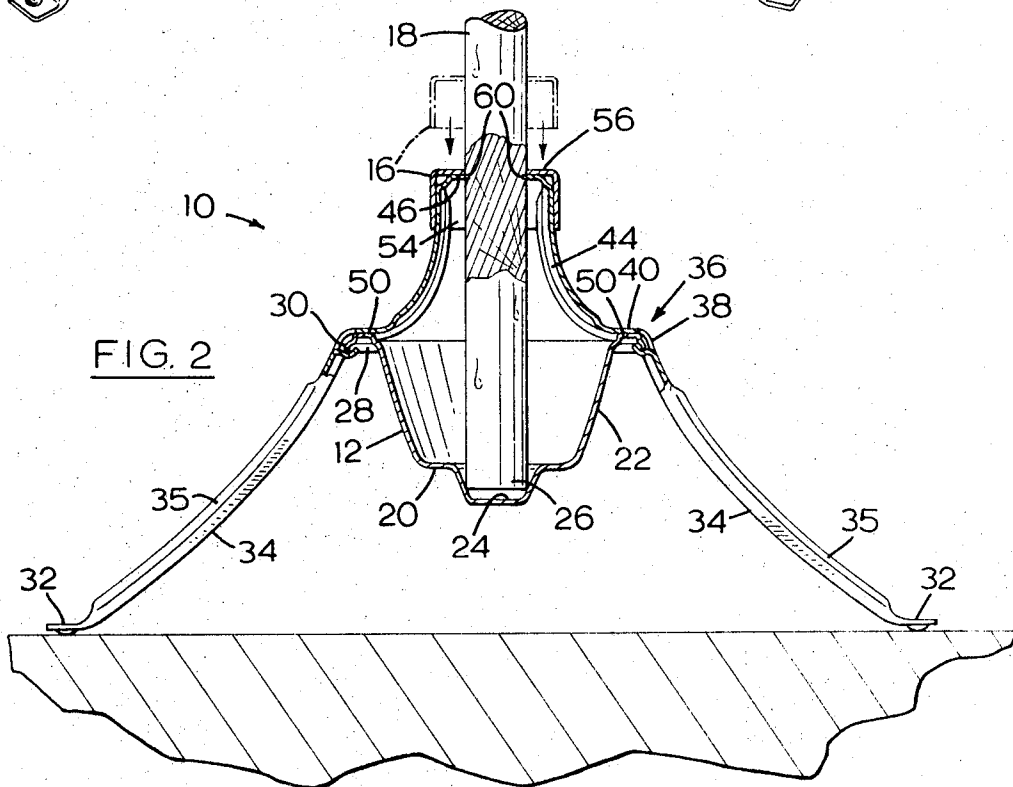
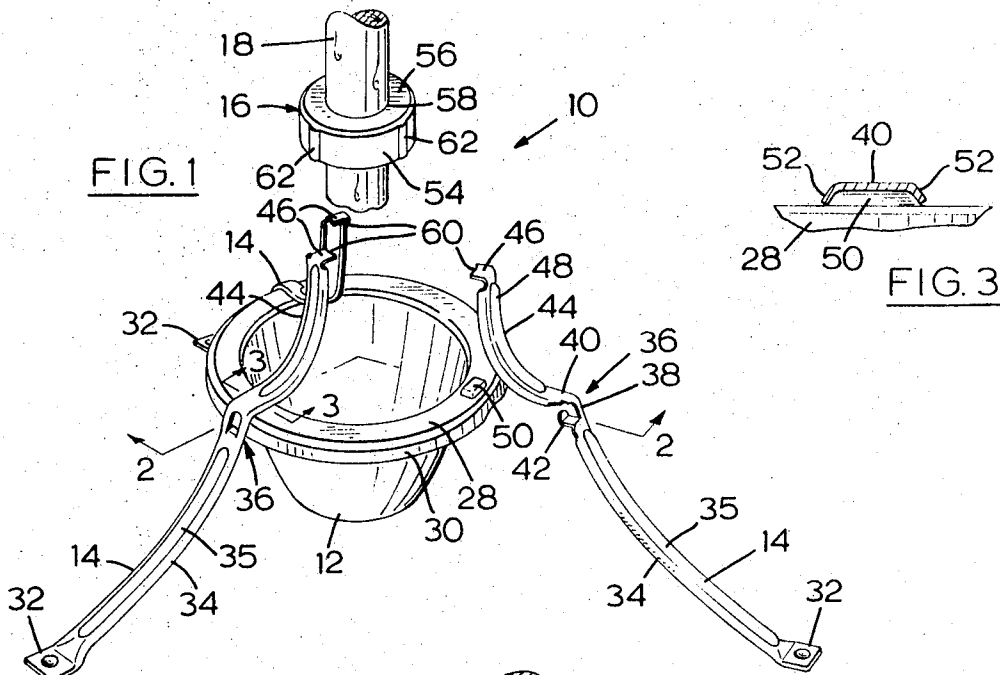
[54] **STAND FOR AN ARTIFICIAL CHRISTMAS TREE
 AND THE LIKE**
5 Claims, 3 Drawing Figs.

[52] U.S. Cl. 248/48
 [51] Int. Cl. A47g 33/12
 [50] Field of Search 248/44, 46,
 47, 48

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ABSTRACT: A stand for artificial Christmas trees having a bowl for receiving and locating the lower edge of the stem of the tree. The upper edge of the bowl has a circumferential lip defined by a circular flange and a peripheral downwardly extending flange. Three identical legs are employed and they are adapted to hook onto skirt and flange near the midpoints of the legs. The upper ends of the legs are bent inwardly and are shaped to grip the stem of the tree. A ring through which the stem of the tree is inserted is shaped so that it can receive the upper ends of the legs and urge the upper ends into contact with the stem of the tree thereby fixing the stem securely to the stand and automatically centering the stem in the stand.





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STAND FOR AN ARTIFICIAL CHRISTMAS TREE AND THE LIKE

This invention relates to a stand for an artificial Christmas tree and the like.

A typical conventional stand of the above kind consists of a bowl, three legs spaced radially about the bowl and clamped to the bowl by set screws, and a ring which surrounds the stem of the tree. Portions of the legs extend upwardly from the bowl to the ring and a plurality of thumbscrews threaded into the ring can be turned by hand to bear against the stem of the tree to thereby fix the tree to the stand. A disadvantage of this type of stand is that some people may find it difficult to accurately center the tree between the thumbscrews, and the thumbscrews are somewhat of an inconvenience.

An object of this invention is to provide a collapsible stand which requires no screws of any kind, and which automatically centers the stem of the tree in the stand when the stem is clamped in the stand.

A preferred form of the present invention includes a bowl for receiving and locating the lower end of the stem of a Christmas tree. The upper edge of the bowl is provided with a circumferential lip defined by a circular flange and a peripheral downwardly extending flange. Three identical legs are employed and they are adapted to hook onto the skirt and flange near the midpoints of the legs. The upper ends of the legs are bent inwardly and are shaped to grip the stem of the tree. A ring through which the stem of the tree is inserted is shaped so that it can receive the upper ends of the legs and urge the upper ends into contact with the stem of the tree thereby fixing the stem securely to the stand and automatically centering the stem in the stand.

In the drawings illustrating a preferred embodiment of the invention,

FIG. 1 is an exploded perspective view of a stand according to the invention;

FIG. 2 is a sectional view on line 2-2 of FIG. 1; and

FIG. 3 is a sectional view on line 3-3 of FIG. 1.

Referring to the drawings, a stand 10 includes a bowl 12, three identical legs 14 adapted to hook onto the bowl 12, and a ring 16 adapted to hold the upper ends of the legs 14 in place about a stem 18. The bowl 12 includes a bottom wall 20 and an upwardly extending generally conical sidewall 22. A frustoconical depression 24 in the bottom wall 20 is concentric with the sidewall 22 and receives the bottom end 26 of the stem 18. A circular flange 28 extends radially outwards from the upper edge of the sidewall 22 and terminates in a cylindrical skirt 30 which extends downwardly from the flange 28.

Each of the legs 14 consists of a foot section 32 integral with a support section 34 and an attachment section 36. The attachment section 36 consists of a generally straight upwardly extending section 38 and a generally straight section 40 which extends horizontally inwards, the angle between the sections 38 and 40 being preferably between 100° and 160°. The sections 38 and 40 have a U-shaped cross section as shown in FIG. 3. A hook 42 is formed in the section 38 and it extends towards the section 40. A curved section 44 of the legs 14 extends inwardly and upwardly from the section 40 and it terminates in a flat section 46 which extends horizontally inwards. The inner edge 60 of the section 46 is slightly curved and it constitutes a gripping edge for engaging the stem 18, as will be explained. The support section 34 and curved section 44 are preferably U-shaped in cross section and are strengthened by ribs 35 and 48 respectively (FIG. 1).

Protrusions 50 formed on the flange 28 of the bowl 12 are provided for locating the legs 14 in equiangularly spaced relation. The protrusions 50 fit between the sidewalls 52 (FIG. 3) of the sections 40 so that the legs 14 are thereby prevented from sliding around the flange 28 of the bowl 12.

The ring 16 has a generally cylindrical wall 54 and an inwardly projecting radial flange 56 defining an aperture 58 for receiving the stem 18. The ring 16 is dimensioned so that it

can be slipped over the upper ends of the legs 14, and when the ring 16 is pushed firmly downwards it forces the gripping edges 60 of the sections 46 into contact with the stem 18 with sufficient force to securely grip the stem 18. A plurality of ribs 62 on the ring 16 form recesses on the inner wall of the ring 16 for locating the ribs 48 of the curved sections 44 on the legs 14. This arrangement helps to rigidify the structure by preventing twisting of the ring 16 relative to the bowl 12.

The stand is assembled by first placing the hooks 42 of the legs 14 under the skirt 30 of the bowl 12, and positioning the legs 14 as shown in FIG. 1. The stem 18 of the tree is inserted through the ring 16 and then the end 26 of the stem 18 is inserted between the gripping edges 60 of the sections 46 and into the recess 24 in the bowl 12. The frustoconical shape of the recess 24 helps to center the tree in the stand. The ring 16 is then pushed down over the ends 46 of the legs 14 thereby locking the ends 60 against the tree stem 18 and at the same time locking the legs 14 about the bowl 12.

The stand will accommodate small variations in the diameter of the stem 18 and also can support natural trees having a suitable stem diameter. The bowl 12 can be filled with water when the stand is used with a natural tree.

The stand is dismantled from the tree by pushing the ring 16 away from the legs 14. The tree is then removed and the legs 14 are pivoted to unlock the hooks 42 from the skirt 30. The stand can then be stored ready for later use.

The stand may be adapted to receive a greater variety of diameters of stem 18 by making the ring 16 with a conical wall so that the farther the ring 16 is pushed onto the legs 14 the closer the gripping edges 60 become.

What I claim as my invention is:

1. A stand for a Christmas tree or the like having a stem, comprising
 - a. a bowl having a bottom wall and a sidewall extending upwardly from said bottom wall and terminating in a lip, said bowl being symmetrical about a central axis perpendicular to the bottom wall and further comprising:
 - i. locating means on said bottom wall for receiving and locating said stem,
 - ii. a flange integral with said lip and extending radially outwards and having an outwardly facing rim,
 - iii. a cylindrical skirt extending axially from the rim of said flange towards said bottom wall,
 - b. at least three legs for supporting said bowl and gripping said stem, each leg being formed with a hook which is positioned inwardly of said skirt when the stand is assembled with a portion of the leg bearing against said flange, and each leg having an upper end with an in-turned portion adapted to grip the stem when it is in place in the stand, and
 - c. a ring having an inwardly projecting radially extending flange having an opening through which said stem can be inserted, said ring being shaped so that it can be pushed over the upper end of said legs to thereby urge them inwardly into engagement with said stem and also to lock said legs in place around the lip of said bowl.
2. A stand as claimed in claim 1 wherein each leg is formed, in the area of said hook, with an attachment section having a first generally planar section and a second generally planar section, the angle between said sections being between about 100 and 160°, said hook being formed in said first section, and said second section bearing against said flange when said stand is assembled.
3. A stand as claimed in claim 2 wherein said bottom wall of said bowl is formed with a frustoconical depression to locate the end of said stem.
4. A stand as claimed in claim 3 wherein said legs are formed with longitudinal ribs.
5. A stand as claimed in claim 2 wherein a portion of each leg above said hook is formed with a generally U-shaped cross section, and wherein said flange is formed with a plurality of upwardly extending protrusions dimensioned to fit within said U-shaped cross section portion of each leg for locating said legs in predetermined positions about the lip of said bowl.