United States Patent [19]

Gidlof

[11] **3,779,493**

[45] **Dec. 18, 1973**

[54] **STAND FOR CHRISTMAS TREES**

[76] Inventor: **Karl Gunnar Gidlof,** Revelsgatan 3, S-421 76, Vastra Frolunda, Sweden

[22] Filed: **Dec. 1, 1971**

[21] Appl. No.: **203,675**

[52] **U.S. Cl.** **248/44,** 287/12

[51] **Int. Cl.** **A07g 33/12**

[58] **Field of Search** 248/40, 41, 42, 43, 248/44, 45, 46, 48; 287/12

[56] **References Cited**

UNITED STATES PATENTS

3,204,898	9/1965	Manning	248/44
2,806,289	9/1957	Rongaus et al.	248/44 X
3,304,037	2/1967	Candela	248/42 UX
3,211,405	10/1965	Fey et al.	287/12 X
3,586,281	6/1971	Schumer	287/12 X
2,260,996	10/1941	Kruczek	287/12
2,997,264	8/1961	Zelenitz	248/48
2,746,700	5/1956	Barbera	287/12 X
1,540,856	6/1925	Munro	248/48
984,496	2/1911	Selig	248/43

FOREIGN PATENTS OR APPLICATIONS

235,181	1/1911	Germany	248/44

Primary Examiner—William H. Schultz
Attorney—Harness, Dickey & Pierce

[57] **ABSTRACT**

A stand, particularly intended for Christmas trees having means to secure the tree in a water container and means to enable said water container to take various positions of inclination, thereby greatly facilitating both support and correct alignment of the tree in a vertical position. Retaining means, such as clasps, are provided to secure the tree trunk in the water container, and a ball joint is provided to permit adjustment of the alignment of the water container relatively the base supporting said container. The ball joint outer concave portion comprises two sections, one rigid section and one movable relatively the first by means of an eccentric shaft operated by an actuating lever.

2 Claims, 2 Drawing Figures

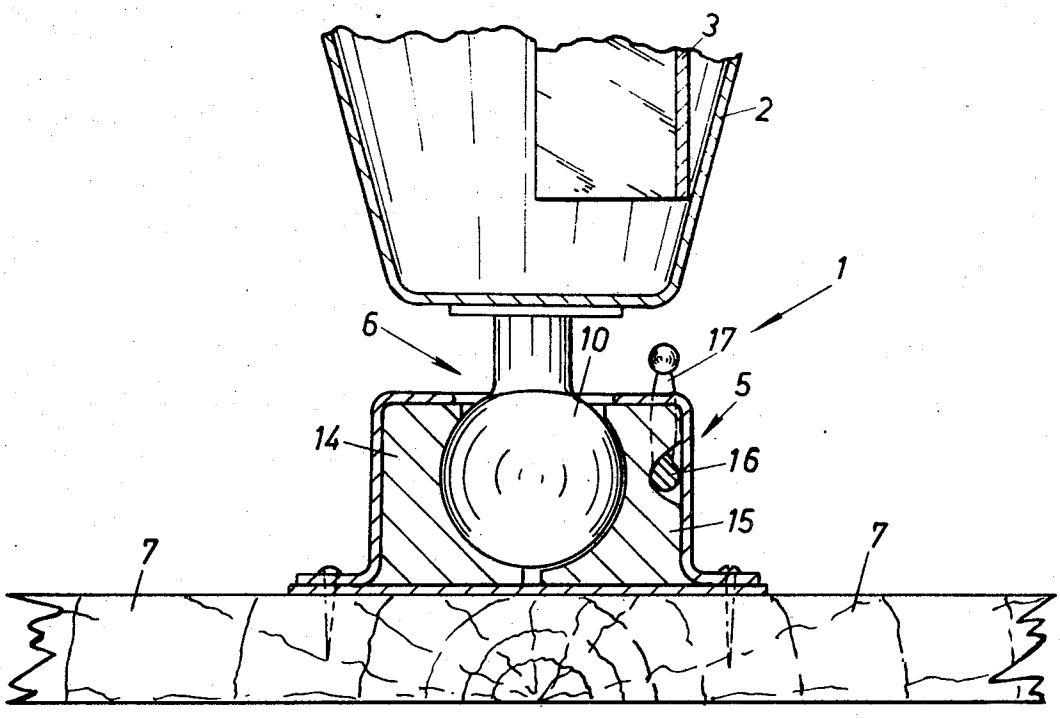


Fig. 1

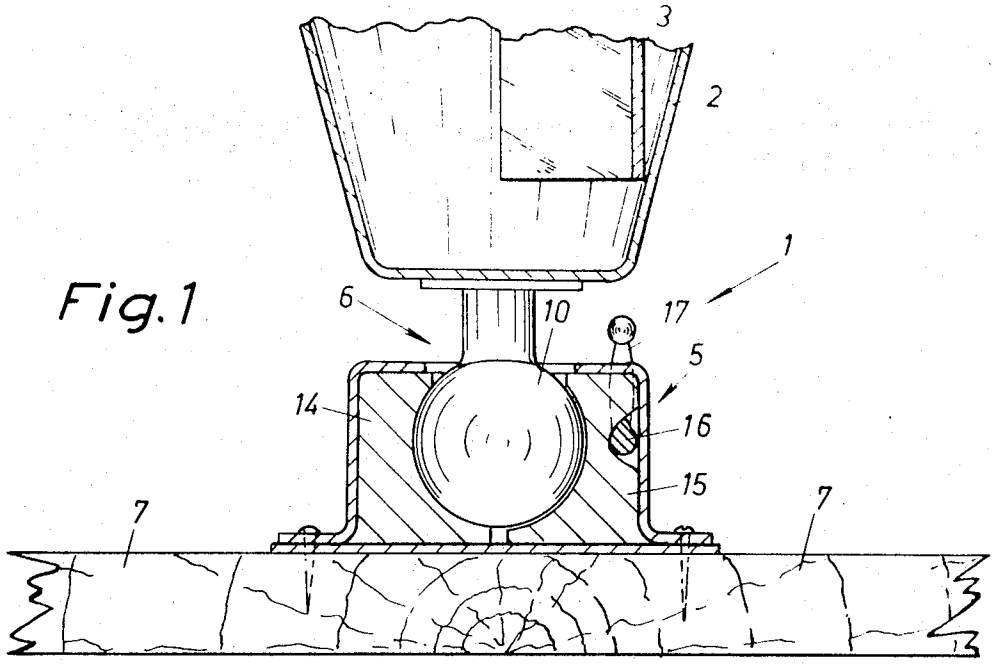
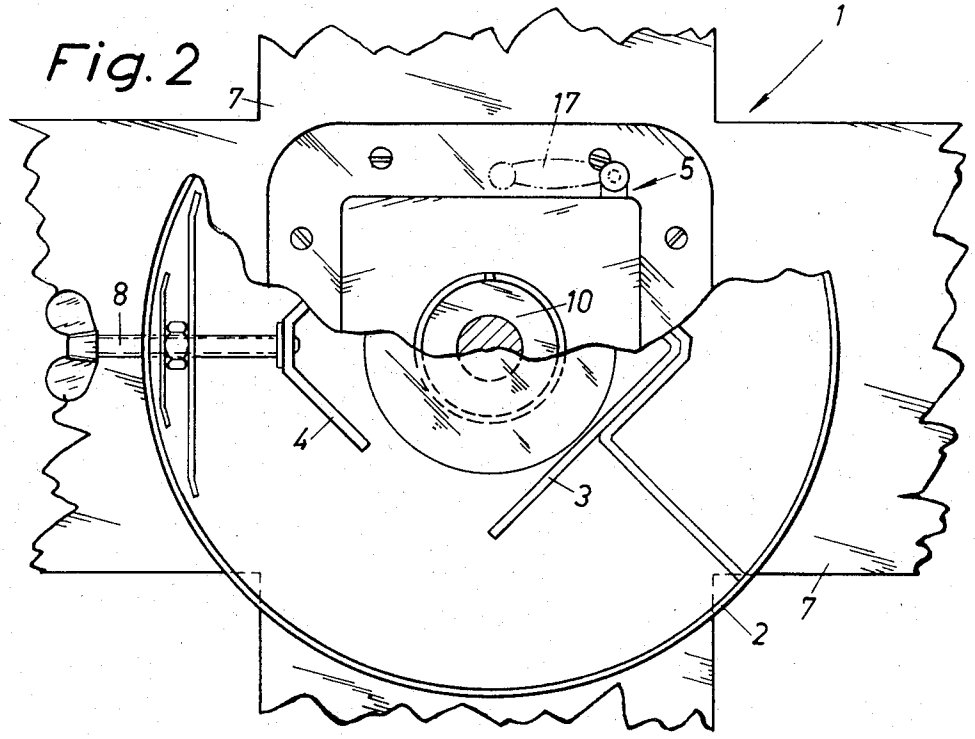


Fig. 2



STAND FOR CHRISTMAS TREES

BACKGROUND OF THE INVENTION

A problem which in most faimiles recurs annually is that of securing the Christmas tree correctly in its stand, making sure that the tree is in a completely straight position. That this task involves a problem in the first place is due to the poor adjustment possibilities of the securing means proper in most stands available on the market, as these securing means are not easily adjustable to ensure that the Christmas tree is fixed in the stand in a completely vertical position. Most often, these securing means consist of three screws arranged at an angular distance of 120° relatively each other along the periphery of a liquid container. Considerable difficulties are involved in adjusting these screws such that the tree assumes a completely vertical and straight position, difficulties which are accentuated by the sharp needles of the fir tree.

SUMMARY OF THE INVENTION

The above-mentioned drawbacks are eliminated by means of the present invention which concerns a stand intended for Christmas trees comprising a water container having means to secure the three such that the lower part of its trunk is fixed in the container, and a support for said container, the support and the container being interconnected by means of a ball joint or the like including a clamping device, said joint being designed to permit adjustment of the container in various positions of inclination. The stand in accordance with the invention is characterised in that the outer concave portion of the ball joint consists of two sections, one of them being rigid and the other one movable relatively the rigid section by means of an eccentric shaft operated by a lever.

Attachment and alignment of the Christmas tree in its stand is considerably facilitated in that the tree alignment and securing means may be made more simple and sturdy and are easier to operate than devices hitherto known, and also in that the tree inclination may be adjusted through a few simple manipulations.

BRIEF DESCRIPTION OF THE DRAWINGS

The invention will be described more in detail in the following with reference to the accompanying, partly diagrammatical drawings, wherein:

FIG. **1** is a vertical section through the joint in accordance with one embodiment of the clamping device, and

FIG. **2** illustrates the same joint as seen from above, parts of the container and the stand foot being broken away.

DETAILED DESCRIPTION OF A PREFERRED EMBODIMENT

In accordance with the embodiment illustrated the Christmas stand **1** comprises a water container **2** having means **3, 4** to retain and secure the fir tree, a joint **6** including a clamping device **5,** and a foot **7.** The means **3, 4** intended to retain and secure the tree comprise a first clasp **3** fixed in the water container, and a second clasp **4** which by means of a regulating or adjusting screw **8** may be set into a position depending upon the thickness of the tree trunk.

The joint **6** between the water container and the foot comprises, as illustrated in FIGS. **1** and **2,** a ball **10** and

two sections **14, 15** surrounding the ball **10,** one of said sections, **14,** being rigid and the other one, **15,** being movable relatively section **14** by means of an eccentric shaft **16** operated by an actuating lever **17.** When the actuating lever **17** is turned to lock the joint **6,** the movable section **15** is urged against the rigid section **14** as a result of the eccentricity of the shaft **16,** and the ball joint **6** is locked.

The invention is not limited to the embodiment described and illustrated herein but various modifications are possible within the scope of the appended claims. The joint interconnecting the water container and the stand need not necessarily consist of a ball joint although this type of joint is the most suitable one in most cases, but may comprise for instance two interconnected flat joints disposed at an angle relatively each other of 90°. In addition, the clamping device may be arranged differently than illustrated and described herein. It may for instance consist of a band which may be tightened about the two sections **14, 15** surrounding the ball **10.** Finally, the tree securing means may be shaped in various ways. One modification comprises retaining the three screws arranged annularly just as in hitherto known constructions, although the advantage of a simple but sturdy attachment is then lost. Furthermore, the cross shape of the stand foot may be replaced by a stand of tripod type or one having four or more legs, or by a round disc or other type of support having a sufficiet base area.

What I claim is:

1. An improved stand, particularly intended for supporting and aligning Christmas trees, comprising a water container adapted to receive a tree trunk, means arranged in said container having a bottom wall for retaining the lower portion of the tree trunk in said container, a support for said container, a ball joint interconnecting said support and said container, including a ball depending from said bottom wall of said container and a combined clamping device and socket carried by said support for permitting adjustment of said container into various positions of inclination, the improvement comprising a first and a second section each having segments forming a respective part of the outer concave portion of said ball joint about a vertically extending axis, the first one of said sections being rigid with said support while the second one is slidably supported in a transverse direction relative to said vertical axis, and relative the first one, an eccentric shaft journaled by said support about a horizontal axis and engaged with said second section for moving said second section, and an actuating lever operating said eccentric shaft.

2. An improved stand particularly intended for supporting and aligning Christmas tree, comprising a water container adapted to receive a tree trunk, a first fixed generally V-shaped segment carried by said container, a second V-shaped segment adjustably supported by said container, said segments being adapted to grippingly engage a tree trunk therebetween, a support for said container, a ball joint interconnecting said support and said container, and a clamping device in said ball joint for permitting adjustment of said container into various positions of inclination, the improvement comprising a first and a second section each having segments forming a respective part of the outer concave portion of said ball joint, the first one of said sections being rigid while the second one is slidably supported relative the first one, an eccentric shaft for moving said second section, and an actuating lever operating said eccentric shaft.

* * * * *