Sept. 4, 1956 R. LUBBERS 2,761,641

CHRISTMAS TREE STAND

Filed Aug. 1, 1952

FIG. 1

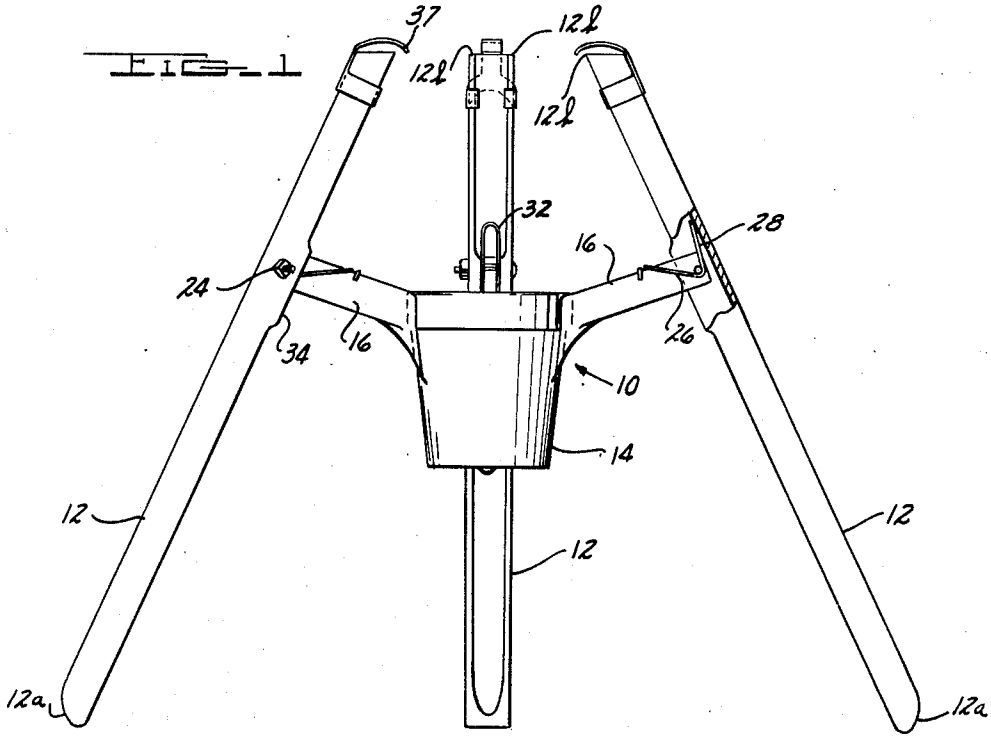


FIG. 2

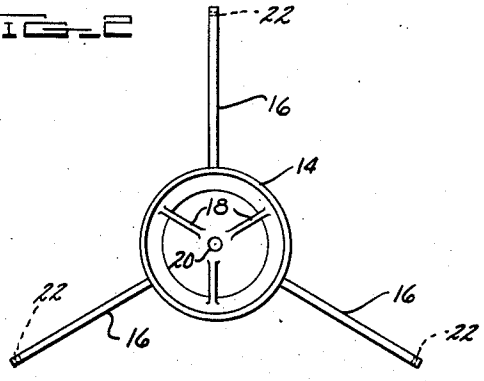


FIG. 3

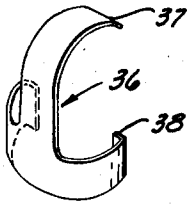
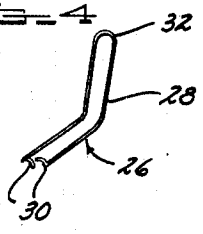


FIG. 4



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CHRISTMAS TREE STAND

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The present invention relates to a stand for supporting a Christmas tree or the like and more particularly to such a stand wherein the weight of the tree provides the force to hold the tree within the stand.

It has long been desirable to have a Christmas tree stand which can be easily and quickly applied without having to first trim off branches from the lower end of the tree trunk and to shape the trunk to fit the stand.

The desirable stand should also be readily adjustable to compensate for irregularities in the vertical alignment of the tree as well as for an irregularly shaped cross sectional trunk.

The stand also should preferably be operable quickly and easily by one person.

Some prior attempts to provide such a stand have involved a stand wherein legs are attached to a cup which receives the lower end of the tree trunk, said legs being so attached that when the trunk is set in the cup the legs are pivoted until the upper ends thereof engage the trunk above the cup.

Such stands, however, usually require two persons to operate, one person to hold the legs in an upright position and another person to insert the tree trunk between the legs and into the cup.

The prior art stands also have usually utilized a cup portion essentially conical in shape so that a tree trunk having an irregular cross section can not be placed therein but must first be shaped to fit centrally in the cup.

It is accordingly one object of the present invention to provide a Christmas tree stand which can be attached to a tree without having first to trim away lower branches and to shape the trunk to fit the stand.

Another object of the present invention is to provide a Christmas tree stand utilizing a cup to which legs are pivotally attached wherein the legs are normally held in an upright position so that the lower end of the tree trunk can be inserted between the legs and into the cup without having the upper ends of the legs catch on the trunk during the operation.

It is a further object of the present invention to provide a Christmas tree stand having a trunk receiving cup that will accommodate tree trunks having an irregular cross section.

Another object of the present invention is to provide a Christmas tree stand which provides a means to compensate for vertical misalignment of the tree trunk.

Still another object of the present invention is to provide a Christmas tree stand wherein the tree is firmly and positively held within the stand by the force of the weight of the tree.

Other objects of this invention will appear in the following description and appended claims, reference being had to the accompanying drawings forming a part of this specification wherein like reference characters designate corresponding parts in the several views.

In the drawings:

Fig. 1 is a side elevation of the Christmas tree stand of the present invention with a portion of one leg broken away to show the arrangement of the leg spring.

Fig. 2 is a top view of the central spider member of the Christmas tree stand of the present invention.

Fig. 3 is a perspective view of the spring finger shown in Fig. 1 attached to the upper end of the legs of the stand.

Fig. 4 is a perspective view of the leg spring shown in place in Fig. 1.

Before explaining the present invention in detail, it is to be understood that the invention is not limited in its application to the details of construction and arrangement of parts illustrated in the accompanying drawings, since the invention is capable of other embodiments and of being practiced or carried out in various ways. Also, it is to be understood that the phraseology or terminology employed herein is for the purpose of description and not of limitation.

Referring to the drawings, Fig. 1 shows the Christmas tree stand of the present invention which comprises the spider **10** with the legs **12** attached thereto the spider **10** is preferably of cast construction and includes the trunk receiving cup **14** with the arms **16** formed thereon.

Fig. 2 is a top view of the spider **10**. The cup **14** has the ribs **18** formed on the inside thereof to accommodate a tree trunk having an irregular cross section. The hole **20** is provided in the bottom of cup **14** to provide communication between cup **14** and a container for water which may be placed under and around cup **14**. If desired hole **20** may be closed with a screw (as shown in Fig. 1) and cup **14** may be used for water thus dispensing with a separate container. The holes **22** are provided in the ends of arms **16** to receive the bolts or pins **24** (Fig. 1) which pivotally connect the legs **12** to the arms **16**.

The leg spring **26** (Fig. 4) is attached as shown in Fig. 1 to normally hold the leg **12** in an upright position. The spring **26** is formed of spring wire. The angle **28** thereof is disposed under bolt **24** (Fig. 1), the ends **30** are hooked over arm **16**, and the loop end **32** engages the inside of leg **12**. It can therefore be seen that spring **26** will normally hold the legs **12** at approximately a right angle to arms **16** of spider member **10** so that a tree trunk may be inserted between the legs **12** and into the cup **14**.

The legs **12** are preferably of cast construction and of V-shaped cross section. The bosses **34** are provided to facilitate the pivotal attachment of the legs **12** with the ends of the arms **16**. The lower end of leg **12** is filled and rounded to form a foot portion **12***a*. The upper end of leg **12** is cut at an angle so that the V-shaped cross section forms the points **12***b* to engage the tree trunk.

The spring finger **36** (Fig. 3) is formed to fit on the upper end of leg **12**. As shown in Fig. 1 the finger portion **37** extends over the upper end of leg **12** and the ends **38** of the band portion snap into notches provided on the inner edges of leg **12**. When the tree trunk is being inserted into the cup **14** the points **12***b* will not catch on the trunk because they are protected by spring finger **36**. However, when the end of the trunk engages in cup **14** the weight of the tree on the spider **10** pivots the legs **12** against the action of springs **26** forcing the upper ends of legs **12** to engage the tree trunk. The force thus exerted on the finger portion **37** of spring finger **36** will push the finger portion **37** down inside leg **12** and the points **12***b* will dig into the trunk giving a firm and positive attachment of the stand to the tree.

It is believed apparent that any vertical misalignment of the tree can be compensated for by changing the point at which the upper end of any of the legs **12** engages the tree trunk.

From the foregoing it can be seen that I have provided a Christmas tree stand which can be quickly and easily attached to a tree by one person without trimming away the lower branches of the tree or shaping the trunk to fit the stand, which can readily accommodate tree trunks of irregular cross section, which is adjustable to compensate for vertical misalignment of the tree and wherein the weight of the tree provides the force necessary to hold the tree firmly within said stand.

Having thus described my invention I claim:

1. A stand for supporting a Christmas tree or the like comprising a central spider member having arms extending radially therefrom in a horizontal plane, legs pivotally attached intermediate their ends to the distal ends of said arms and extending above and below said spider member, springs bearing between said legs and said arms and engaging said legs at a point above the pivotal attachment between the legs and arms to initially restrain movement of the upper portions of the said legs toward the vertical axis of said spider member thereby yieldingly holding the upper ends of said legs a sufficient distance apart to allow insertion of a tree trunk therebetween and permitting the lower portions of said legs to diverge outwardly from the vertical axis of the said spider member upon insertion of a tree trunk between the upper ends of said legs and into engagement with said spider member.

2. A stand for supporting a Christmas tree or the like and comprising a cup to receive the end of the trunk of said tree, arms extending radially from said cup near the top thereof in a horizontal plane, legs pivotally attached intermediate their ends to the distal ends of said arms and extending above and below said cup, springs bearing between the upper surface of said arms and the inner surface of said legs and engaging said legs at a point above the pivotal attachment of said legs to initially restrain movement of the upper portions of said legs toward the vertical axis of said cup thereby yieldingly holding the upper ends of said legs a sufficient distance apart to allow insertion of the said tree trunk therebetween but permitting the lower portions thereof to diverge on insertion of the said tree trunk between the upper ends of said legs and into said cup, each of said legs having an open channel formed on the inner surface thereof near the upper end thereof and a spring finger affixed at one end to the outer surface of each of said legs with the free end thereof extending over the upper end of the leg to prevent the upper end of said leg from catching on said tree trunk as it is being inserted into said stand, the free ends of said spring fingers being adapted to be forced down into the said channel portions of said legs upon the pivoting of the upper ends of the legs into firm engagement with said tree trunk.

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