Feb. 23, 1954 B. W. ARMITAGE 2,670,163

CHRISTMAS TREE STAND

Filed Oct. 31, 1950

Fig. 1

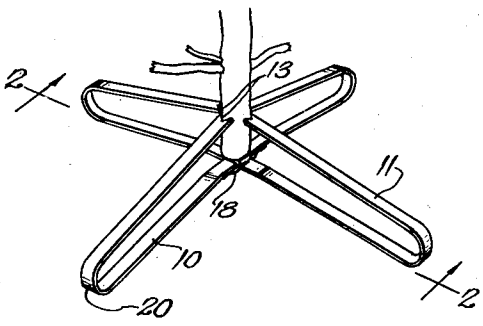


Fig. 2

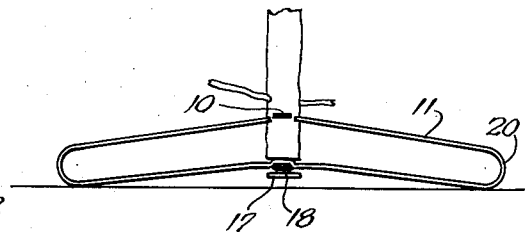


Fig. 3

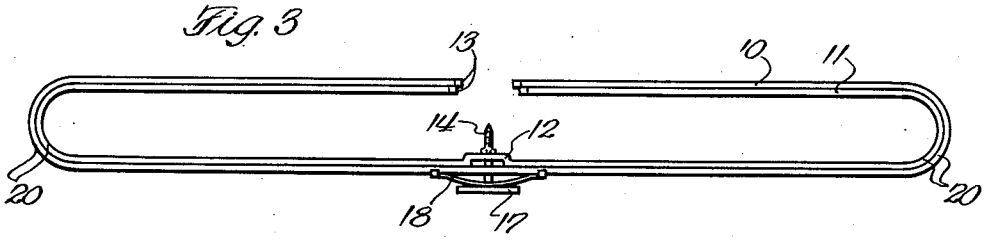


Fig. 4

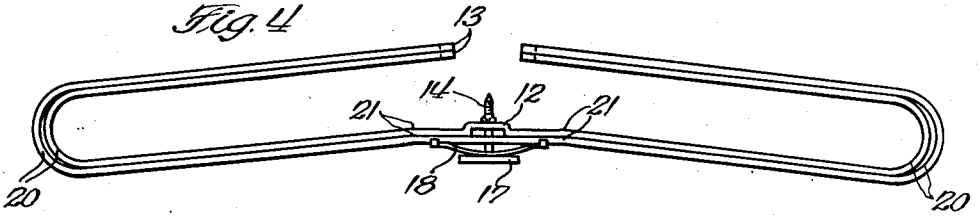


Fig. 5

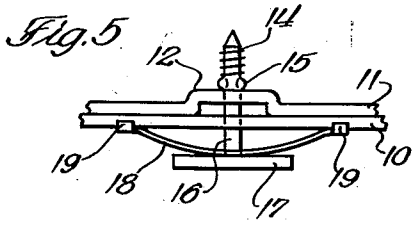
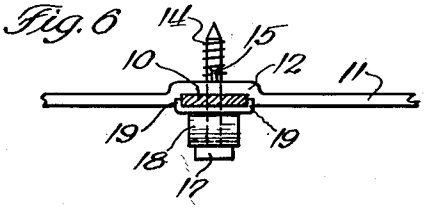


Fig. 6



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CHRISTMAS TREE STAND

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1 Claim. (Cl. 248—47)

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The object of the present invention is to provide means for holding a Christmas tree or related article in upright position, such means being of simple construction and easily applied to a tree.

A further object of the present invention is to provide a device of the foregoing character which is simple to manufacture and may be stored in a relatively small space. A further object of the present invention is to provide a method of manufacturing a foldable Christmas tree stand whereby the relative parts thereof may be formed in simple steps and by relatively simple mechanism.

The foregoing and other objects and advantages of the present invention will be more readily apparent from inspection of the following specification taken in connection with the accompanying drawing wherein like numerals refer to like parts throughout, while the features of novelty will be more distinctly pointed out in the appended claim.

In the drawing:

Fig. 1 is a view in perspective of the Christmas tree stand in use;

Fig. 2 is a vertical section taken substantially along line 2—2 of Fig. 1, showing the Christmas tree stand in use;

Fig. 3 is a view, on an enlarged scale, of the Christmas tree stand in a partial state of formation;

Fig. 4 is a similar view showing the Christmas tree stand in final form and collapsed for shipment or storage;

Fig. 5 is an enlarged view of the joint of the Christmas tree stand in the collapsed condition; and

Fig. 6 is a view similar to Fig. 5 showing the Christmas tree stand in operative condition.

The device preferably comprises a pair of bent straps of equal length designated by the numerals 10 and 11. The straps are nested within each other and pivoted together at a central point so that they may be folded for shipping or storage as seen in Figs. 3 and 4, or may be opened and disposed at right angles to each other so as to support a tree as seen in Figs. 1 and 2. The strap 11 is provided with an offset central portion 12 of sufficient width and depth to receive the central portion of the strap 10 therein when the straps are disposed at right angles to each other as seen in Fig. 6, thereby providing means for holding the straps at right angles to each other when in use. Each of the straps is initially provided with a reentrant angular tip as indicated at 13 in Fig. 1 whereby a pair of sharp points is

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provided on each tip capable of gouging into and holding the trunk of a Christmas tree or the like. When the straps have been formed to this state they are placed in superimposed relation and connected together by a pivot member including a screw point 14, an intermediate retainer abutment 15, a shank portion 16 and a head 17. Various forms of abutments and heads may be provided, the present disclosure illustrating one form. The screw and shank portion may be provided on a single member having the abutment thereon, which member after being inserted through central pivot openings in the straps 10 and 11 and through a central opening in a spring 18 tending to hold the members in contacting position when in crossed relation as seen in Fig. 6, is then welded to the head 17 which may be in the form of a short bar. An alternate disposition would be the provision of a member including the head 17, the shank 16 and screw point 14 which is inserted through the openings in the spring and the strap and is then subjected to a stamping operation to provide the abutment 15 holding the assembly in assembled relation. The spring may be of any desired shape or type, in the present disclosure the same comprising a bowed leaf spring 18 having flanges 19 at each tip to engage the sides of the strap 10 and prevent relative rotation of the spring with respect to the strap. The spring is initially tensioned so as to force the central portion of the strap 10 into the recess provided by the offset 12 when the straps are crossed as seen in Figs. 2 and 6.

After the straps are so joined together by the pivot member they are bent together about suitable form members so as to provide reentrant elbows 20, the bending being such as to cause the arm portions to lie parallel to the base portions, with the pointed tips closely adjacent each other and close to the tip of the screw 14. It will be realized that so bending a pair of superimposed straps will cause the elbow portions 20 to be bound together, virtually preventing relative rotation of the arms 10 and 11. In order to provide an effective Christmas tree stand the elbows are loosened and the central portion of the assembly is raised with respect to the elbows 20 which would contact the floor, by bending the straps downwardly at the points indicated at 21, thus causing the elbow portions 20 to separate from each other as seen in Fig. 4. So bending the straps also causes the tips of the arms to more closely approach each other, thus compensating for the reduction in length of the inner strap 11 by reason of the offset 12.

It will be appreciated that the finished article

may be shipped in a thin, elongated carton and will not require much space for shipment or storage. When it is desired to use the article the straps are easily rotated to a position at right angles to each other and will be retained in such position by the effect of the spring 18. A Christmas tree may be laid on its side and the device positioned thereon by springing the pointed tips to permit insertion of the base of the tree, whereupon the screw 14 may be operated to pierce the butt of the tree and at the same time draw the butt end downwardly, thus placing tension on the arms and causing the pointed tips to be driven into the tree. If the tree is off balance when erected the arms may be very easily adjusted by lifting one pointed tip upwardly and driving the opposed pointed tip downwardly. Relative shifting of the four pointed tips may be rapidly and easily accomplished to cause the tree to stand upright. As seen in Fig. 2, a light-weight tree will be supported entirely by the rounded elbows 20. A heavier tree might depress the central portion until the screw head 17 rests upon the floor, this action resulting in the pointed tips being more firmly driven into the trunk of the tree and causing the assembly to be completely stable regardless of the weight or height of the tree, within the limits of the device. It is to be appreciated that various irregularities in contour of the tree trunk or various differences in diameter thereof within reasonable limits may be accommodated by one size of stand. It is contemplated that two or three sizes of stands may be provided to accommodate all sizes of trees normally used for Christmas tree purposes.

Having illustrated and described a preferred embodiment of my invention, it should be apparent to those skilled in the art that the invention permits of modification in arrangement and detail. I claim as my invention all such modifications as come within the purview of the appended claim.

I claim:

A Christmas tree stand comprising a pair of elongated spring straps of substantially equal length, pivot means connecting said straps together at their centers, each of said straps having its opposed sections beyond said pivot means curvedly bent at an intermediate point so as to provide an arm portion overlying the central portion in substantially parallel relation thereto, the distances from said pivot means to the bends of one of said straps being lesser than the corresponding distances of the other and the bends of said one strap being of lesser radius than those of the other whereby said straps may be nested one within the other and are freely movable from the nested position to a position at right angles to each other, the tips of each of said straps being pointed whereby to grip the trunk of a Christmas tree emplaced therebetween, said pivot means comprising a pointed member capable of being driven into the butt of the tree, one of said straps having an offset central portion of substantially the same width as the width of the other of said straps and into which said other strap may fit when said straps are at right angles to each other, and spring means compressed between a portion of said pointed member and said other strap, said other strap being slidably mounted on said pointed member whereby said spring means may force said other strap into said offset central portion yieldably to hold said straps at right angles to each other.

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