April 15, 1947. J. A. WOMACK 2,419,183

STAND OR HOLDER FOR CHRISTMAS TREES OR THE LIKE

Filed July 9, 1943

Fig. 7.

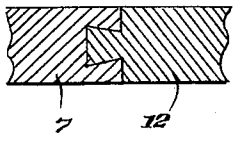


Fig. 1.

Fig. 4.

Fig. 2.

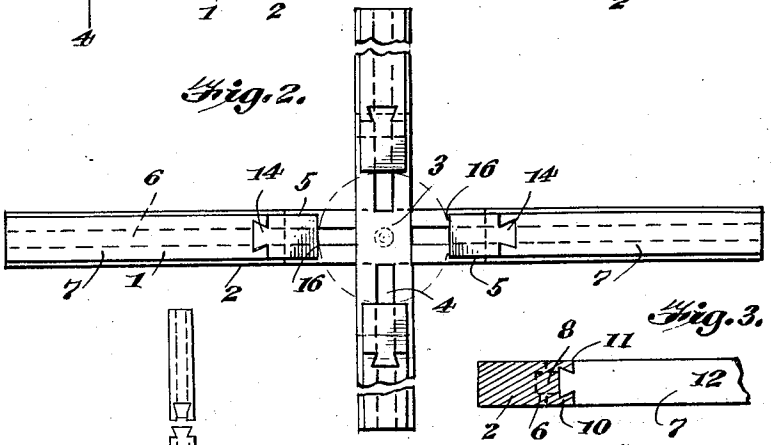


Fig. 3.

Fig. 5.

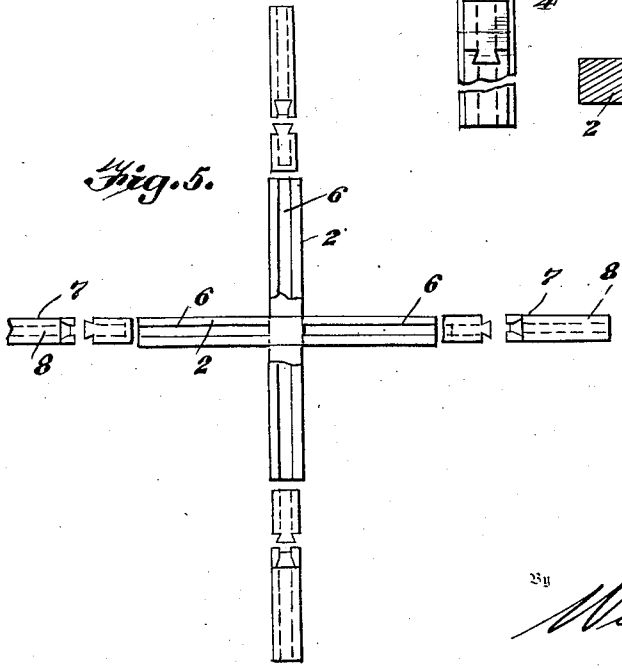
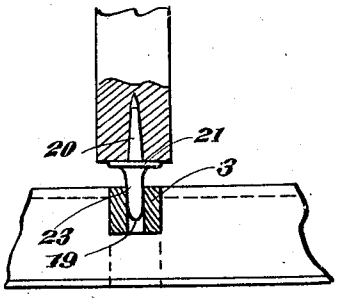


Fig. 6.



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STAND OR HOLDER FOR CHRISTMAS TREES OR THE LIKE

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Application July 9, 1943, Serial No. 494,062

7 Claims. (Cl. 248—44)

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This invention is directed to an improvement in stands or holders for Christmas trees or the like, designed to provide a firm adjustable support for the tree regardless of the external shape thereof, and which requires no auxiliary connecting or fastening means in its use.

The primary object of the present invention is the provision of a tree stand constructed of wood or the like, and capable of being stored or shipped in a knock-down condition, with the parts conveniently associated for use without requiring any tools or fastening means.

A further object of the invention is the provision of a stand in which the parts for clamping the tree in place are designed for clamping adjustment to accommodate trees of varying diameters; are movable into tree-clamping relation by simple endwise movement; and cooperate with the tree by edge contact to avoid interference to such clamping by any irregular form of the tree.

A further object of the invention is the provision of a stand in which the clamping elements when moved into clamping relation with the tree are, incident to their form and relation in the stand, automatically locked in operative position against displacing stresses, without the use of any auxiliary locking means.

A further object is the provision of a stand of inexpensive material, requiring but little mechanical work to form in desired shape, to thus provide an economical, simple construction, requiring no particular skill to use, while remaining effective for its purpose under all conditions.

The invention is illustrated in the accompanying drawings, in which:

Fig. 1 is a view in elevation, partly in section, illustrating the stand in operative relation to a tree.

Fig. 2 is a plan view of the stand.

Fig. 3 is a section on line 3—3 of Fig. 1.

Fig. 4 is a section on line 4—4 of Fig. 1.

Fig. 5 is a broken plan of the base, showing the parts separated.

Fig. 6 is a sectional detail, showing a slight modification.

Fig. 7 is an enlarged fragmentary sectional view further illustrating the operative connection between a clamping member and a locking brake.

The improved stand is preferably, but not necessarily constructed of wood, and made up in a way to utilize small and more or less waste lumber. In preferred working form, the stand comprises a base 1, made up of two pieces of narrow elongated form 1', in crossed relation, forming the four leg pieces as at 2. Each of the pieces

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1' is centrally cut-out so that they may be locked in crossed relation in a half-lap joint. Thus the center part of one piece lies uppermost, as at 3, to be utilized as hereinafter stated and the top edges of the two pieces 1' are in a common plane.

The upper edge surfaces of the pieces 2 are longitudinally grooved at 6, to receive the tongues 8, formed on the lower edges of locking braces 7. The locking braces are designed to be fixed with relation to the pieces 2, and if desired may be made in one piece therewith. For the sake of economy, however, in permitting the use of smaller pieces, it is preferred that the pieces and locking braces 7 be made in separate pieces, though it is to be understood that they are to be secured together for use.

The locking braces are triangular in side elevation being preferably of substantially right-angled form, with the inner edge 9 at substantially a right angle to the pieces 2. The locking braces 7 are secured to the pieces 2 so that their inner edges are spaced an appreciable distance from the center of the base to avoid any possible contact with the tree to be supported. The upper portion of the edge 9 of the locking braces are cut away at an upward and outward angle, as at 10, this length 10 constituting the locking area, and being formed throughout such length with a dovetail channel 11, as shown in Fig. 3.

Clamping members 12 are provided for cooperating with the locking channels 11, such members each comprising a triangular section of wood of substantially right triangular form, the base edge 13 of which is formed with a dovetail tongue 14 to closely but slidably fit the channel 11 in the locking brace. The upper edge of the clamping member is of the maximum width of that member, and the inclined edge 15 slopes outwardly from a vertical line passing through the juncture of the inclined and upper edge. This defines the juncture, indicated at 16, as a clamping edge of the full width of the clamping member but at the innermost plane vertically of the clamping member, in order to provide but a single edge for cooperation with the tree, as will later appear.

The center piece 3 is provided with an upstanding spur, preferably a common nail 17, which extends above the plane of the base. The tree to be supported is formed at the center of its lower end with a hole to receive the spur 17, with the tree, indicated at 18, extending upward between the clamping members. These members are simply pressed downward in the channels 11, until the edges 16 of the clamping members are

brought into clamping contact with the side of the tree. The inclination of the channels 11 to the vertical and the clamping pressure of the edges 16, provides a wedge action in the cooperation which constitutes in effect a lock to prevent any relative movement of the clamping members when in cooperation with the tree.

It is to be particularly noted that the only contact of the clamping members with the tree is at the extreme upper edge. This is important, for as illustrated particularly in Fig. 1 it constitutes each clamping member an independent holding means, which may engage the tree at varying heights. This provides for supporting a tree of irregular exterior surface with secure and effective clamping.

It will be further noted that no securing elements, such as nails, screws, or other fastenings are needed or necessary, as the only action required to securely clamp the tree in position is a downward pressure on and movement of the clamping members until the edges 16 tightly engage the surface of the tree. The construction further lends itself to supporting the tree at an inclination if desired for any purpose. By obvious positioning of the clamping members at different heights the tree may be held at any reasonable inclination, and as securely supported as in upright position.

If desired the center 3 of the base may be provided with a hole 19, and a spur 20 driven into the bottom of the tree, the spur having a flange 21 to limit its penetration of the tree and provide an end 23 to be entered into the hole 19 of the center. This modification is shown in Fig. 6.

From the above description it will be apparent that the improved tree stand is made simply and economically, requires few parts, and those of simple design, and more importantly requires no independent securing elements either in their assemblage or in their use in clamping the tree in supported position. While preferring that the stand be made of wood for economy and to avoid the use of scarce and prohibitive materials, it is of course apparent that any appropriate material may be used if desired and that such are complemental to the above description.

The stand as a whole is readily separable when desired for storage or shipment, requires no tools or skill for assemblage, and its application and use is so apparent when assembled that it can be effectively employed by anyone without any particular knowledge.

Having thus described the invention, what is claimed, is:

1. A stand for supporting a standard such as a tree trunk, comprising a plurality of members supported in spaced relation around a center upon which the standard is to be placed, the members being spaced apart a distance to define a circular area materially greater than the diameter of the standard, each of said members being formed to have a surface inclined downwardly and inwardly toward said center, and a clamping member

mounted for sliding movement upon each of said inclined surfaces for movement downwardly and inwardly along the supporting surface for locking engagement with a standard disposed upon said center.

2. A stand of the character stated in claim 1, in which each of said clamping members has a sharp corner for locking engagement with the standard.

3. A stand of the character stated in claim 1, in which each of said clamping members is substantially in the form of a truncated right triangle, the back edge of which engages said surface and the corner forming the junction of the base and hypotenuse being adapted to have locking connection with the standard.

4. A stand as set forth in claim 1, in which the clamping members have dovetail tongue and groove connection with the supporting members.

5. A stand of the character stated comprising a base having a plurality of legs directed radially from a common center, an upstanding brace member supported upon each leg, the brace member having inner edges spaced from said center, a portion of each of said edges being inclined upwardly and outwardly with respect to said center, a clamping member supported by each brace and having a straight edge portion slidably connected with the inclined edge portion of the brace, the clamping members when moved downwardly on the said inclined portions of the braces, moving together toward said center for clamping engagement with an object disposed upon said center.

6. A stand of the character stated in claim 5, in which said clamping members have opposing and cooperating inner edges which are inclined downwardly and outwardly with respect to said center whereby to form a sharp clamping point.

7. A stand as set forth in claim 5, in which the clamping members have dovetail tongue and groove connection with their respective bases and in which the clamping members have inner edges which are inclined downwardly and outwardly with respect to said center to form a sharp clamping point.

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1st addition to Patent No. 722,678