June 12, 1962 W. N. MATSON 3,038,689

CAST STAND

Filed July 19, 1960

FIG.1

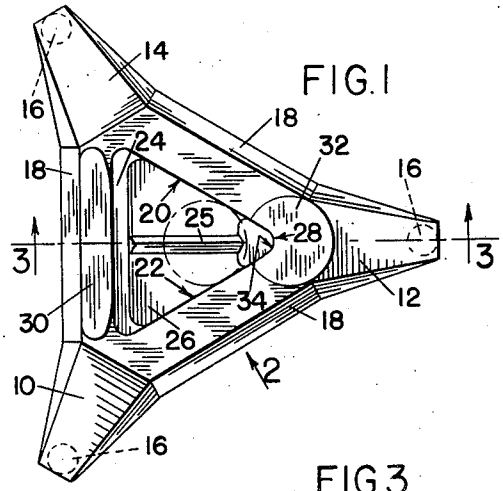


FIG.2

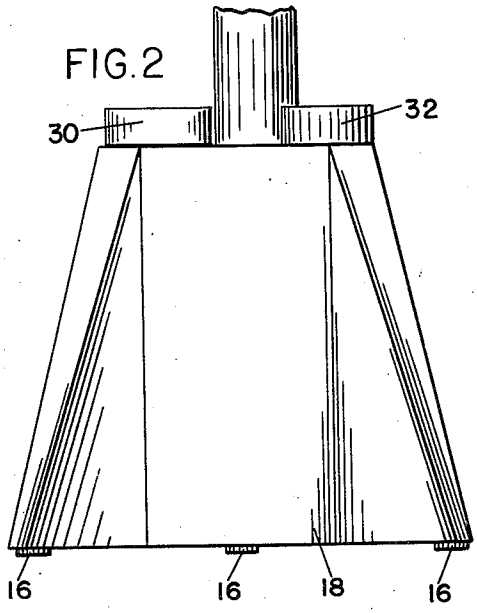


FIG.3

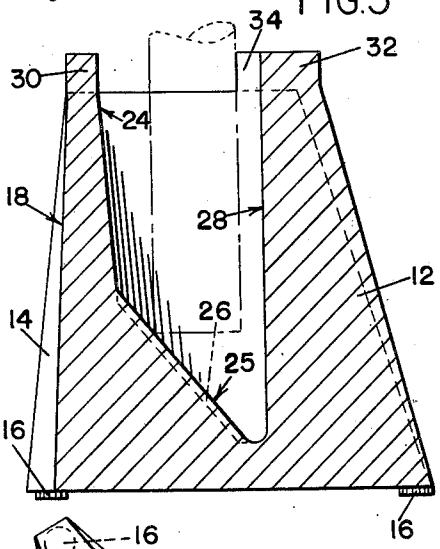


FIG.5

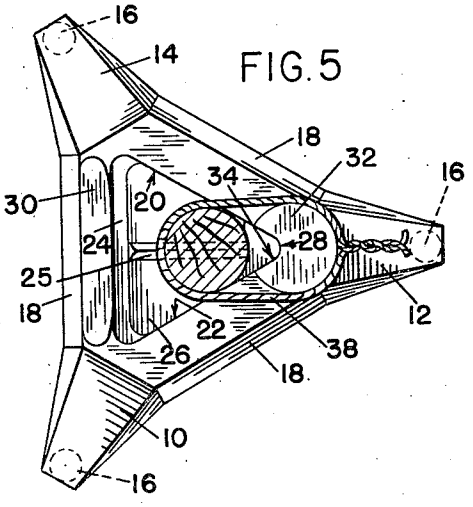


FIG.4

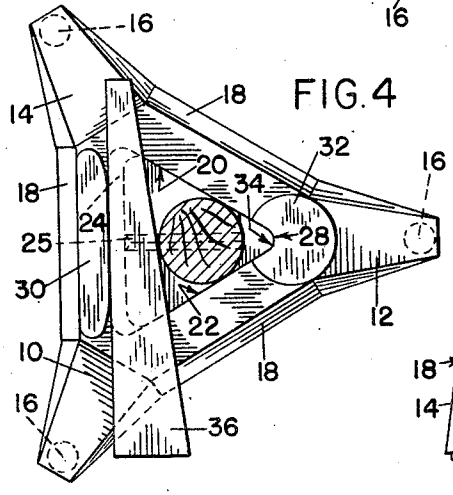
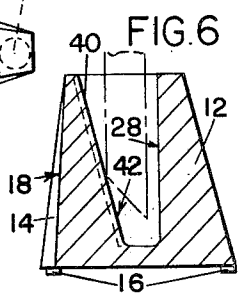


FIG.6



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CAST STAND

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5 Claims. (Cl. 248—44)

This invention relates to a cast stand for staffs, poles, rods and trees such as Christmas trees, and the principal objects of the invention resides in the provision of an inexpensive but very effective heavy concrete stand of the class described having means for preventing tipping, new and improved means for holding the tree butt or staff including a triangular downwardly extending tree butt or staff-holding recess, the same having two walls at acute angles with respect to each other against which the tree butt or staff is wedged automatically by reason of the presence of an inclined bottom in the recess, by which the weight of the object is utilized to better hold it.

Other objects of the invention include the provision of means on said cast stand for receiving and holding a long narrow horizontal wedge which additionally clamps the tree butt or staff to the inclined walls aforementioned as distinct from the prior art in which very inefficient and hard-to-use vertical wedges are attempted to be utilized; and the provision of a cast stand having a low center of gravity by having the greatest weight concentrated near the bottom of the stand, and at the top of the stand there are projections, one of which forms an abutment for the aforementioned wedge and the other projection providing a means of applying a wire or cord to secure the tree by this means if desired.

Other objects and advantages of the invention will appear hereinafter.

Reference is to be had to the accompanying drawings, in which—

FIG. 1 is a top plan view illustrating the invention;

FIG. 2 is a view in elevation looking in the direction of arrow 2 in FIG. 1;

FIG. 3 is a section on line 3—3 of FIG. 1;

FIGS. 4 and 5 are plan views illustrating different modes of securing the tree butt or staff firmly into the stand; and

FIG. 6 is a section on a reduced scale and similar to FIG. 3 but showing an alternate recess in the stand.

In carrying out the present invention, I prefer to make my new stand of concrete in some cases reenforced with wire. The stand is a one-piece cast member and it is of general triangular shape, see particularly FIG. 1. The cast body includes the three projecting legs like flying buttresses, these all being generally the same at 120° apart and being indicated at **10**, **12** and **14**. The bottom of the device may be generally flat if desired and is preferably provided at the extremities of the legs **10**, **12** and **14** with some kind of pads **16** which will avoid marring floors, and it will be seen that this construction provides for a three-point support which will obviate any tipping or sliding, it being pointed out that the pads **16** are generally applied at the terminal points of the projections or legs **10**, **12** and **14** so that they are spread apart as far as possible in order to provide the greatest stability for the cast stand.

It will be noted that all of the outside walls which are indicated at **18** slope inwardly from the bottom up and this not only provides the greatest weight toward the bottom of the cast stand but also provides for quick and easy removal of the core from the mold, so that the sides will separate from the core instantly and not break down the walls of the wet cement.

The inside walls are three in number defining a triangular downwardly projecting recess as seen in FIG. 1. This comprises walls **20**, **22** and **24**. Walls **20** and **22** are made substantially vertical so that the tree butt or staff or rod being held thereagainst will be held vertical but the wall **24** is tapered as are the walls **18**, and this is for the same purpose as it has been found that two of the three walls forming the triangular recess may be made substantially straight, i.e., vertical, but if one of the walls as at **24** is tapered as shown, the core will be quickly and easily removable. A raised rib **25** digs into the tree butt and prevents twisting.

The bottom of the recess is provided with a sharply inclined wall **26** and it will be seen that this converges from wall **24** to the apex at **28** of the walls **20** and **22**. It will be clear that when the tree butt or staff is deposited in the recess as shown in broken lines, there will be a component of force derived from the weight of the article being held which will force the lower end of the staff or tree butt into firm association with the two vertical walls **20** and **22** and in many cases the object will be held with no need for further clamping means applied thereto. If it is a Christmas tree which is being held, water or other preservative liquids may be placed in the recess and of course the entire stand may be painted in order to make it waterproof and to decorate the same if desired.

On the top surface of the stand there are provided a pair of spaced projections. One of these projections is located between the legs **10** and **14** and is elongated in a horizontal direction. This projection is indicated by the reference numeral **30**, see particularly FIG. 1 and is in prolongation of wall **24**, see FIG. 3.

The other projection is indicated at **32** and is located adjacent to the leg **12**. It may have a height similar to that of projection **30** and may be of any shape desired but is conveniently substantially circular as shown in FIG. 1, having a notch formed therein at **34** to conform to the apex **28** defined by the juncture of walls **20** and **22**.

Referring now to FIG. 4, it will be seen that with the tree butt or staff in position as shown against the walls **20** and **22**, the projection **30** is quickly and easily utilized to provide an abutment or reaction point for a long narrow wedge **36**. This wedge is obviously easily inserted in a horizontal direction between the tree butt and the projection **30**, and a slight tap is all that is necessary to firmly clamp the tree butt in position.

By the use of a horizontal wedge, all interference from the branches of the tree is completely avoided. If a vertical wedge is attempted to be used to wedge the tree against the wall **24**, for instance, it is almost impossible to provide such a wedge due to the tree branches, and it is just as difficult to remove such a wedge. However, by using the novel wedge **36** against abutment **30**, the same is quickly and easily applied and is not easily apparent when in position. Furthermore by the use of the long narrow wedge as shown, the holding action due to the friction thereof is extremely great, and it is merely necessary to tap on the wider end of the wedge to firmly seat it or to tap on the narrower end thereof to disengage it, or tap or lift upward out of slot.

Referring now to FIG. 5, the use of the projection **32** is illustrated whereby a wire spring, rubber bands or rope **38** may be utilized to bind the tree butt or the staff to the walls **20** and **22** with a firm clamping action such that the same is firmly held in upright position as shown.

It is believed that it will be seen that the objects of the invention have been carried out and that an extremely stable but very inexpensive concrete cast Christmas tree or staff base has been provided. In having its center of gravity near the bottom, it is virtually untippable and by having the three-point contact with the floor, the center of gravity is aided by this construction in providing a base which cannot be tipped over. The concrete will not rust or rot and is very durable, not being effected

by the weather and by the use of the projections described, the tree or staff may be extremely firmly held in position, it however having positioned itself as shown in FIG. 3 by a combination of the inclined bottom **26** with the divergent straight parallel walls **20** and **22**.

As shown in FIG. 6, the sloping wall at the rear of the recess indicated at **40** also has a center rib **42** like that at **25** and for the same purpose, but in this case the wall **40** slopes top to bottom and especially when the tree is cut on a bias in the woods, as usual, this construction is entirely self sufficient to hold the tree upright without further holding means. The hardware, wedge, etc. may be used in this form of the invention if desired but is not often necessary.

Having thus described my invention and the advantages thereof, I do not wish to be limited to the details herein disclosed, otherwise than as set forth in the claims, but what is claimed is:

1. A stand comprising a generally triangular cast one-piece body, a correspondingly triangular recess in the top of the body, said recess comprising a pair of converging straight side walls forming an apex, a wall opposite the apex, and an inclined bottom slanting toward the apex from the said opposite wall, said inclined bottom forcing an object therein to be positioned against said two vertical walls.

2. The stand of claim 1 wherein said third wall is tapered and the outside walls of the stand are tapered, these tapers extending from a narrower relationship at the top of the stand to a wider relationship at the bottom of the stand, whereby most of the weight of the stand is located adjacent the bottom of the device.

3. A concrete cast stand comprising a triangular member having a generally flat bottom and a substantially flat top, the top being narrower than the bottom, said stand including three leg members diverging downwardly and outwardly providing most of the weight toward the bottom of the stand, and a recess at the top, said recss comprising a triangular hole having two converging vertical side walls and a tapered third wall, said taper extending divergently downwardly, and an inclined bottom member inclined to the horizontal down and toward the junction of the vertical side walls, causing an object entered into the recess to be thrust toward the junction of the two vertical side walls.

4. A concrete cast stand comprising a triangular member having a generally flat bottom and a substantially flat top, the top being narrower than the bottom, said stand including three leg members diverging downwardly and outwardly providing most of the weight toward the bottom of the stand, and a recess at the top, said recess comprising a triangular hole having two converging vertical side walls and a tapered third wall, said taper extending divergently downwardly, and an inclined bottom member inclined to the horizontal down and toward the junction of the vertical side walls, causing an object entered into the recess to be thrust toward the junction of the two vertical side walls, a wedge, the projection providing an abutment for the wedge which may be thrust horizontally against the same at one side thereof, the other edge of the wedge contacting the object located against the two vertical side walls.

5. A concrete cast stand comprising a triangular member having a generally flat bottom and a substantially flat top, the top being narrower than the bottom, said stand including three leg members diverging downwardly and outwardly providing most of the weight toward the bottom of the stand, and a recess at the top, said recess comprising a triangular hole having two converging vertical side walls and a tapered third wall, said taper extending divergently downwardly, and an inclined bottom member inclined to the horizontal down and toward the junction of the vertical side walls, causing an object entered into the recess to be thrust toward the junction of the two vertical side walls, and a projection at the top of said stand adjacent the apex of said two vertical side walls, said projection providing an abutment for a cord or the like tying the object in the recess tightly into clamped association with the two vertical side walls.

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