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BOLE-SUPPORTING DEVICE

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1 Claim. (Cl. 248—46)

This invention relates to an improved device for engaging and supporting in upright position a bole and may prove of great convenience for instance in connection with a Christmas tree.

As is of course well known, the present-day stands or supports for Christmas trees or the like are rather complicated and are not altogether dependable.

Therefore the object of my present invention is to devise a simple, comparatively inexpensive and yet dependable form of support for a Christmas tree or the like and in which the legs thereof may occupy collapsed or folded arrangement when not in use.

A more specific object of my invention is to devise such a support which has a tapering pin adapted for exclusively frictional or wedging engagement with a tapering bore in the lower end of the bole and in which this constitutes the only supporting engagement for the bole.

Other objects will appear from the following description and claim when considered together with the accompanying drawing.

Fig. 1 is a side elevation of my present form of device and illustrates the manner of its engagement with the bole that is to be supported thereby;

Fig. 2 is a top plan view of the device;

Fig. 3 illustrates the manner in which the legs of my present device may be collapsed when not in use;

Fig. 4 is a partial detail of the means for holding the two collapsible legs in extended or operative position.

Referring now to the accompanying drawing in detail, my present device comprises a flat metal base portion 1 in the center of which there is an upwardly tapering pin 2 and upon the under-side of which there are provided the three legs 3, 4 and 5 that are of substantially duplicate form.

Each of the three legs 3, 4 and 5 has an inner or upper end portion 6 of channel form, an outer or lower end foot portion 7 of ball form and an intermediate angular portion 8.

The leg 3 has the bottom of its channel portion 6 riveted in fixed position to the under-side of the base portion 1, as indicated at the points 9 and 10. The legs 4 and 5 have their channel portions 6 pivotally mounted at the points 11 and 12, respectively, to the under-side of the base portion 1 and are provided with the apertures 13 and 14, respectively, that are adapted for releasable frictional holding engagement with the knobs 15 and 16, respectively, on the under-side of the base portion 1. The bottoms of the channel parts 6 extend horizontally and are thus adapted for supporting engagement beneath the base 1 while the sides of the channel portions 6 serve as a reinforcing means. The legs 3, 4 and 5 extend in a triangular manner with respect to each other and their inner end portions extend along paths of an equilateral triangle about the longitudinal axis of the pin 2. With my triangle arrangement of these legs, their inner end portions have extended engagement with the base part 1 so as to render such supporting means most dependable.

When this device is in use, the legs 3, 4 and 5 will occupy the positions indicated in Figs. 1, 2 and 4 of the present drawing; that is, the apertures 13 and 14 will engage the knobs 15 and 16, respectively. Then, when not in use, the legs 4 and 5 may be released and turned about their pivot points 11 and 12, respectively, so as to occupy substantially parallel arrangement as indicated in Fig. 3 of the present drawing. The leg 5 is provided with an arcuate groove 5a to permit the same to be moved over the knob 15.

The pin 2 may be of any suitable degree of taper, as for instance two degrees more or less, but it is essential that the pin 2 and the bore B' of the bole B bear such relationship to each other that there is clearance between the upper end of the pin 2 and the bottom of the bore and also between the bottom end of the bole and the plate 1 in order to ensure effective and dependable exclusively frictional engagement of the bored bole down upon the pin 2 in the manner indicated in Fig. 1 of the present drawing. That is, the pin 2 is of greater cross section at any point therealong than the bore B' at the same distance from its smaller end although the pin and the bore have the same degree of taper. Whether or not the bore B' is exactly co-axial with respect to the longitudinal axis of the bole B, it may be supported upon my present device in a dependable manner.

The legs are so constructed and arranged that when they occupy operative position, as viewed in Fig. 1 hereof, the end of each of them may have bearing engagement against the side of the channel portion of another leg. This may serve as a means of limiting the movement of each of the legs 4 and 5 as they are turned about their pivots towards operative position; and, when turned to such extent, the apertures 13 and 14 of the legs 4 and 5 will come into engagement with their respective knobs 15 and 16 for holding the same in such operative position.

As will be observed from the present drawing (Fig. 1), the base 1 is elevated slightly above the floor and the three legs are inclined at such a slight angle with respect to the floor and are of such extent that there is obtained a three-point support over such a diametrical extent and with the center of gravity at such a low point as to render the device most dependable for the purpose intended. With my arrangement of the legs, there is obtained the combined advantage of a three-point support and an engagement of the legs to a substantial extent beneath the base part 1.

Thus I have devised a simple form of stand or support that is of strong and durable character, that is capable of efficient and dependable operation, and that can be manufactured and sold at a popular price.

It is to be understood that the present form of disclosure is merely for the purpose of illustration and that there might be devised various modifications thereof without departing from the spirit of my invention as herein set forth and claimed.

What I claim is:

In combination, a bole having a tapered bore in the larger, lower end portion and extending longitudinally thereof, a supporting plate, a plain tapered pin having its larger end attached to the center of said plate and extending upwardly therefrom into direct engagement within the bore in said bole, the degree of taper of said pin being the same as that of said bore, the upper end of said pin being of greater diameter than that of the upper end of said bore, and the lower end of said pin being of greater diameter than that of the lower end of said bore so as to provide clearance between the upper end of said pin and the upper end of said bore and also between the lower end of said bole and said supporting plate, whereby there is obtained exclusively wedging engagement directly between said pin and the bore in said bole, three

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legs having their inner ends attached to the under-side of said supporting plate and having substantial inner end portions in parallel engagement with the under-side of said supporting plate in a substantially equilateral triangular arrangement about said centrally disposed tapered pin and extending downwardly and outwardly from said supporting plate and having their lower ends adapted to rest upon the floor, one of said legs being fixed in position and the other legs having pivotal mounting about vertical axes at their inner ends upon said supporting plate, said plate and pivoted legs having means for releasable interengagement for holding said pivoted legs in operative position, said pivoted legs being adapted to be turned about their pivotal points so as to occupy inoperative position in substantially parallel relation to said fixed leg and so that all of said three legs will then extend in the same direction from their inner ends.

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