Aug. 29, 1950 M. B. AUSTIN, JR 2,520,450

PORTABLE TRAY STAND

Filed Sept. 17, 1946

Fig. 1

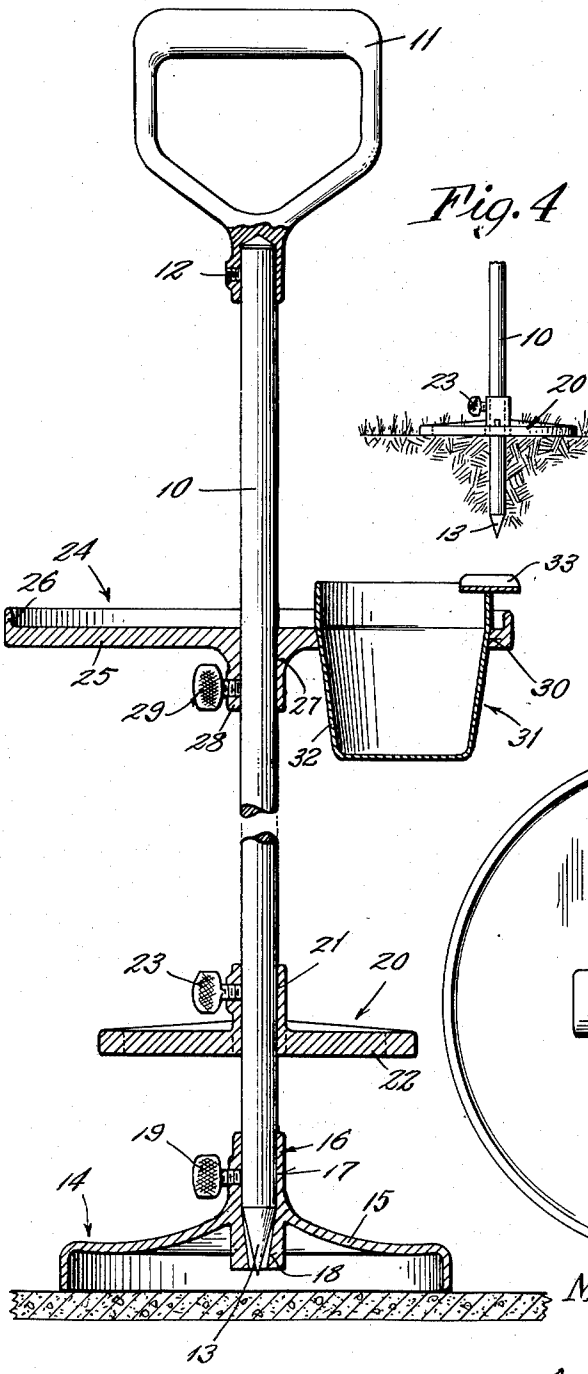


Fig. 4

Fig. 2

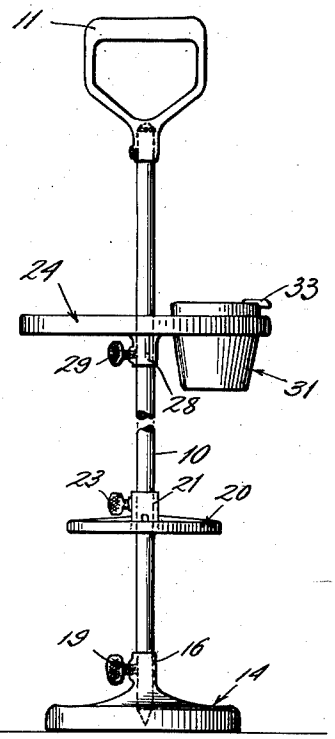
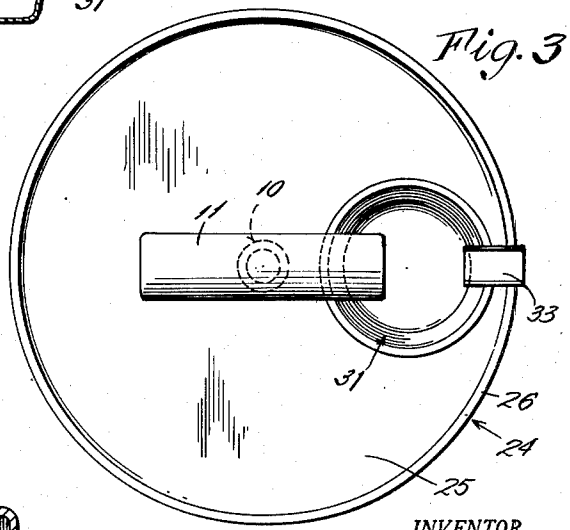


Fig. 3



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PORTABLE TRAY STAND

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2 Claims. (Cl. 248—156)

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This application relates to a portable tray stand for use on lawns, terraces, verandas, beaches and the like, for holding drinks, smoking equipment and other articles.

It is an object of my invention to provide a stand for the aforesaid purposes, which is durable, easy to assemble, and to dismantle as for cleaning or for convenient transportation, economical to manufacture, adjustable to adapt it for maximum convenience of the user, stable in supporting articles on its tray when used on a flat surface such as a porch floor as well as on uneven ground such as a lawn or beach, easily adaptable for use on a floor or on the ground, and at the same time having no tendency to mar the finish or paint on a floor, and readily portable from one place to another.

In accordance with my invention I provide a central rod for the stand, preferably of metal, having a handle at the top and a pointed tip at its lower end to facilitate thrusting same into the ground. Above its lower end, the rod carries stop means, such as a step plate, to provide additional stability when the rod is inserted in the ground. Above the step plate, my stand comprises a tray secured to the rod and preferably adjustable to any desired level on the rod. Advantageously the tray comprises an ash receiver adapted for outdoor use, and removable from the tray for emptying or cleaning. All of the parts are preferably removable from the rod so that the device can be readily shipped in dismantled condition, readily assembled, and readily taken apart for cleaning.

Further objects and advantages of my invention will appear from the following description of a preferred embodiment thereof, taken in connection with the accompanying drawing, wherein:

Figure 1 is a central vertical section of the fully assembled stand in accordance with my invention.

Fig. 2 is a side elevation of the stand as employed on a porch or other flat surface.

Fig. 3 is a plan elevation of the tray stand.

Fig. 4 is a fragmentary detail of the lower end of my stand when used on a lawn.

Referring to the drawing, my stand comprises a central rod 10 having handle 11 secured to its upper end, preferably so as to be removable therefrom as by means of set screw 12, and having at its lower end a pointed tip 13 to facilitate insertion of the rod into the ground. A base 14, as shown, comprises for example, a plate portion 15 adapted to rest firmly on a flat substantially horizontal surface such as the floor of a porch or stone

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terrace, so as to support the stand in stable upright position. The base 14 comprises a central socket 16 for receiving the lower end of the rod, having vertical walls 17 for supporting the rod in a vertical position when inserted therein, and having stop means such as the inner tapered portion 18 for limiting insertion of the rod so as to prevent the pointed tip 13 from extending downward through the base into contact with the surface on which the base stands. In this way, when used with the base, the tip 13 of the rod 10 is prevented from marring, denting or scratching a painted or finished surface, such as a porch floor, and the tip 13 is also effectively shielded from blunting contact with hard surfaces.

Preferably the base 14 includes means for securing the base to the rod 10 when inserted in socket 16; for example, a thumb or set screw 19 extending through the vertical walls 17 of the socket so that when the thumb screw is tightened against the rod, the base 14 can be lifted with the rod 10 for moving the stand to another location on the porch by means of the handle 11. Moreover, the base can be readily removed from the end of the rod 10 merely by loosening the thumb screw 19 when it is desired to remove the stand to the lawn or beach.

The stand is supported on a lawn or beach, after removal of the base 14, by thrusting the pointed lower end of the rod 10 into the ground, as shown in Fig. 4. In order to provide greater stability when the stand is used on a lawn or beach, the rod 10 carries a step plate 20 having therein a central aperture 21 through which the rod 10 slidably extends. The plate portion 22 of the step plate extends horizontally from the rod, so that when the pointed lower end of the rod is thrust into the ground, the plate portion 22 of the step plate 20 serves as a stop when it reaches the ground, and supports the rod in upright position.

The step plate 20 is secured, preferably releasably, to the rod 10 adjacent its lower end. Thus, the plate is advantageously secured to the rod by a thumb or set screw 23 adapted to be tightened against the rod 10 through the side walls of the aperture 21, and loosened to remove the plate from the rod. With this arrangement, the step plate can be readily removed from the rod for cleaning or for dismantling the stand to make it more compact for transportation.

The plate portion 22 of the step plate can be of any disk-like form, for example simply a solid disk, or an apertured disk like a wheel with spokes connecting the rim to the central rod-engaging portion of the plate. When assembled with the

rod, the thumb screw 23 is preferably on the upper side of the step plate in order to avoid contact with the ground when the stand is used on on a lawn or beach.

A tray 24 is provided which comprises for example a flat disk 25, having a rim 26, and an aperture 27 in a thickened central portion or hub 28 through which the rod 10 slidably extends. The tray 24 is secured, preferably releasably, to the rod 10 above the step plate 20; for example, by means of a thumb or set screw 29 in the hub 28, whereby the tray can be fastened to the rod and adjusted at any desired level.

The tray 24 preferably comprises an ash receiver, adapted to be readily removed from the tray for emptying ashes and for cleaning. For example, a large aperture 30 is formed on the tray to one side of the central portion 26, and a cup 31 is provided as an ash receiver which is supported in the aperture 30, for example, by its tapering sides 32 engaging the periphery of the aperture 30. The ash receiver 31 is preferably made deep enough to prevent ashes and debris from being blown out by the wind, when the stand is used outdoors. Moreover, the ash receiver 31 preferably comprises one or more rests for cigars or cigarettes, for example, a horizontally disposed holder 33 of U-shaped cross-section, deep enough to prevent a lighted cigarette deposited therein from blowing away.

The various parts of the stand are preferably constructed of metal, for example of iron, or better of aluminum to render the device sturdy and at the same time, relatively light in weight for convenience in transportation. The stand can be finished in any desired manner or color.

When the stand is used on a porch or other flat surface adapted to provide a stable support for the base 14, the rod 10 is inserted in the socket 16 and preferably secured therein by tightening the thumb screw 19. The rod 10 is supported in upright position on the base by engagement of its lower end with vertical walls 17 of the socket 16 regardless whether the thumb screw 19 is tightened. Generally, the thumb screw 19 is not tightened when it is desired to move the stand back and forth between a porch and lawn without changing the location of the base 14 on the porch. On the other hand, to move it from place to place on the porch, the thumb screw 19 is tightened, so that the base 14 is lifted together with the rod 10 by handle 11. The stop means provided by the tapered portion 18 at the base of the socket 16 prevents the pointed tip 13 of the rod from contacting the porch, and thus avoids the possibility of marring the paint or other finish thereon.

The step plate 20 is disposed above the base 14 a sufficient distance so that the lower end of the rod 10, below the step plate, can be thrust far enough into the ground to provide stable support for the stand. To use the stand on the lawn, the lower end of rod 10 is merely lifted out of the socket 16 on the base 14, after releasing the securing means such as set screw 19, and the pointed tip 13 at the lower end of the rod 10 is thrust into the ground until the step plate 20 firmly engages the surface of the ground. In this way the stand is firmly supported against tipping over while at the same time it can be readily lifted by means of the handle 11 and returned to its base 14 which remains meanwhile on the porch.

The height of the tray 24 can be readily adjusted by releasing the thumb screw 29 sliding

the tray to any desired level above the step plate 20, and tightening said thumb screw to hold the tray in the desired position on the rod 10.

The deep form of ash tray 31 and the deep cigarette holder 33 provided thereon prevent ashes and debris, as well as cigarettes left on the cigarette holder from blowing away in the wind. Moreover, the ash receiver can be readily removed for cleaning and emptying.

As indicated above, all of the parts of the stand are preferably made removable from the rod 10, so that they can be conveniently dismantled for cleaning, or for reducing the stand to a compact form for convenient transportation. Similarly, the parts can be readily reassembled for use.

The construction of the various parts of the stand in its preferred form is simple and economical, and assembly and dismantling thereof can be accomplished with a minimum number of operations. However, instead of securing the parts together by means of thumb or set screws, the parts (with the exception of the base) can be permanently attached to the rod 10 as by rivets, welding or other means. However the demountable construction herein illustrated is preferred because of its flexibility and adaptability for various conditions of use.

If desired, more than one tray of a shape similar to that of the tray 24, or for example a similar tray without the aperture 31 can be attached to the rod 10 in spaced relation to the tray 24 to accommodate a larger number of drinking glasses or other equipment.

Variations and modifications may be made within the scope of this invention and portions of the improvements may be used without others.

I claim:

1. A portable tray stand comprising a base for supporting the stand on a flat surface; a rod having a handle on its upper end, and a pointed tip on its lower end to facilitate thrusting the rod into the ground; a socket on the base for receiving the lower end of the rod to support the same in upright position on the base; a tapered portion in the lower end of said socket for engaging the lower end of the rod and supporting the same with the pointed tip above the level of the surface on which the base rests; a step plate slidably engaging the rod adjacent its lower end; a thumb screw on the upper side of said step plate for securing the same in adjusted position on said rod, said step plate serving as a stop means for limiting insertion of the lower end of the rod into the ground when removed from said base and for supporting the rod in upright position by engagement with the ground; a disk-like tray slidably engaging the rod above the step plate at its center and having a hub on its undersurface through which the rod extends; and a thumb screw in said hub for securing the tray in any adjusted position on the rod, said tray having an aperture therein for supporting an ash receiver of substantial depth to prevent ashes deposited therein from blowing away.

2. A convertible portable stand adapted for either ground penetrating support or flat surface resting support, comprising a rod having a tapered tip of a shape such that it can be readily forced into the ground, and a base member for supporting the rod on a flat surface, said base having a bottomless socket receiving the rod at its tapered end, a wall portion of said socket being

arranged to contact the tapered surface of said tip and being so located with respect to the surface-engaging portions of the base that the rod is prevented from penetrating the base to an extent sufficient to contact a flat surface upon which the base rests.

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REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
631,317	Miller	Aug. 22, 1899
699,391	Johnson	May 6, 1902
716,560	Leininger	Dec. 23, 1902
1,358,792	Shogran	Nov. 16, 1920
1,470,639	Peller	Oct. 16, 1923
1,515,078	Shee	Nov. 11, 1924
1,545,203	Schaefer	July 7, 1925
1,666,293	Lorton	Apr. 17, 1928
2,044,192	Templin	June 16, 1936
2,190,222	Strasser	Feb. 13, 1940