Sept. 3, 1963 W. C. SAUNDERS 3,102,638

TRAY SET AND STAND

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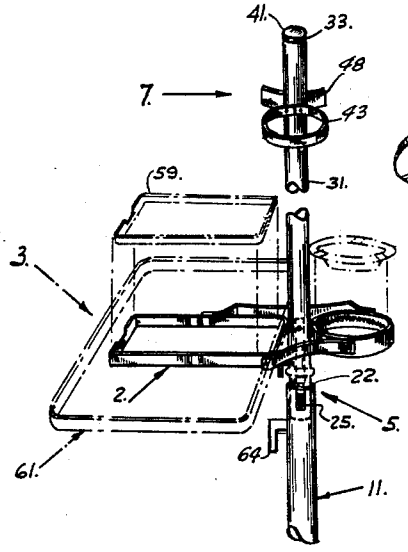


Fig. 1.

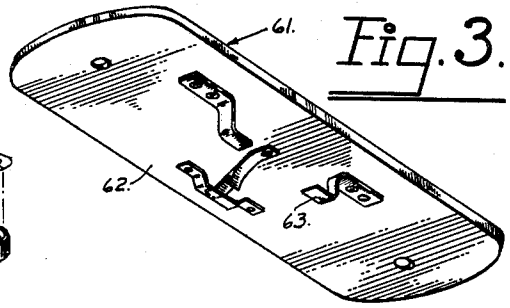


Fig. 3.

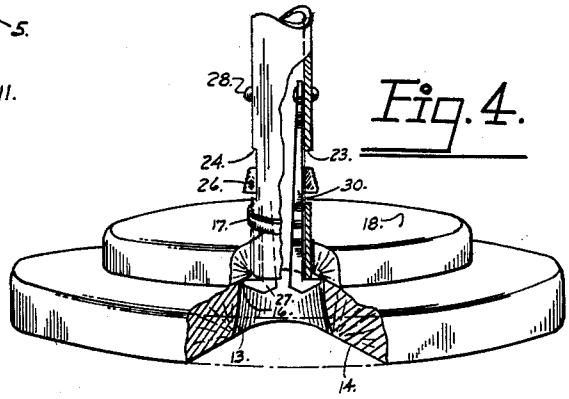
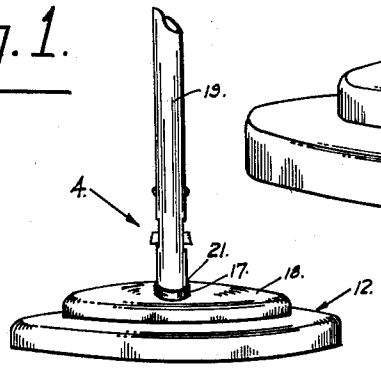


Fig. 4.



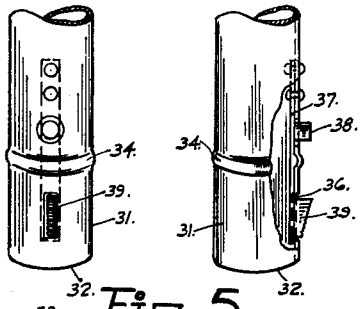


Fig. 5.

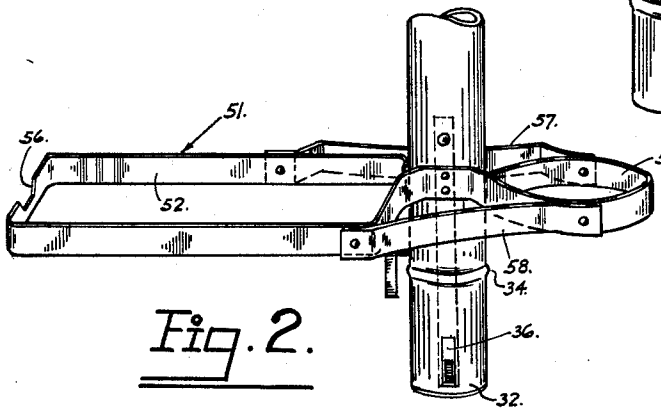


Fig. 2.

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Fig. 6.

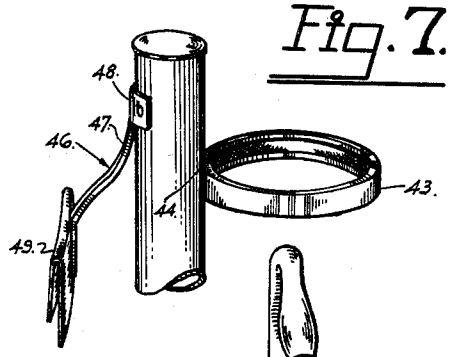


Fig. 7.

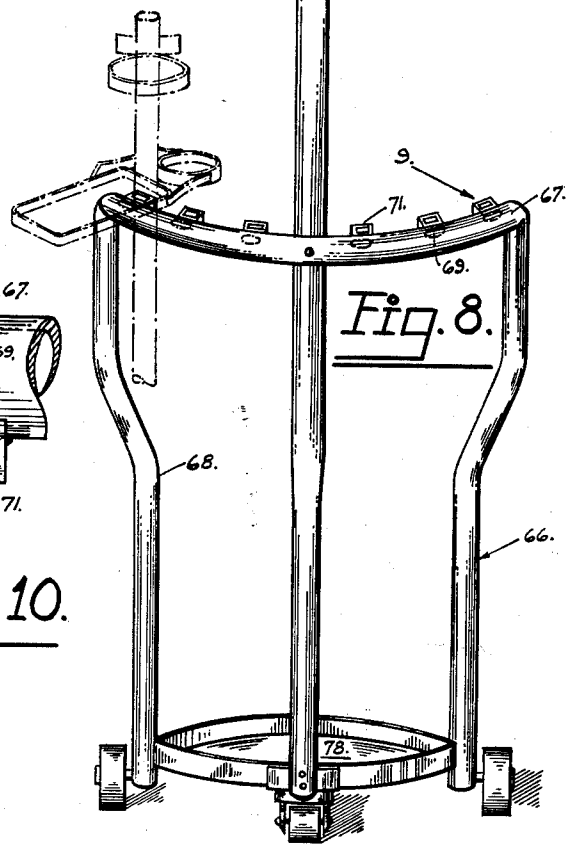


Fig. 8.

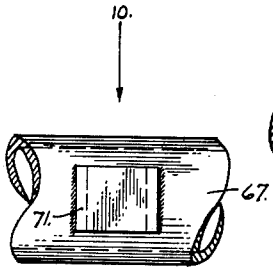


Fig. 9.

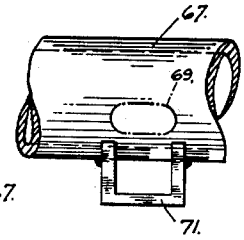


Fig. 10.

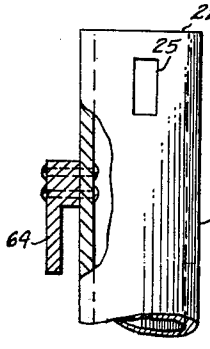


Fig. 11.

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3,102,638

TRAY SET AND STAND

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2 Claims. (Cl. 211—71)

This invention relates to a tray set and stands therefor, and, more particularly, this invention relates to a tray set, the trays of which may be detached from the stands provided therefor and used in a portable manner.

In the past, there has been need for a tray set of compact design such that the trays, tray stands and a storage cart therefor could be used as required and readily stored. This invention is for such a tray set.

It is an object of this invention to provide a device of the type described hereinafter which can be assembled and placed almost anywhere, which is light weight and which can be used in a portable fashion to carry food and drink.

It is another object of this invention to provide a tray stand which is provided with a detachable portion having means for carrying conveniently and safely a glass, an ash tray and a hors d'oeuvre tray and which may be alternatively used as a stationary stand with a large tray that may be used as an upset-proof bed table for meals which may be served in bed or for a typewriter table.

It is also a general object of this invention to provide a device of the type described comprising a stand, a support detachably mounted in said stand, and a bracket carried by said support whereby articles may be carried thereby.

It is a general object of this invention to provide a device of the type described hereinafter which will be easily manufactured, durable in construction, economical in cost and otherwise well adapted for the purposes for which the same is intended.

In accordance with these and other objects, the instant invention will now be described with reference to the accompanying drawings in which:

FIG. 1 is a general perspective view;

FIG. 2 is an enlarged perspective view of the portion of FIG. 1 generally designated 2;

FIG. 3 is a perspective view of the underside of the tray shown in dotted lines in FIG. 1, and generally designated 3;

FIG. 4 is a detailed view partially in cross section of the lower part of FIG. 1, being general designated 4 in FIG. 1;

FIG. 5 is a front and a side view partially in cross section of that part of FIG. 1 generally designated 5;

FIG. 6 is a perspective view showing the instant invention in use;

FIG. 7 is a perspective view of that part of FIG. 1 generally designated 7;

FIG. 8 is a perspective view of a wheel cart having a device shown in FIG. 1, illustrated in dotted line relation thereto;

FIG. 9 is a detailed view of part of the representative area generally designated 9 in FIG. 8;

FIG. 10 is a plan view of the area shown in FIG. 9 and looking in the direction of the arrow 10;

FIG. 11 is a partial side view of the female portion of the juncture designated by the arrow 5 in FIG. 1.

Referring more particularly to the drawings, wherein like reference characters designate like or corresponding parts throughout the different views and referring particularly to FIGURE 1, 11 designates generally a tray support device having a base 12 provided with an axial bore 13 therethrough, said bore 13 being flared on the underside 14 thereof and being provided with a lip 16. The base 12 has a guide extension 17 protruding from the top surface 18 thereof, said guide extension having a bore to retain a stand extension tube 19. The stand extension tube, which may be adjustable to vary its length, is hereinafter designated as the first tube 19. The first tube 19 has a male end 21 and a female end 22. At the male end 21 there are located slots 23 and 24 in diametrical opposition to one another, said slots being located adjacent said male end 21, and adjacent the upper end 22, there is a cutout 25. The male end of the first tube 19 is adapted to be received in the guide extension 17 of the base 12.

A pair of elongated spring strips 30 is provided having a protrusion 26 on each and a hook 27 at one end. The strips are mounted as at 28 within the male end 21 of the first tube 19 in such a fashion that in the normal position the hooks 27 are in spring biased engagement with the lip 16.

These is also provided a second tube 31 having a male end 32 and a female end 33. A stop ridge 34, comprising a circumferential ridge on the extension surface of the second tube, is provided, and a hole 36 is located between said stop ridge and said male end 32.

A spring clip 37 having a button 38 is riveted or otherwise suitably located within the interior of the second tube normally disposed with the button and a key 39 aligned with the hole 36 whereby the second tube may be alternatively locked into union with the first tube or separated therefrom. When the second tube is locked into union with the first tube the key 39 is passed through the hole of the second tube and through the cut-out of the first tube.

A cap 41 is positioned in the female end as well as the male end of the second tube providing smooth neat ends for the second tube.

Again referring to the second tube partially shown in FIGURE 7, a felt lined hoop 43 is affixed near the female end as at 44. Disposed on said second tube substantially in diametrical opposition to said hoop and extending downwardly and outwardly therefrom, there is an extension arm 46, affixed to said second tube at one end thereof 47, as at 48, and at the other end thereof being provided with a fastener 49, which is adapted to engage a leather belt or the like of a person wearing same. FIGURE 6 is drawn next to FIGURE 7, on sheet 2 of the drawing to generally depict this feature. Reference is now made to FIGURE 2 showing that part of the second tube adjacent the male end thereof, in which there is shown a tray mounting 51, having a first large portion 52 for receiving a tray, and a second smaller portion 53 for receiving an ash tray or the like. It will be seen that the second portion is smaller than the large portion, and that the mounting 51 is disposed such that the first portion extends outwardly from one side of the second tube while the second portion extends outwardly from the other side of said tube, the centerline of the areas circumscribed by the first portion and second portion of the tray mounting 51, defining a line which may be described as a first reference line. The first reference line is situated relative to the aforesaid felt lined hoop such that it is substantially perpendicular to a second reference line which would be defined between the point 44 and the center of the hoop 43. It will be seen that mounting 51 may be formed of one continuous piece of formed strip metal. A notch 56 is provided in the large portion 52 of the mounting, 51 and there is affixed to said mounting a body strip 57 and a thumb rest 58.

An hors d'oeuvre tray 59 is adapted to be received in the large portion 51, said tray being provided with a notch corresponding to the notch 56, as is shown in dotted lines in FIGURE 1. The tray 59 has a curved upper edge such that it may be dropped into the larger portion of the mounting with the curved upper edge

engaging the larger portion and being supported thereby. A serving tray 61 is also shown in FIGURE 1 in dotted line relation to the mounting 51, and in solid lines in FIGURE 3. The underside 62 of the tray is provided with suitable means to engage the larger portion of the mounting 51, and, as shown, the interrupted U-shaped piece 63 is adapted to slide over the larger portion 52 such that the locking member may engage the notch 56.

In FIGURE 8, a cart 65 is generally shown, and particular attention is directed to the upper cross member 67 of the frame 68. A series of slots 69 are provided either in the surface thereof or in housings therefore, such as the box like housings 71.

Referring to the first tube and, in particular to that section thereof shown in FIGURE 11, a clamping device or bayonet 64 is affixed thereto.

In use, the base, first tube and second tube may be assembled into an upright support. A glass may be inserted in the hoop, an ash tray in the smaller portion of the mounting and a tray having a notch 56 in the larger portion of the mounting. The entire second tube may be removed from the first tube and worn on the belt as seen in FIGURE 6, the body strip 57 engaging the hip area and the thumb rest 58 being located in a convenient position thereon. The second tube may be returned to the assembled position with tube 1, and the tray shown in FIGURE 3 mounted thereon without the need of cleaning the smaller tray with the notch 56.

When not in use, the bases are stacked in the bed 78 of the cart, the guide extensions of one mating with the flared underside of another. The first tube and second tube in the joined state may be hung on to the cart by means of the bayonets 64 engaging with the slots 69, shown in dotted lines in FIG. 10 or the housings identified by the numeral 71 in FIGURES 8, 9 and 10.

While the instant invention has been shown and described herein in a most practical embodiment, it is recognized that departures may be made therefrom within the scope of the invention, which is, therefore, not to be limited to the details disclosed herein but is to be awarded the full scope of the claims so as to embrace any and all equivalent apparatus and articles.

I claim:

1. A tray set comprising; a base having an axial bore therethrough, said bore having a flared opening provided with a lip on the underside of said base, said base having a guide extension protruding from the top surface thereof comprising a female opening; a first tube having a male end and a female end and having diametrically opposed slots adjacent said male end, and a cut-out adjacent said female end, said male end received in said female opening of the base; a pair of elongated spring strips provided with a protrusion in the center thereof, and having a hook at one end thereof, said pair of spring strips being mounted within the male end of said first tube whereby in the normal position the hooks thereof engage said lip and the center protrusions thereof protrude through said slots; a second tube having a male end and a female end, a stop ridge adjacent the male end and a hole between said stop ridge and said male end; a spring clip having a button thereon, said spring clip being riveted in the male end of said second tube above said stop ridge normally disposed with said button aligned with said hole, whereby said second tube may be locked into said first tube in an assembled state, the button passing through said hole of said second tube and through said cut-out of said first tube; a cap received in the female end of said second tube; a felt-lined circular hoop affixed at the female end of said second tube; an extension arm affixed to said second tube at one end thereof, being disposed substantially diametrically opposed to said hoop and extending outwardly and downwardly from said second tube; a fastener mounted to said extension arm and adapted to engage a leather belt; and a tray mounting fastened to said second tube adjacent the male end thereof, said mounting having a first portion and a second portion, said first portion extending outwardly in a horizontal plane from one side of said second tube and said second portion being smaller than said first portion and extending outwardly in a horizontal plane from the opposing side of said second tube, the center line of said portions defining a first reference line substantially perpendicular to a second reference line defined by an imaginary line extending outwardly from said second tube at the point where the hoop is attached and passing through the center of said hoop.

2. A base having an axial bore therethrough, said bore having a flared opening provided with a lip on the underside of said base, said base having a guide extension protruding from the top surface thereof comprising a female opening; a first tube having a male end and a female end and having diametrically opposed slots adjacent said male end, and a cut-out adjacent said female end, said male end received in said female opening of the base; a pair of elongated spring strips provided with a protrusion in the center thereof, and having a hook at one end thereof, said pair of spring strips being mounted within the male end of said first tube whereby in the normal position the hooks thereof engage said lip and the center protrusions thereof protrude through said slots; a second tube having a male end and a female end, a stop ridge adjacent the male end and a hole between said stop ridge and said male end; a spring clip having a button thereon, said spring clip being riveted in the male end of said second tube above said stop ridge normally disposed with said button aligned with said hole, whereby said second tube may be locked into said first tube in an assembled state, the button passing through said hole of said second tube and through said cut-out of said first tube; a cap received in the female end of said second tube; a felt-lined circular hoop affixed at the female end of said second tube; an extension arm affixed to said second tube at one end thereof, being disposed substantially diametrically opposed to said hoop and extending outwardly and downwardly from said second tube; a fastener mounted to said extension arm and adapted to engage a leather belt; a tray mounting fastened to said second tube adjacent the male end thereof, said mounting having a first portion and a second portion, said first portion extending outwardly in a horizontal plane from one side of said second tube and said second portion being smaller than said first portion and extending outwardly in a horizontal plane from the opposing side of said second tube, the center line of said portions defining a first reference line substantially perpendicular to a second reference line defined by an imaginary line extending outwardly from said second tube at the point where the hoop is attached and passing through the center of said hoop; a body strip fixedly attached to one side of said mounting and a thumb rest fixedly attached to the other side of said mounting.

References Cited in the file of this patent

UNITED STATES PATENTS

608,850	Folmer	Aug. 9, 1898
696,790	Atkinson	Apr. 1, 1902
1,043,387	Astruck	Nov. 5, 1912
1,397,453	Rekar	Nov. 15, 1921
1,711,502	Levien	May 7, 1929
2,289,945	Wadsack	July 14, 1942
2,309,190	Heller	Jan. 26, 1943
2,559,981	McBride	July 10, 1951