

[54] MISCELLANEOUS ARTICLE HOLDING AND STORING TRAY WITH DETACHABLE HOLD-DOWN ANCHORING MEANS

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[56] References Cited

UNITED STATES PATENTS

3,561,589	2/1971	Larkin, Jr. et al.	206/19.5 R
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3,331,494	7/1967	Gregg, Jr.	206/19.5 R
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3,674,132	7/1972	Loss	206/1 R
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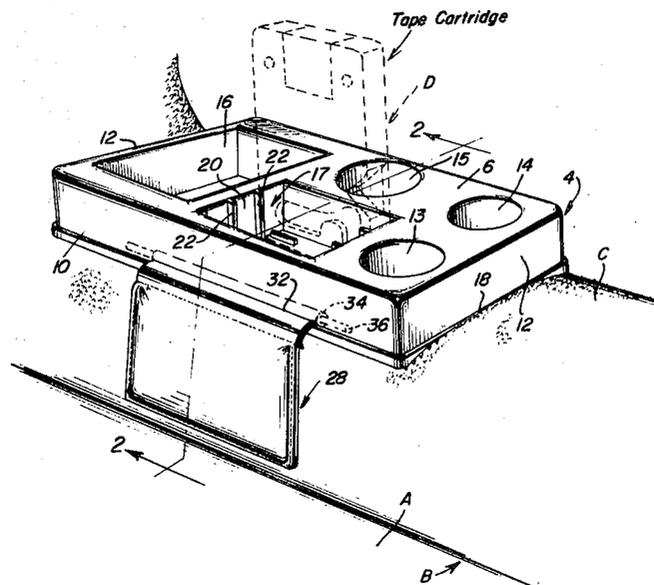
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[57] ABSTRACT

A multi-purpose article holding and occupant accom-

modating plastic tray which lends itself to readily applicable and removable use atop an existing tunnel-hump in present-day automobiles. The tray is characterized by a horizontal top formed with a plurality of selectively usable well-like receivers providing open top holders, said top having a depending marginal supporting rim which, in turn, embodies smooth interior sidewalls joined by intervening transverse end walls. At least one of the holders is of a size and shape to adaptably receive one or more insertable and removable conventional tape cartridges for selective retention and use. For best results the end walls of the stated holder are provided with interior inwardly projecting spaced parallel vertical main ribs. The ribs on one end wall are disposed and aligned with the main ribs on the other end wall in a manner to engage body surfaces of the tape cartridge and, in so doing, they seat and safely but accessibly locate the cartridges in readiness for selective use. These main ribs provide guideways for the cartridge or cartridges, as the case may be. The upper surface of the bottom wall is provided with a plurality of upstanding auxiliary ribs which constitute elevating rests atop which bottom surface portions of the tape cartridges reside, that is in a manner to minimize likelihood of sticking and interfering with ready removal for use. Weighted tray positioning and hold-down bags with upwardly inwardly disposed longitudinal edge portions are provided with stick holding hems which are detachably and adjustably connected with median slotted portions of the respective sidewalls.

3 Claims, 2 Drawing Figures



**MISCELLANEOUS ARTICLE HOLDING AND
STORING TRAY WITH DETACHABLE
HOLD-DOWN ANCHORING MEANS**

The present invention relates to certain new and useful improvements in an article holding and occupant serving tray which is functionally designed and structurally adapted to be removably perched atop the convex crown portion of a tunnel-hump in an automobile and which is provided with novel and improved hold-down and anchoring means and which has a horizontal wall provided with a plurality of selectively usable well-like depressions constituting holding and storing receivers for miscellaneous small articles.

More particularly one of the built-in well-like receivers is provided on vertical end walls with inwardly projecting upstanding ribs. These ribs define channel-like guideways for cooperating portions of the cartridge tapes. These tapes are held out of direct contact with the bottom wall of the receiver by way of relatively short upstanding auxiliary ribs. These auxiliary ribs constitute rests and not only slightly elevate the cartridges but keep the tapes from contacting the top surface of the bottom wall and, in addition, facilitate handling the cartridge inserting and removing steps.

For general background information, the refuse container for automobile use covered in Larkin's U.S. Pat. No. 3,109,537 may be taken into account. As indicative, with greater particularity of the art to which the invention relates attention is invited to my prior U.S. Pat. No. 3,331,494 on which the present invention is an improvement and which has to do with a tray having a top wall provided with a plurality of selectively usable depending well-like receivers functioning as open top small article holders, said tray having a marginal depending rim and said rim embodying sidewalls joined by intervening transverse end walls. One holder has a bottom wall marginally encompassed by united vertical side and end walls. The end walls are provided with interior inwardly projecting spaced parallel vertical primary or main ribs wherein certain of the ribs on one end are opposed to, aligned with and properly paired to conjointly serve to engage coordinating body surfaces of the tape cartridge, that is, in a manner to seat, guide and safely and accessibly locate the cartridge in a given ready-to-use position. The upper surface of the bottom wall is also provided with a plurality of integral upstanding auxiliary ribs which constitute elevating rests atop which bottom surface portions of the tape cartridge reside. In addition to the internally ribbed tape cartridge holder, the median slotted sidewall portions of the tray are constructed to accommodate weighting and hold-down bags, each bag having an edge portion provided with an open-ended hem. Insertable and removable bag attaching and retaining rods or sticks are fitted into the hems and the rods, being of a length greater than the hem have their respective end portions projecting beyond the ends of the hem in a manner to position and hold the sand bags in their tray positioning and retaining as well as ready-to-use location.

Briefly, and as will be evident from the following description of the details, the herein disclosed advance in the art is structurally and functionally similar to my aforementioned prior U.S. Pat. No. 3,331,494 except that the aforementioned one well-like holder is not only of a size and shape to conformingly adapt itself for

reception and retention of the insertable and removable tape cartridge but is provided with horizontal and vertical ribs which are oriented and coordinated to not only guidingly receive but to elevate the bottom surface portions of the cartridge or cartridges as the case may be.

These together with other objects and advantages which will become subsequently apparent reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings, forming a part hereof, wherein like numerals refer to like parts throughout.

FIG. 1 is a view in perspective showing a fragmentary portion of the aforementioned tunnel-hump and showing the small article holding and occupant serving tray positioned and held in place by the suspended sand containing bags and showing, what is more significant, the special purpose rectangular well-like receiver and vertical and horizontal ribs therein for reception and retention of an upstanding tape cartridge shown in phantom lines.

FIG. 2 is an enlarged detail section taken approximately on the plane of the section line 2-2 of FIG. 1 looking in the direction of the indicating arrows.

With reference now to the views of the drawing, it will be seen that one aspect of the overall concept has to do with hold-down and anchoring weights, simple sand loaded or equivalent canvas or equivalent bags which are not only detachably connected with the median slotted portions of the sidewalls of the tray but are balanced and shaped and arranged so that they drape down over diametrically opposite sides of the hump and properly locate and orient the tray in an in-between position on the hump. The slots serve to permit the hem-equipped end portions of the sand bags or sacks to be threaded through in order to accommodate insertable and removable rounds, dowels or simple wooden or equivalent retaining sticks.

The floor of the automobile or other vehicle is denoted at A and the usual longitudinally extending tunnel-hump is denoted at B. The crest of the hump is denoted at C and, as usual, is covered with carpet or the like. The tray 4 is preferably constructed of moldable colorful plastic material and is rectangular in plan and has a substantially flat top wall and a depending skirt-like marginal rim characterized by opposite longitudinal sidewalls or flanges 10 and interconnecting transverse end walls 12. The top wall is provided with a plurality of selectively usable integral well-like components which constitute and provide selectively usable receivers 13, 14, 15, 16 and 17 for various insertable and removable small articles. It may be noted that the bottom portions of all of these receivers or receptacles are substantially coplanar and terminate in a plane above the plane of the open bottom of the tray. The forward and rearward transverse end walls may be contoured to accommodate the convex surface of the tunnel-hump and if desired depending longitudinally spaced anti-slipping teeth may be provided as at 18 to facilitate positioning and retaining the inverted tray in position. The several well-like receivers 13, 14, 15 and 16 may be circular or of some other shape and may be used for supporting drinking glasses, and whatever articles are found to be suitable for placement and accessible storage therein. The special purpose tray 17 is significant here because it is intended to accommodate and retainively support two or more up-

standing tape cartridges one of which is denoted at D in both views. The two vertical end walls of this special purpose receiver are denoted at 20 and each end wall is provided with spaced parallel vertically disposed primary or main ribs 22. These ribs are spaced apart and provide guideways between themselves for reception and stabilized retention of the lower end portion of the cartridge D. As shown each vertical rib 22 is of a height commensurate in dimension with the height of the wall 20 on which it is mounted. These ribs are properly spaced apart to provide intervening guideways for the cartridges. It has been found that there is a possibility that once the cartridges are stacked and inserted in the guideways there is always a chance that they may stick and be difficult to remove with desired readiness. With this in mind the top surface of the bottom wall 24 is provided at its respective ends with a plurality of relatively short auxiliary or secondary ribs which are denoted at 26 and which seat and slightly elevate the portions of the cartridge which rest thereon. It should be noted (FIG. 1) that there are several auxiliary ribs at the left and several at the right. These ribs 26 are located between that is midway between the respective guideways. More particularly, the inner or adjacent ends of the ribs 26 are spaced apart to accommodate the bottom portions of the cartridges and to prevent the tape (not shown) from coming into direct damaging contact with the upper surface of the bottom wall 24. It follows that by properly locating the ribs, that is the main and auxiliary ribs, they well serve the cartridge receiving and storing purposes desired.

Each hold-down weight or anchor comprises a generally rectangular elongated bag made of canvas or equivalent material, each bag being denoted at 28 and being adapted to contain sand or the like 30. Each bag is of a dimension that it cooperates with the length of the sidewall slot 32 with which it is cooperable. The bag has an inner attachable portion which is passed through the slot and is provided adjacent the edge with an open-ended pocket or hem 34. This hem serves to accommodate an insertable and removable rod, pin or dowel. In practice a simple resilient plastic stick has been used. It is inserted by way of the open ends of the hem and is of a length greater than the length of the hem so that the end portions project beyond the respective ends of the associated slot. The views of the drawings show how the hem-equipped edge portions can be hand-pulled through the slot inwardly into the hollow portion of the tray to permit one to insert and remove the retaining rod by simply slipping it endwise.

It will be evident from the disclosure that the essence of the instant invention has to do with the special purpose suitably shaped and proportioned receiver 17 with its vertical and horizontal walls and with the interiorly projecting vertical ribs 22 and horizontal ribs 26. These ribs, conjointly and individually well serve the purposes for which they have been devised and successfully used.

The foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly all suitable modifications and equivalents may be resorted to, falling within the scope of the invention.

What is claimed as new is as follows:

1. A multipurpose article holding tray for readily applicable and removable use atop an automobile tunnel-hump, said tray embodying a horizontal top wall provided with a plurality of distributively arranged selectively usable depending open-top well-like receivers constituting individual small article holders, said top wall having a marginal depending endless supporting rim embodying longitudinal sidewalls joined by intervening transverse end walls, said tray being open at its bottom, the bottom wall portions of all of the holders therein terminating in a common plane above the plane of the lower edges of the said end walls of said rim, said holders being spaced from interior surfaces of said sidewalls to provide encompassing clearance spaces, one of said holders being of a size and shape to conformingly and adaptably receive and retain insertable and removable tape cartridges for storage and convenient selective use, said one holder having a planar horizontal bottom wall marginally encompassed by united vertical side end walls, said end walls being interiorly provided with inwardly projecting spaced parallel vertical main ribs, certain of the ribs on one end wall being opposed to, aligned and paired with the companion main ribs on the other end wall and conjointly serving to engage coordinating body surfaces of said tape cartridges in a manner to retentively seat and safely but accessibly locate the same in a given ready-to-select position, said paired main ribs being spaced apart a distance and in a manner to provide individual guideways in which marginal portions of said tape cartridges are insertably and removably keyed and thus stored for expedient use, the upper surface of the bottom wall of said one holder being provided with a plurality of integral elevated auxiliary ribs which are staggered relative to coordinating main ribs, are aligned with the respectively cooperable guideways and constitute cartridge seating and elevating rests atop which bottom surface portions of the coating tape cartridge reside in a manner to minimize the likelihood of said cartridges sticking and interfering with and hampering the cartridge removal step, said primary ribs being of a vertical height commensurate with the depth of the well portion of said one holder and also said auxiliary ribs being horizontal, relatively short, and having adjacent inward ends spaced apart in a manner to minimize damaging contact of the tapes therewith.

2. The tray defined in claim 1, and wherein the median portion of each sidewall has an elongated slot spaced above and parallel to the bottom edge of said sidewall, a sand containing bag constituting a weighting and hold-down device for each sidewall, each sand bag having an inward lengthwise edge portion extending slidingly and removably through the coating slot, said edge portion being provided with an open-ended hem, an insertable and removable bag attaching and retaining rod fitted in said hem, said rod being of a length greater than the length of the hem and having its respective end portions projecting beyond the respective ends of the hem in a manner to abut interior side surfaces of the cooperating sidewall at the respectively operable ends of the slot.

3. The tray defined in claim 2, and wherein the bottom edge portions of the respective end walls are arcuately contoured to fittingly rest atop said tunnel-hump and having integral depending anti-slipping teeth.

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