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STORAGE RECEPTACLE
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3,209,979

Fig. 1

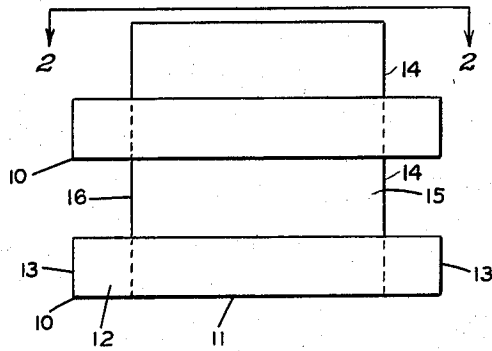


Fig. 2

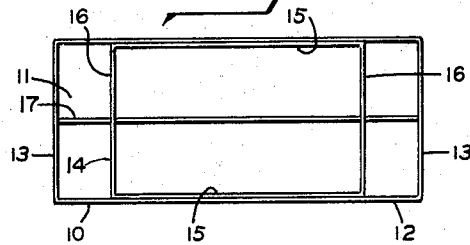
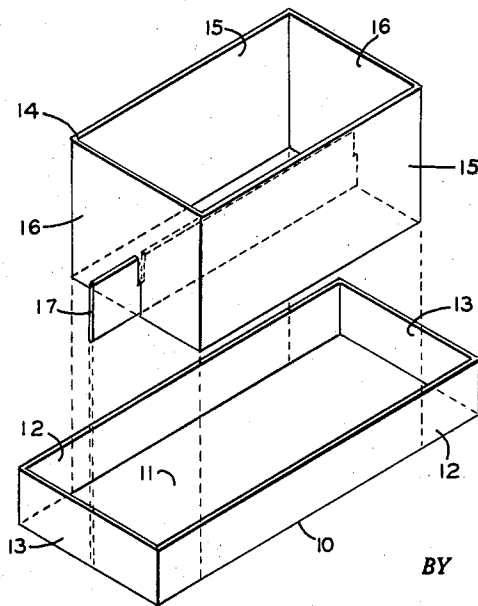


Fig. 3



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STORAGE RECEPTACLE

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This invention relates to packing means including a storage receptacle in which there is provided an insert having a vertical dimension greater than that of the receptacle. More particularly, the upper edge of the insert provides a support surface upon which another receptacle may be stacked.

Heretofore, many problems have been encountered in the stacking of storage receptacles, especially those fabricated of light-weight materials, wherein the vertical dimension of an insert is equal to or exceeds the vertical dimension of a stored article or articles and wherein the vertical dimension of said insert exceeds that of a particular receptacle. The prior receptacles have a tendency to be unstable in stacked relationship. This unstable condition can result in the collapse of the stacks of receptacles and consequently, in damage or breakage in the stored articles.

In the device of the present invention, proper and stable stacked relationships are maintained by receptacles having removable, sleeve-like support inserts which have a vertical dimension greater than that of the receptacles with which the inserts are associated.

It is, therefore, an object of this invention to provide a storage receptacle of a predetermined vertical dimension with an insert having a vertical dimension greater than that of said predetermined dimension which insert will not appreciably diminish the storage capacity of the receptacle but will allow greater stability of the receptacle when it is in stacked relationship with other receptacles.

The invention will be described in detail with reference to the drawing wherein:

FIGURE 1 is a view in elevation of a plurality of receptacles and associated inserts according to the invention in vertically stacked relationship;

FIGURE 2 is a plan view of FIGURE 1 taken on line 2—2 in FIGURE 1;

FIGURE 3 is a view in perspective showing the insert separated from the receptacle.

Referring to FIGURE 3, there is shown a receptacle 10 which is rectangular in shape although other shapes may be used without departing from the spirit and concept of the invention. The receptacle 10 has a bottom wall 11, side walls 12, and end walls 13.

Above the receptacle 10 in FIGURE 3 is shown a sleeve-like insert 14. The insert 14 has side walls 15 and end walls 16. The insert 14 has a rectangular configuration, however, various other shapes may be used. The sleeve-like insert may have a continuous or discontinuous periphery.

In the particular embodiment of the invention shown in FIGURES 1 to 3 it will be noted that the end walls 16 of the insert 14 have a horizontal dimension which is only slightly less than that of the end walls 13 of the receptacle 10 and that the side walls 15 of the insert 14 have a horizontal dimension which is less than that of the side walls 12 of the receptacle 10. When the removable insert 14 is placed in the receptacle 10, the lower periphery of the insert 14 rests on the bottom wall 11 of the receptacle 10. In this position, the insert side walls 15 are located closely adjacent the receptacle side walls 12 and the insert end walls 16 are spaced from the receptacle end walls 13. The vertical dimension of the insert walls 15 and 16 is greater than that of the receptacle walls 12

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and 13. Thus, the upper portion of the insert 14 projects upwardly out of the receptacle 10.

As shown in FIGURE 1, a plurality of receptacles 10 with their associated inserts 14 may be vertically stacked in a stable manner by placing the bottom of one receptacle 10 on top of the insert 14 of another similar receptacle 10 in vertically aligned relation. In this manner it will be noted that the upper edge of each of the insert walls 15 and 16 provides a support surface for the bottom of the next higher receptacle. Although only two receptacles have been shown in FIGURE 1, additional units may be similarly aligned and supported in a single stack.

It is here noted that the respective vertical dimensions of the walls of the insert and the receptacle may be varied as long as the vertical dimension of the insert walls 15 and 16 exceeds that of the receptacle walls 12 and 13. Similarly, the shape of the insert and receptacle may take various different forms. For example, the insert may be circular while the receptacle may be square. The spacing and horizontal dimensional relationship between the insert wall or walls and receptacle wall or walls also may be varied.

It will be noted that a removable transverse divider 17 may be provided in the receptacle 10. The divider 17 may be interlocked with the insert 14 by any conventional means not shown in detail in the drawing. The divider 17 will provide additional stability for the insert 14 and will position the insert 14 in the interior of the receptacle 10 in addition to separating the receptacle 10 into various compartments.

Various modifications will occur to those skilled in the art without departing from the spirit and scope of the invention as defined in the claims.

I claim:

1. Packing means comprising receptacle means having side wall means of a predetermined vertical dimension, substantially vertical, removable, sleeve-like insert means having a vertical dimension greater than said predetermined vertical dimension and located in said receptacle means, said insert means having upper edge portions which provide supporting surfaces for additional receptacle means to be stacked thereon, and transverse divider means extending across said receptacle means.

2. Packing means for storing articles of a predetermined vertical dimension comprising receptacle means having side wall means of a vertical dimension less than said predetermined vertical dimension for supporting said articles and substantially vertical, removable, sleeve-like insert means having a vertical dimension at least as great as said predetermined vertical dimension and located in said receptacle means in surrounding relationship to at least one of said articles whereby an upper edge portion of said sleeve insert means provides a support surface for additional receptacle means to be stacked thereon, said sleeve insert means including divider means.

3. A receptacle having a bottom wall, side walls, and end walls for supporting articles of a predetermined vertical dimension, said side walls having a vertical dimension less than that of said articles, and a substantially vertical, removable, sleeve-like insert located in said receptacle, said insert having side walls and end walls, said insert side walls being located adjacent said receptacle side walls, said insert end walls being spaced from said receptacle end walls, said insert side walls and end walls having a vertical dimension at least as great as said predetermined vertical dimension whereby the upper edge portions of said insert side walls and end walls provide a support surface for additional receptacles to be stacked thereon.

4. A receptacle according to claim 3 further comprising transverse divider means extending across said receptacle.

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5. Packing means for storing articles of a predetermined vertical dimension comprising receptacle means having side wall means of a vertical dimension less than said predetermined vertical dimension for supporting said articles and substantially vertical, removable, sleeve-like insert means having a vertical dimension at least as great as said predetermined vertical dimension and located in said receptacle means in surrounding relationship to at least one of said articles whereby an upper edge portion of said sleeve insert means provides a support surface for additional receptacle means to be stacked thereon, said sleeve-like insert means including at least one wall means which is spaced from said side wall means of said receptacle means.

6. Packing means comprising receptacle means having side wall means of a predetermined vertical dimension and substantially vertical, removable, sleeve-like insert means having a vertical dimension greater than said predetermined vertical dimension and located in said receptacle means, said insert means having upper edge portions which provide supporting surfaces for additional receptacle means to be stacked thereon, said insert means

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also having at least one wall which is spaced from said side wall means of said receptacle means.

7. Packing means comprising receptacle means having side wall means of a predetermined vertical dimension and substantially vertical, removable, sleeve-like insert means having a vertical dimension greater than said predetermined vertical dimension and located in said receptacle means, said insert means having upper edge portions which provide supporting surfaces for additional receptacle means to be stacked thereon, said insert means also having at least two walls which are spaced from said side wall means of said receptacle means.

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