United States Patent

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[73] Assignee **The Baxter Company**

[54] **RECEPTACLE-PALLET**
2 Claims, 4 Drawing Figs.

[52] **U.S. Cl.** ..... **217/26.5,** 229/2.5, 206/65 R, 206/72
[51] **Int. Cl.** **B65d 1/36**
[50] **Field of Search** ..... 214/10, 5; 206/65, 65 K, 62, 72, 8, 81, 84; 220/22, 23.2; 217/21, 26, 26.5, 30, 31; 229/2.5

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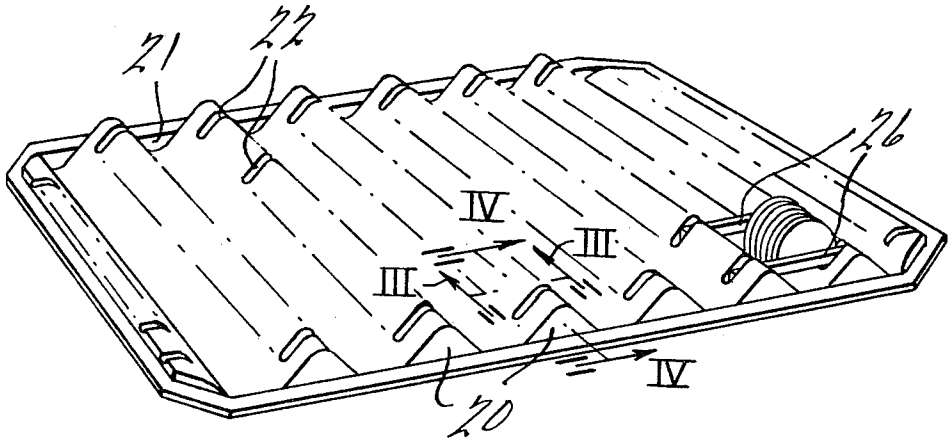
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ABSTRACT: A rigid traylike sheet is contoured to provide a plurality of work-holding channels defined by wavular walls of sawtooth section extending both above and below end walls which form a part of the perimeter.



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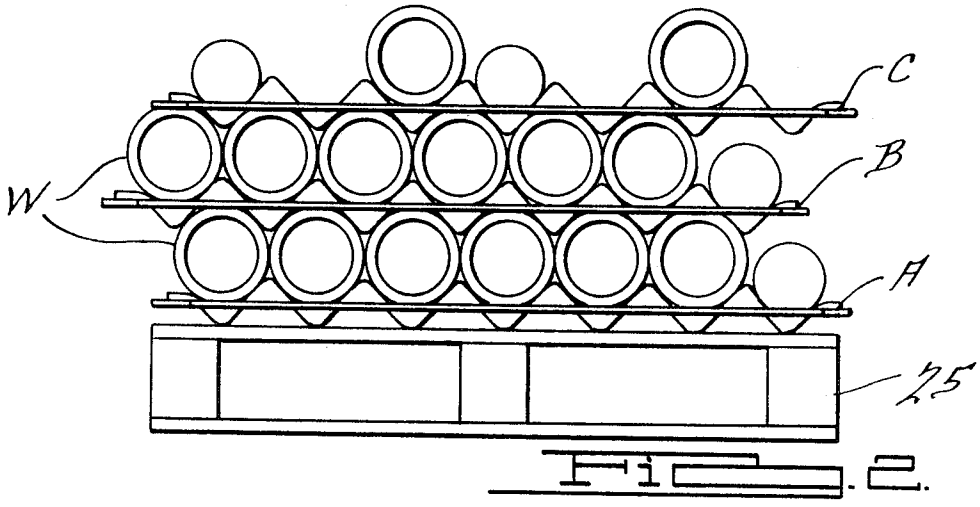


Fig. 2.

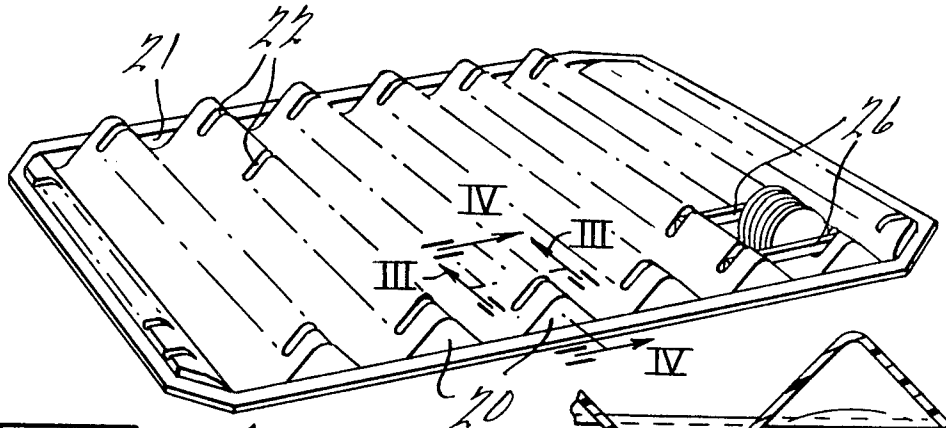


Fig. 1.

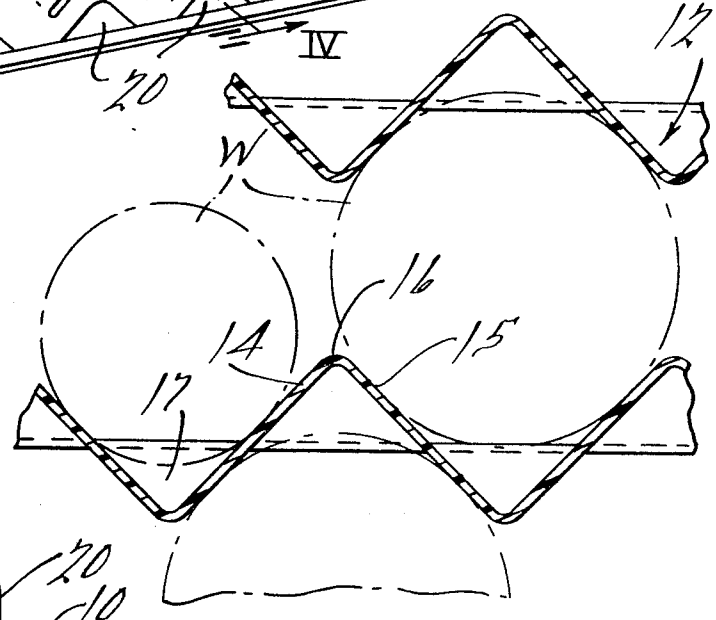


Fig. 3.

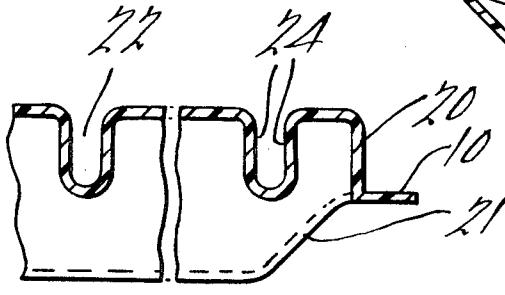


Fig. 4.

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RECEPTACLE-PALLET

BACKGROUND OF THE INVENTION

In the storage and handling of unpackaged articles it is frequently desirable to prevent unwanted relative motion and contact between the articles and it is of course desirable that the articles be compactly held to provide the greatest practical storage capacity, and that a number of layers of the articles can be stacked in an interkeyed relationship which prevents unwanted displacement during transport and handling.

The primary objects of the present invention can be summarized as the provision of an improved traylike receptacle-pallet which accomplishes the objectives above indicated in a convenient and economical manner, which provides effective protection for and accommodates a wide variety of differently shaped articles, which occupies a minimum of space when in use, and which when not in use can be stacked and stored in a small space. Additional objects are to provide such a device which is light in weight, readily cleanable, does not absorb oil, water or dirt, does not damage fine surfaces, and which is readily adapted to be handled in stacks on standard loading pallets, mounted in racks or stood on a floor or other support.

Other objects and advantages will become apparent upon consideration of the present disclosure in its entirety.

BRIEF DESCRIPTION OF THE FIGURES OF DRAWING

FIG. 1 is a perspective view of a receptacle-pallet constructed in accordance with the present invention;

FIG. 2 is an elevational view showing a plurality of the receptacle-pallets in use and supported on a conventional pallet; and

FIGS. 3 and 4 are sectional detailed views on a larger scale taken respectively as indicated by the lines and arrows III–III and IV–IV of FIG. 1.

DETAILED DESCRIPTION OF PREFERRED FORM OF THE INVENTION

Referring now to the drawing, my preferred receptacle-pallet is constructed of a single rectangular sheet of rigid plastic such as linear polyethylene, contoured, as by the vacuum forming process, to provide a flat coplanar rim section **10** bounding a work-supporting section consisting of wavular walls **14** and **15** defining a plurality of work-receiving channels **12** lying parallel to each other in a transverse series along the rectangular plane defined by the rim **10**. The walls **14** and **15** converge upwardly and downwardly to crests **16** located above the rim **10** and troughs **17** located below the rim. The upper surfaces of the troughs define the receptacle portions, while the undersides of the crests of an overlying unit act to position and isolate articles as W positioned in the troughs of the subjacent unit.

The ends of the upwardly projecting wavular portions are closed by wall sections **20** integral with the sheet and similar integral end wall portions **21** close the ends of the troughs in the areas lying below the rim **10**.

Each crest portion is provided with a plurality of transverse

flat-walled indentations **22**, the walls **24** defining such indentations extending perpendicularly both to the channels and to the generally flat plane of arrangement or zero axis plane of the channels. The depression sidewalls **24** provide rigid connections between the sidewalls **14**, **15** for a substantial distance downwardly from the crests, and such depressions are preferably aligned longitudinally, so that when desired partitioning elements **26** can be placed in the slots defined by such indentations, bridging the trough area, to isolate articles located in the bridged trough, or to support articles which are short axially.

Articles located in and projecting upwardly from the troughs to positions above the crests are adapted to extend into the spaces beneath and between the corresponding walls **14**, **15** of a similar unit placed over the stored articles and displaced laterally one-half wavelength, as shown in FIG. **2**. As also shown in the latter view, a bottom unit A shown resting upon a conventional pallet **25**, contains articles W which project upwardly in the manner indicated into the spaces between the wavular walls of the superposed unit B, which similarly carries workpieces which support a third unit C laterally displaced to the right from the unit B so as to directly overlie the Unit A. Of course, any number of such units may be stacked in this manner which the workpieces can properly support.

This Detailed Description of Preferred Form of the Invention, and the accompanying drawings, have been furnished in compliance with the statutory requirement to set forth the best mode contemplated by the inventor of carrying out the invention. The prior portions consisting of the Abstract of the Disclosure and the Background of the Invention are furnished without prejudice in an effort to comply with administrative requirements of the Patent Office.

What I claim is:

1. A device for supporting and segregating articles for storage and for handling comprising a relatively rigid sheet crenelated to sawtooth wavular form to define a plurality of straight channels and alternately interposed upstanding ridges arranged parallel to each other and parallel to a flat zero axis plane lying midway between the tops and bottoms of said ridges and channels and having flat sidewalls uniformly inclined at approximately 90° to each other in such manner that a section taken through the sheet on any plane perpendicular to the channels and to said zero axis plane defines a configuration of like and uniform sawtooth wavelike form, a flat uninterrupted perimetric flange integral with said sheet and extending entirely around the same on said zero axis plane, and integral walls joining the sidewalls to each other and to said flange and closing the ends of said channels and said ridges above and below the flange.

2. A device as defined in claim **1** including a plurality of narrow straight-sided indentations defined by a plurality of pairs of parallel flat walls extending downwardly from the crests of each wavelike portion parallel to said section plane and each connecting the sidewalls of one of the channels, corresponding walls of the several indentations being coplanar and adapted to receive removable partitions for bridging and dividing the channels.