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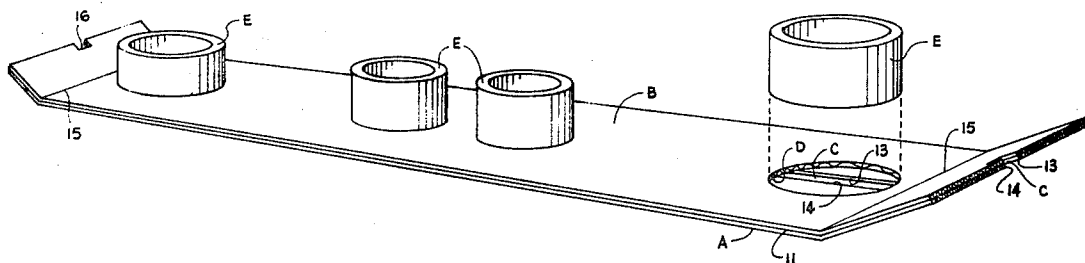
[54] **DISPOSABLE PALLET**  
3 Claims, 5 Drawing Figs.

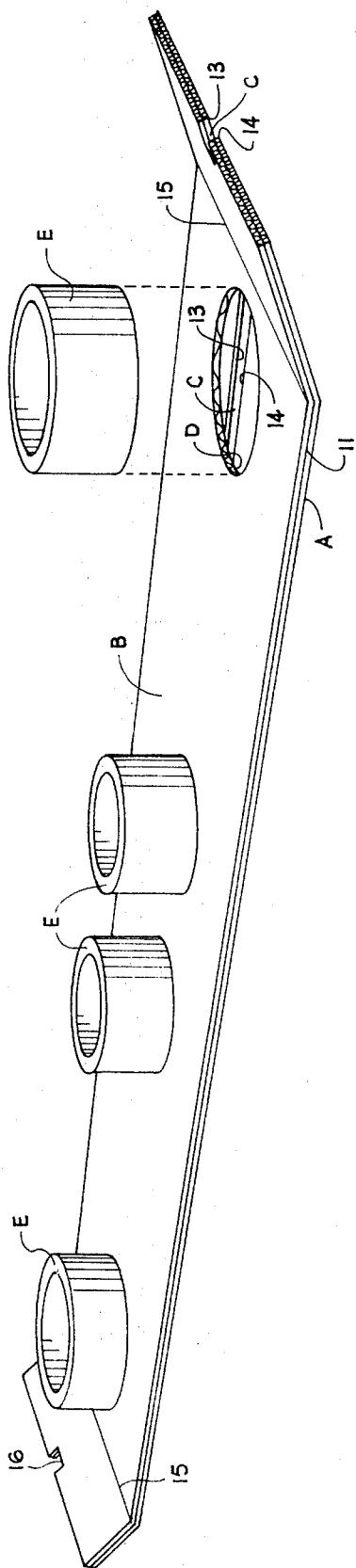
[52] U.S. Cl. .... **108/55**  
[51] Int. Cl. .... **B65d 19/44**  
[50] Field of Search .... **108/51-**  
**—58; 206/60 A**

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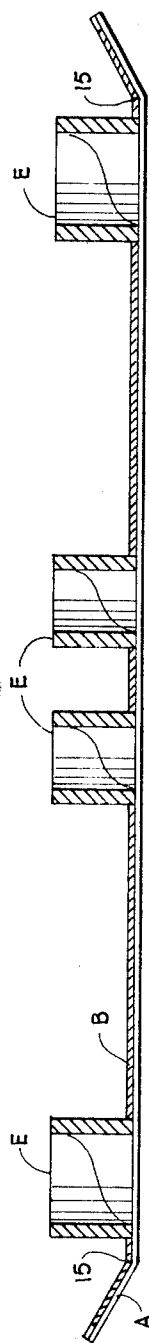
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**ABSTRACT:** A pallet assembly for shipping articles carried thereon, comprising a plurality of spaced elongated skid assemblies. Each skid assembly is constructed from an elongated scored board which has flaps folded under a main body portion. Hollow tubular members are carried in a pressure fitting relationship in spaced cutouts provided in a main body portion of the blank, and are supported on the folded under flaps. A metal tie-band extends through a groove provided between the edges of the flaps and wraps around the article and skids for holding the skid assembly in position relative to the articles. The ends of the skid assembly are folded upwardly so as to lock the flaps in position.





*Fig. 1.*



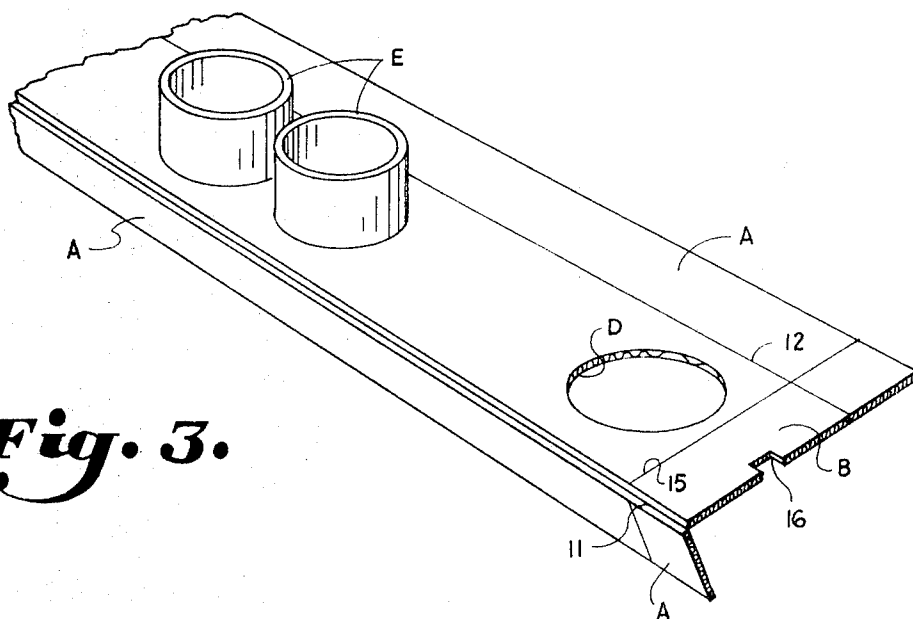
*Fig. 2.*

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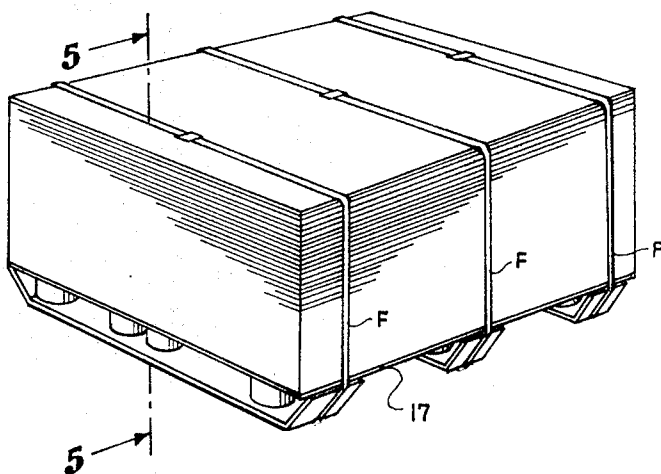
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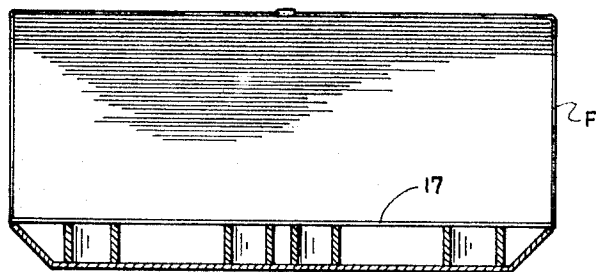
*Fig. 3.*



*Fig. 4.*



*Fig. 5.*



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### DISPOSABLE PALLET

This invention relates to a pallet assembly, and more particularly to a disposable pallet constructed of cardboard and the like, and is sturdy and relatively inexpensive.

Presently, the most commonly used pallet is constructed of wood and includes a plurality of spaced runners which are sandwiched between wooden planks. In order to lift the pallet and the articles carried thereon, the forks of a lift truck are positioned between the runners. Not only are these wooden pallets expensive, they are heavy and require considerable time to construct. They, also, must be stored in an assembled position, and after use either returned or destroyed.

Expendable pallets, such as disclosed in U.S. Pat. No. 2,444,184 granted to Cahners on June 29, 1948 incorporate lightweight material, such as cardboard and paper tubing, which can be readily disposed after use. The tubular members are glued on a thin flat sheet in a spaced configuration so that the forks of a lift truck can pass therebetween. Normally, an additional flat board is placed on top of the tubing for accommodating the articles to be shipped thereon. One problem with such device is maintaining the tubular members in position. Frequently, while inserting and removing the forks of a lift truck from between the tubular members such will strike them breaking the tubular member away from the baseboard. When the supporting tubular members are dislodged the pallet is likely to collapse, or the dislodged tubular members interfere with subsequent insertion of the forks of a lift truck. Furthermore, before the pallets can be used the glue which is used to hold the tubular members in position must be allowed to dry.

Another expendable pallet is illustrated in U.S. Pat. No. 2,706,099. The pallet comprises a platform of fiberboard with means for securely attaching supporting legs to the underside thereof spaced at suitable distances for distributing the load uniformly over the supporting legs.

Accordingly, it is an important object of the present invention to provide an improved expendable pallet structure.

Another important object of the present invention is to provide a pallet assembly which can be constructed of relatively light material, as compared to wood, and may be readily assembled for use.

Another important object of the present invention is to provide a pallet assembly which can be stored in a collapsed position and easily assembled for use.

A further important object of the present invention is to provide a pallet assembly wherein there is a four-way fork lift entry.

Still another object of the present invention is to provide a pallet assembly wherein pressure fillings are relied upon making assembling and disassembling easy.

Still another important object of the present invention is to provide a pallet assembly which has a groove therein for aiding in positioning the tie-bands that are used for securing articles on the pallet.

Still another important object of the present invention is to provide a pallet assembly which has a sufficiently rigid base member that allows stacking pallets on top of each other without leaving transfer marks or damaging material on the bottom pallet.

Still another important object of the present invention is to provide a pallet assembly which may be varied in size according to the desired load capacity that such is to support without departing from the basic construction of the pallet.

A further important object of the present invention is to provide a pallet assembly which incorporates disposable skid assemblies which permit the package to be slid across smooth surfaces.

The construction designed to carry out the invention is to be hereinafter described together with features thereof.

The invention will be more readily understood from a reading of the following specification, and by reference to the accompanying drawings forming a part thereof, wherein an example of the invention is shown and wherein:

FIG. 1 is a top perspective view illustrating a skid assembly which forms part of the pallet assembly with a vertical supporting member removed,

FIG. 2 is a vertical cross-sectional view of the skid assembly illustrated in FIG. 1,

FIG. 3 is a fragmentary perspective view illustrating a partially assembled skid assembly,

FIG. 4 is a perspective view illustrating a package which includes a pallet assembly constructed in accordance with the present invention with articles banded thereon, and

FIG. 5 is a longitudinal sectional elevation taken on the line 5-5 in FIG. 4.

The drawings illustrate a pallet assembly for shipping articles carried thereon, comprising a plurality of spaced elongated skid assemblies. Each skid assembly is formed from an elongated blank having opposed elongated flaps A that are folded under a main body portion B. The flaps A act as an elongated base supporting member, while the main body portion B acts as an elongated positioning member. The flaps A have a width of less than one-half the width of the main body portion so that when they are folded under the main body portion B a lengthwise groove C is defined. The main body portion B has a plurality of spaced cutouts D therein. Vertical supporting members E corresponding in size to the cutouts D are carried in a pressure fitting relationship in each of the cutouts D and extend therethrough to be supported on the flaps A which are folded under the main body B. The vertical supporting members E are tall enough and spaced apart so that when the articles which are to be shipped are positioned thereon the forks of a lift truck can fit between the vertical supporting members E. A tie-band F extends in the groove C around each of the skid assemblies and the article for holding the skid assemblies in position relative to the articles. The ends of the main body portion B and flaps A of the skid assembly are held in an upright position by the tie-band F for locking the flaps in position under the main body portion B. The upwardly turned ends of the main body B and flaps A also aid in forming a skid.

Referring in more detail to FIGS. 1 through 3, the flaps A and the main body B may be constructed from any suitable material, such as cardboard, plywood, masonite, etc. In the preferred embodiment the blank is constructed from a double-faced corrugated paperboard having a thickness of approximately three-eighths of an inch. An elongated slit score 11 extends through the blank except for the inner layer of flexible material. This enables the flap A to be folded underneath the main body portion B. Another elongated slit score 12 is positioned on the other side of the blank for forming another flap A. The slit scores 11 and 12 are cut into the blank a predetermined distance from the outer edge so that when the flaps are folded underneath the main body portion B the inner edges 13 and 14, respectively, will not meet and a groove C is formed therebetween. This groove C acts as a guide for the tie-band F when such is drawn therethrough. The end portions of the flaps A and the main body have a pressure score 15 along which the flaps A and main body B are bent upwardly and held in such position by the tie-band F to lock the flaps under the main body portion B. These upturned ends also act as skids enabling the package to be moved across smooth surfaces. A cutout notch 16 is provided in each end of the main body portion B for acting as a guide for the tie-band F.

Circular cutouts D are provided in the main body portion B for receiving hollow tubular vertical supporting members E in a pressure fitting relationship. The cutouts D are die cut and are spaced so that the forks of a lift truck can extend therebetween. It is noted that the tubular vertical supporting members E adjacent the ends of the skid assembly are larger than the two vertical supporting members E in the middle so that when the pallet is shipped in a disassembled condition the inner tubular members E can be placed within the outer tubular members so as to conserve space. Preferably, the hollow cylinder supporting members E are spirally wound fiberboard or chipboard formed on the principal of mailing or carpet tubes. The strength and size of such can be varied according to

the weight of the articles being shipped. If additional support is necessary to carry added weight of pallet material, extra small tubes can be inserted in the large tubes on each end to provide the desired strength.

Generally, a flat plate 17 is positioned on top of the supporting members E of three spaced skid assemblies, such as illustrated in FIG. 4. The flat top plate 17 can be made any desired size and from a number of various types of material, such as corrugated board, plyboard, masonite, etc. The articles which are to be shipped are then positioned on top of the flat plate 17 and the tie-band F is drawn tightly thereover, through the groove C in the skid assembly to secure such relative to each other.

As can be seen in FIGS. 4 and 5, the forks of a lift truck can be entered from any side of the package to lift it. If it is coming from the side, the forks would be positioned between the two central supporting members E and the two outer supporting members E. If it is coming from the front it would be positioned between the outer skid assembly and the inner skid assembly. If the forks of the lift truck accidentally strike the supporting members E, generally they will not be dislodged since they are recessed within the cutouts D in the main body positioning member B. This prevents laterally shifting of the supporting members E. If the supporting members E were glued on the main body portion B, such not only would take time in assembling and disassembling, but would frequently break loose when struck by the forks of the lift truck.

It can also be seen that the pallet assemblies with the articles thereon, can be stacked on top of each other, and the bottom flaps provides support without leaving transfer marks and damaging material on the bottom pallet.

While the pallets illustrated in FIGS. 4 and 5 are shown with

paperboard stacked thereon, it is to be understood that such can be used for shipping any suitable type of articles. Sometimes it may be desirable to place another flat plate on top of the package so that the tie-band F will not damage such.

What I claim is:

1. A pallet assembly for shipping articles carried thereon comprising: a plurality of spaced elongated skid assemblies, each skid assembly being formed from an elongated blank having opposed elongated flaps that are folded under a main body portion, said main body portion having a plurality of spaced cutouts therein, a vertical supporting member corresponding in size to said cutouts carried in each of said cutouts and extending therethrough to be supported by said flaps folded under said main body portion, said vertical supporting members being tall enough and spaced apart so that when said articles which are to be shipped are positioned thereon the forks of a lift truck can fit between said vertical supporting members, and a tie-band extending around each of said skid assemblies and said article for holding said skid assemblies in position relative to said articles.

2. The pallet assembly as set forth in claim 2, wherein the ends of said main body portion and flaps of said skid assembly extend upwardly to lock said flaps in position under said main body portion, and said tie-band being drawn tight about said skid and articles holding said ends of said main body portion and flaps in said upwardly extending position.

3. The pallet assembly as set forth in claim 2, wherein said flaps have a width of less than half the width of said main body portion so that when the opposed elongated flaps are folded under the main body portion a lengthwise groove is defined for accommodating said tie-band.

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