

July 9, 1957

A. G. MOONEY

2,798,685

EXPENDABLE PALLET

Filed July 24, 1953

2 Sheets-Sheet 1

Fig. 1

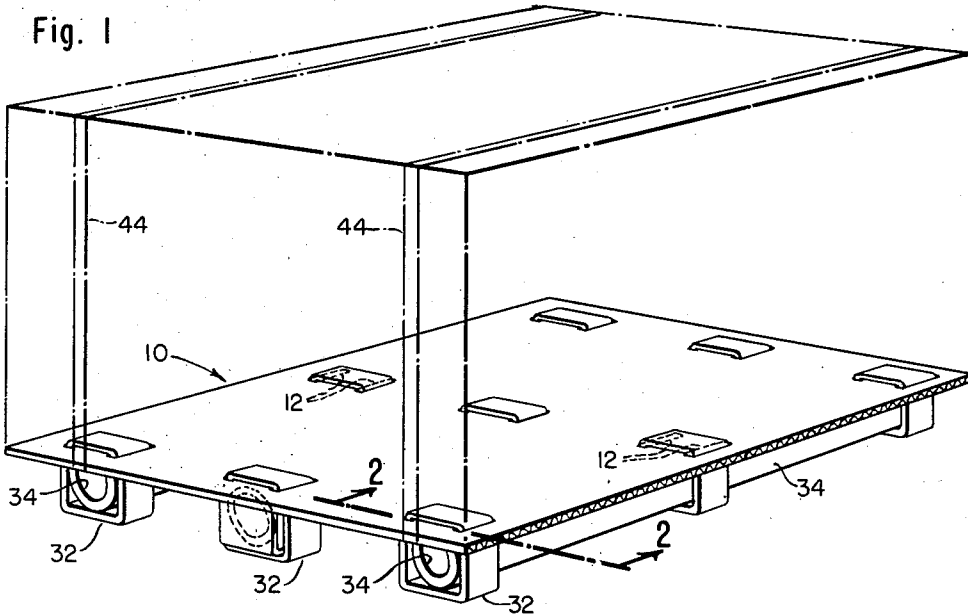


Fig. 2

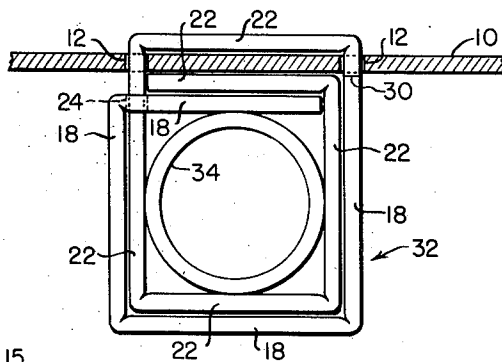
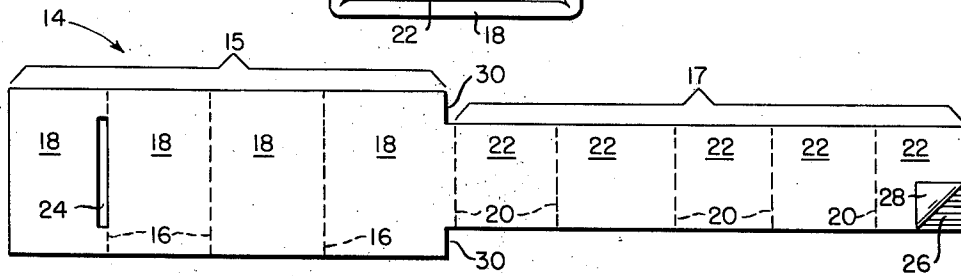


Fig. 3



INVENTOR.
ARTHUR G. MOONEY

BY
Kenway, Tenney, Witter & Hildreth
ATTORNEYS

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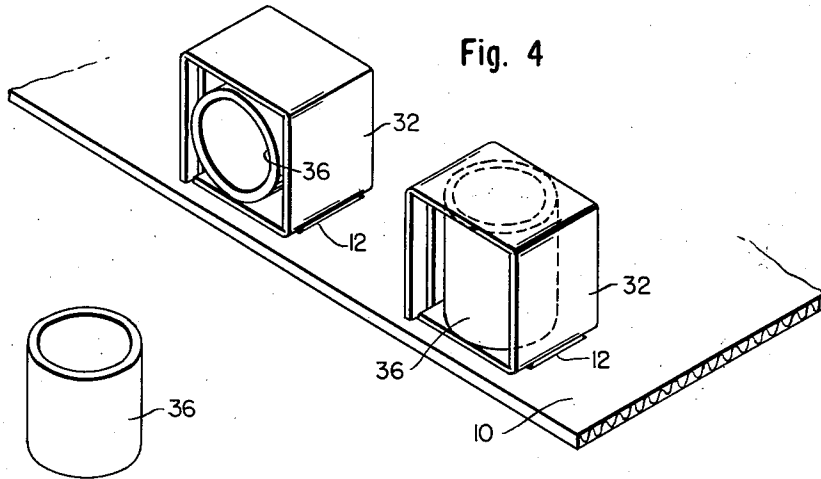


Fig. 5

Fig. 4

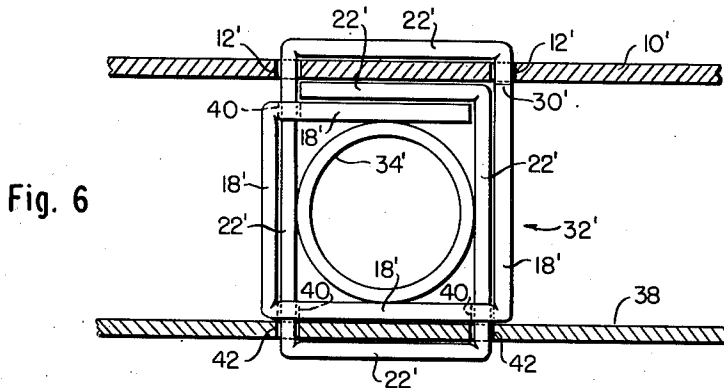


Fig. 6

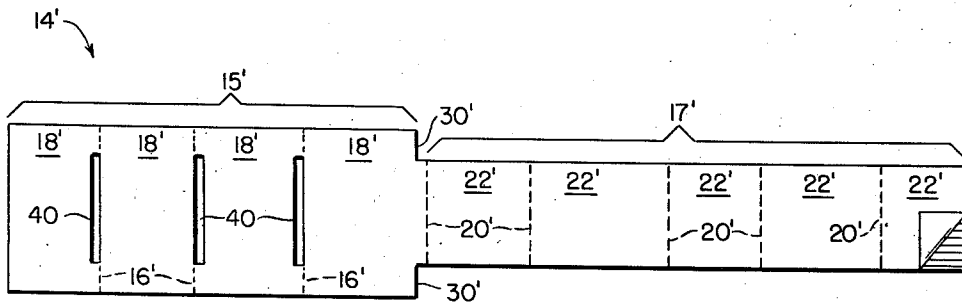


Fig. 7

INVENTOR.
ARTHUR G. MOONEY

BY
Kenway, Tenney, Witter & Hildreth

ATTORNEYS

2,798,685

EXPENDABLE PALLET

Arthur G. Mooney, Andover, Mass.

Application July 24, 1953, Serial No. 370,063

8 Claims. (Cl. 248—120)

This invention relates to expendable pallets constructed from paperboard and adapted to support in packaged form a load to be shipped. The primary object of the invention resides in the production of an improved pallet of this nature that is adapted to be manufactured so economically that it can be discarded after use and the cost of returning "empties" thereby eliminated.

My invention contemplates a pallet embodying a paperboard load supporting platform and strips of paperboard threaded through slots in the platform and formed into open ended boxes at one face of the platform, the boxes being thus attached to the platform and being adapted to receive tubular supporting inserts that combine with the boxes to provide spaced supporting legs for the pallet. The production of an improved and novel pallet of this nature comprises a further object of the invention.

In accordance with the preferred form of my invention the boxes are square and adapted to receive cylindrical inserts therinto which inserts can be individual for each box or a single long insert can extend through a plurality of aligned boxes and thus provide a support for the platform. Furthermore, individual cylindrical inserts can be employed and inserted either axially through the open ends of the boxes or perpendicular to the platform, each insert being formed with dimensions adapting it to fit the box in either of such positions. The production of a novel pallet embodying these features comprises another object of the invention.

These and other features of the invention will be best understood and appreciated from the following description of preferred embodiments thereof selected for purposes of illustration and shown in the accompanying drawings in which—

Fig. 1 is a perspective view of my improved pallet,

Fig. 2 is an enlarged sectional view taken on line 2—2 of Fig. 1,

Fig. 3 illustrates a paperboard strip employed in forming a supporting leg for the pallet,

Fig. 4 is a fragmentary bottom perspective view of the pallet,

Fig. 5 is a perspective view of a weight supporting insert,

Fig. 6 is a view like Fig. 2 but showing a modified construction, and

Fig. 7 illustrates the paperboard strip employed in Fig. 6.

Referring first to Figs. 1-3 of the drawings, 10 indicates a paperboard platform of stiff construction provided with a plurality of pairs of slots 12 therethrough. The pairs of slots are placed wherever leg support for the platform is desired and in the drawing I have illustrated the pairs of slots as disposed in spaced alignment.

Cooperating with each pair of slots 12 is a paperboard strip 14 having a relatively wide end portion 15 and a relatively narrow end portion 17. The portion 15 is scored transversely at 16 to provide four panels 18 and the portion 17 is scored transversely at 20 to provide five panels 22. The outermost panel 18 is also slotted at 24

adjacent to the outermost score line 16. Each strip comprises a corrugated sheet 26 having corrugations extending lengthwise of the strip and covered at each face with an adhesively attached cover sheet 28.

5 The slots 12 and 24 are of a width to receive the narrow strip portion 17. A strip portion 17 is threaded through each pair of slots 12 to bring the shoulders 30 of the strip into contact with the bottom face of the platform. The strip is then folded on the score lines 16 and 20 to form the open ended box 32, the end panel 22 being tucked through the slot 24 and overlapping the end panel 18. The load weight on the platform is adapted to press the overlapped panels 18 and 22 into firm contact and hold the box against lateral or shifting movement. A box thus formed beneath each pair of slots 12 is directly attached to and provides a leg support for the platform, and the relatively wider portion 15 of each strip adds substantially to the strength of the formed box.

20 The open ended boxes 32 are adapted to receive reinforced weight supporting inserts which can be of any desired and inexpensive construction. In Fig. 1 I have illustrated the boxes as having their open ended through openings axially aligned and adapted to receive long tubular inserts 34 of heavy paperboard, the tubes providing weight support for the platform along their entire lengths and firmly supporting the platform against lateral movement. The tubes are of a diameter to fit snugly into the boxes.

30 As illustrated in Figs. 4 and 5, individual inserts can be provided in the boxes if desired and these inserts can be of tubular paperboard, blocks of wood or any suitable support fitting snugly within the box. Also the tubular insert 36 can be made of a length equal to its diameter and to the width of one interior side wall of a box so that the insert can be placed either axially into the box opening or vertically, as illustrated in Fig. 4. In the latter case the axis of the insert is perpendicular to the platform and directly supports the same endwise.

40 The construction illustrated in Figs. 6 and 7 furthermore provides a bottom platform 38, the other parts corresponding to Figs. 1-3 being indicated by like reference characters primed. In this case the wide portion 15' of the paperboard strip is slotted at 40 to receive the narrow legs 17' which also pass through the pairs of slots 42 in the platform 38 and secure the platform supporting boxes thereto.

45 When the platform is loaded the load can be secured by straps 44 passing through the tubes 34, thereby providing a secure shipping package with spaced supporting legs adapted to receive lifting forks for handling the load. After delivery and removal of the load the platform can be discarded. It is particularly pointed out that my improved pallet eliminates the use of all attaching elements usually employed, such as adhesives, staples, etc., and the labor required to apply such elements, and at the same time produces a unitary pallet with securely attached and firmly supported legs.

50 Having thus disclosed my invention what I claim as new and desire to secure by Letters Patent is:

60 1. An expendable pallet comprising a paperboard platform provided with a plurality of pairs of parallel and laterally spaced slots therethrough in predetermined spaced areas of the platform, a plurality of paperboard strips each scored transversely along spaced parallel lines providing a plurality of rectangular panels at opposite sides of said lines and extending through a pair of said slots and folded on said lines to bring said panels in overlapping relation forming an open ended rectangular box at one face of the platform, two of said panels at one side of each box being in opposed relation and in surface engagement with opposite faces of the platform between its pair of slots and each of the other three sides

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of the box embodying two of said panels in face to face contact, and supporting inserts disposed within the boxes through their open ends and in snug engagement with the side walls thereof.

2. The pallet defined in claim 1 in which one end portion of the strip forming each box is narrower than the other end portion and extends through said slots in the platform and through a slot in said other end portion.

3. The pallet defined in claim 1 in which the inserts are tubular and cylindrical and of a diameter to fit snugly within the boxes.

4. The pallet defined in claim 1 in which said boxes and pairs of slots are arranged in a plurality of straight lines disposed in spaced relation across the platform with a plurality of boxes in each line disposed with their open ended openings in axial alignment beneath each aligned pairs of slots and in which the insert is a relatively long and tubular supporting member disposed axially within and through the aligned boxes.

5. The pallet defined in claim 1 plus a second paper-board platform provided with pairs of slots corresponding to those in the first named platform, said strips extending through the pairs of slots in the second platform and supporting it on the boxes at the sides opposite to and parallel with the first platform.

6. The pallet defined in claim 1 in which the inserts

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are tubular and their longitudinal axes are perpendicular to the platform.

7. The pallet defined in claim 1 in which the insert receiving openings in the boxes are square and the inserts are cylindrical and each is of a length substantially equal to its diameter and to the width of one interior side wall of a box.

8. The pallet defined in claim 1 in which one end portion of the strip forming each box is narrower than the other end portion and extends through said slots in the platform and through a slot in said other end portion, said transverse scoring of the narrower end portion dividing it into five panels and the free end panel thereof comprising one of said two panels in surface engagement with the platform.

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