

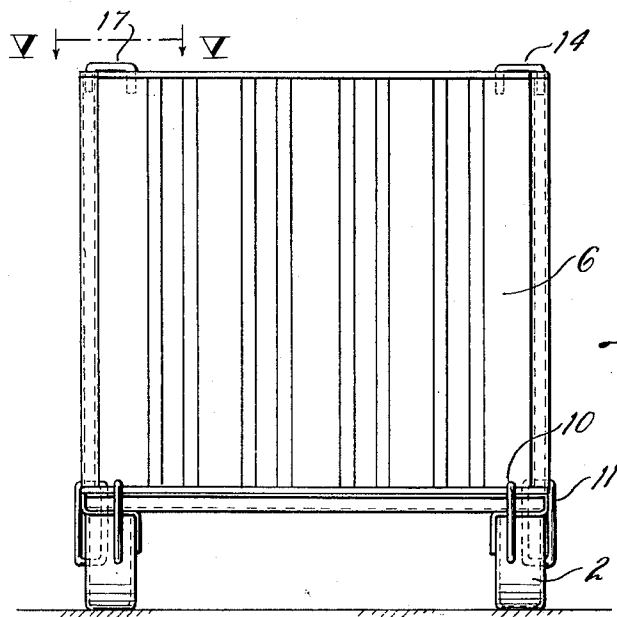
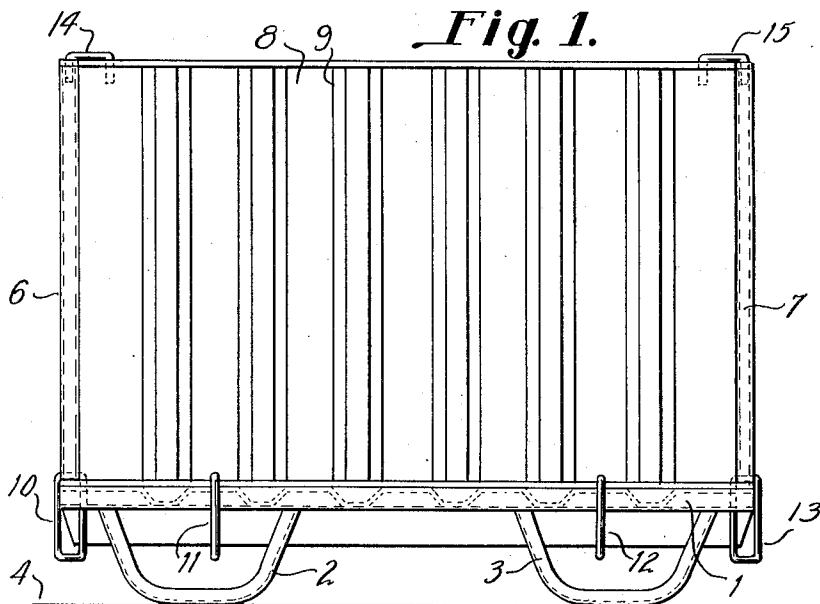
May 15, 1951

J. M. PHILLIPS
PALLET TYPE CONTAINER

2,553,273

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2 Sheets-Sheet 1



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2 Sheets-Sheet 2

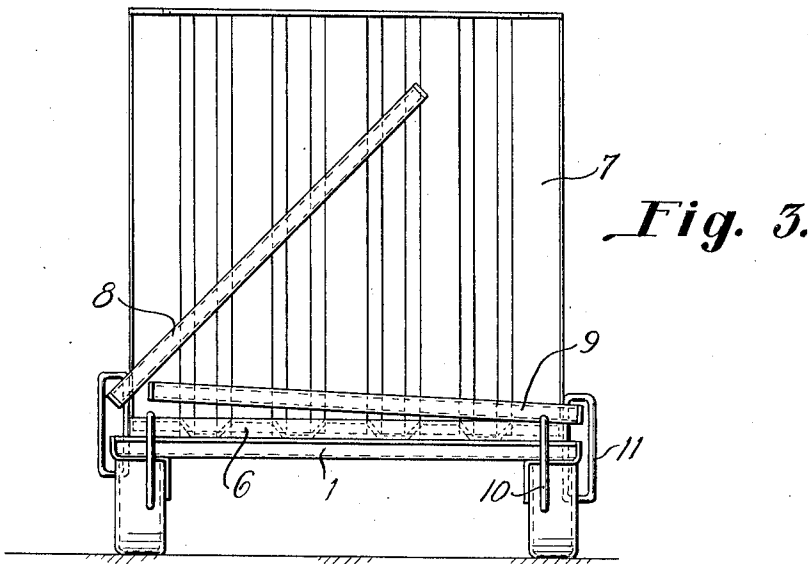


Fig. 3.

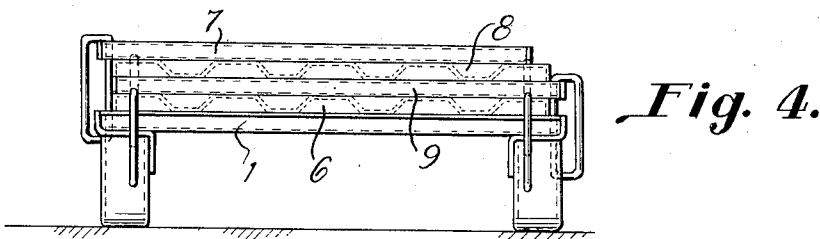


Fig. 4.

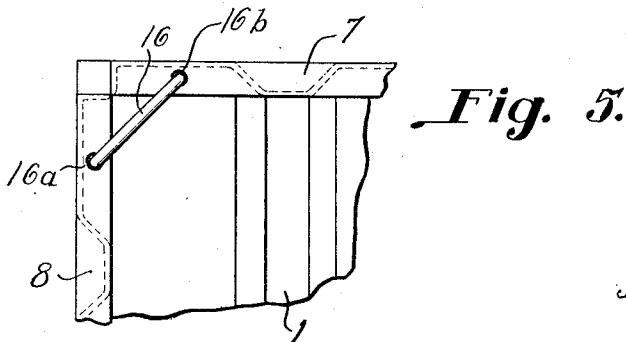


Fig. 5.

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PALLET TYPE CONTAINER

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This invention relates to a skid of the type commonly used for transporting materials on runways, inclined planes and the like and, more specifically, relates to a skid having side panels and end panels loosely hinged to a bottom platform in a manner so as to form a readily collapsible box-like unit.

Common types of skids generally have permanent side walls and end walls which present an outstanding disadvantage during the return shipment of the skids after the material loaded thereon has been removed inasmuch as they unnecessarily occupy considerable space, particularly when a large number of empty skids are to be transported on a vehicle in closely packed or stacked relationship.

An object of the present invention, therefore, is to overcome the above disadvantage by providing a skid structure having readily collapsible side walls and end walls which are loosely hinged to a bottom platform in a manner so as to make it possible to stack these walls on top of each other to form a compact, collapsed assembly which takes up a very small volume and which enables stacking of a large number of empty skids, one on top of the other in a relatively small volume or space.

Other objects and advantages of the present invention will become apparent from a study of the following specification taken with the accompanying drawings wherein:

Fig. 1 is a side elevational view of a skid made of corrugated sheet material and embodying the principles of the present invention;

Fig. 2 is an end view of the skid shown in Fig. 1;

Fig. 3 is an end view similar to Fig. 2 except that it shows some of the wall panels in collapsed or stacked relationship;

Fig. 4 is an end view similar to Figs. 2 and 3 except that it shows all of the side and end wall panels in stacked relationship and the entire skid assembly in collapsed condition, and

Fig. 5 is an enlarged fragmentary top view of a corner of the skid assembly showing fastening means for securing the upper ends of adjoining wall panels together.

Referring more particularly to Figs. 1 and 2, numeral 1 denotes a base or bottom platform which is illustrated as being made of corrugated sheet material, such as, for example, sheet steel, although it should be understood that such platform may be made of wood, plastic or other suitable material. Integrally secured to the bottom of platform 1 are provided a plurality of runners, such as 2 and 3, also preferably of sheet steel,

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adapted to slide on the surface of a roadway or floor indicated at 4. A pair of end panels 6 and 7 and a pair of side panels 8 and 9, preferably of corrugated sheet material, such as steel, are provided and are loosely hinged to the perimeter of the bottom platform by means of looped hinge elements, such as 10, 11, 12 and 13, preferably of substantially rectangular configuration. These looped hinge elements may be made of steel or any other suitable material and are loosely and slidably mounted so that one of the elongated sides of each extends through a hole formed in platform 1 as well as through a hole formed at the lower or hinged end of the various panels in a manner so that the hinge elements may move in a longitudinal direction along the thickness of both the platform and hinged panel as will be more apparent from an inspection of Fig. 4. A pair of hinge elements are provided for each panel. A larger number, of course, may be used, if so desired.

The looped hinge elements 10, 11, etc., are elongated sufficiently so that the opening thereof in a longitudinal direction is coextensive at least with the over-all or combined thicknesses of all four panels, or slightly greater than the combined thickness of the four panels, as will be more apparent from an inspection of Fig. 4. This allows stacking of the side and end panels, one on top of another, to form a collapsed structure, such as shown in Fig. 4. Figs. 3 and 4 more clearly show how each pair of hinge elements extends through holes of different ones of said side and end panels and the sequence of stacking of the panels.

In operation, when it is desired to open the skid or unfold the panels from the collapsed position shown in Fig. 4 to that shown in Figs. 1 and 2, it is merely necessary to rotate the various panels about their looped hinge elements, which form loose pivots, and thereafter secure the adjoining panels together when they are in a substantially vertical position. This is preferably done by means of substantially U-shaped hooks, such as 14, 15, 16 and 17, the extremities of which hooks fit into holes formed at the top corners of adjoining panels, as will appear more clearly from Fig. 5. That is, one extremity of hook 16, for example, fits into hole 16a formed at one top corner of side panel 8, whereas the other extremity fits into a hole 16b formed at one top corner of the adjoining end panel 7.

Thus it will be seen that the U-shaped hooks, 14, 15, 16 and 17, provide readily detachable fastening means for holding adjoining panels in a

vertical position at the four upper corners of the box-like structure. It will be understood, of course, that other types of readily detachable fastening means could be used instead of the U-shaped hooks, if desired. As explained hereinbefore, the various panels may be made of any suitable material other than metal and may or may not be corrugated as desired.

Thus it will be seen that I have provided a highly efficient, relatively simple and inexpensive skid whose side and end walls are readily collapsible into stacked relationship so that the total volume occupied by the empty skid will be considerably less than that when the side and end panels remain erected in vertical position, thereby enabling transportation of a large number of collapsed skids in a relatively small space or volume which is highly desirable when shipping the skids from place to place or returning them from the unloading site to the loading site.

While I have illustrated and described certain specific embodiments of my invention, it will be understood that these are by way of illustration only, and that various changes and modifications may be made within the contemplation of my invention and within the scope of the following claims.

I claim:

1. A skid comprising a rectangular platform, means supporting the platform in an elevated relation to the floor or other surface on which it is set, a wall panel at each side and end of the platform, at least two of the wall panels being hinged to the platform by elongated loops which are slidably passed through the platform and movable up and down with respect thereto and slidably passed through the wall panels, the length of said loops internally being at least equal to the effective total thickness of said platform and said two wall panels to provide for overlapping of the latter wall panels upon each other on said platform.

2. A collapsible container having a bottom panel and a plurality of inwardly foldable side wall panels about the edges of the bottom panel, characterized by at least two of the wall panels having hinged connections to said bottom panel, the hinged connections of at least one of said two wall panels being constituted of substantially rectangular loops slidably passed through the panels in a direction normal to the surface thereof and slidably passed through the bottom panel for relative vertical movement, the length of said loops internally being at least equal to the effective total thickness of said bottom panel and said two wall panels to provide for overlapping of the two wall panels upon each other on said bottom panel.

3. A collapsible container having a base panel and a plurality of inwardly foldable side wall panels about the edges of the base panel, characterized by at least some of the wall panels having the hinged connections therefor constituted of substantially rectangular loops slidably passed through the panels in a direction normal to the surface thereof and slidably passed through the base panel for relative vertical movement, said loops being of a length so that a wall panel so connected with the base panel may lie parallel with the base panel with the remaining wall panels of the container being folded under it between it and the base panel.

4. A collapsible container having a base panel and a plurality of inwardly foldable wall panels about the edges of the base panel characterized by the wall panels having a hinged connection to the base panel, said hinged connection being constituted of substantially rectangular loops slidably passed through the panels in a direction normal to the surface thereof whereby the wall panels may hinge from a vertical to a horizontal position, said rectangular loops being slidably passed through the base panel for relative vertical movement therein, said loops being of a length such that all of the wall panels may lie parallel with the base panel, any one wall panel overlapping any other panel.

5. A collapsible container of the class described having a base panel and side wall panels about the edges of the base panel, said side wall panels being connected with the base panel through connections which permit hinging relative vertical movement thereof relatively to the base panel so as to permit the wall panels to be moved from a vertical position in which they are in abutting relation, to a horizontal position in which they are in overlapping relation, said connections comprising substantially rectangular loops slidably passed through the panels in a direction normal to the surface thereof and slidably passed through the base panel for relative vertical movement, said loops being of a length so that a wall panel so connected with the base panel may lie parallel with the base panel with the remaining wall panels of the container being folded under it between it and the base panel, and inverted U-shaped fastening links on the top edges of some of the wall panels having one leg thereof received in the wall panel in which it is mounted and the other leg thereof removably received in a socket of the abutting wall panel when the wall panels are in vertical position.

6. A collapsible container having a base panel of substantially rectangular form and a plurality of inwardly foldable wall panels, one along each edge of the base panel, each of the wall panels being connected with the base panel by means of a plurality of substantially rectangular loops, which loops have one side thereof slidably passed through the base panel, and one side thereof outside and clear of the base panel, said loops also passing through the side wall panels in a direction normal to the surface thereof, the loops being of a length at least equal to the effective total thickness of said wall and base panels, whereby the wall panels may be folded inwardly in parallel relation to the base panel.

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