# United States Patent [19]

## Seymore

#### [54] PALLET RUNNER

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- [52] U.S. Cl. ..... 108/51; 108/56; 108/58
- [58] Field of Search ...... 108/51-58

# [56] **References Cited**

#### UNITED STATES PATENTS 2,559,930 7/1951 Bolton et al. ..... 108/57 2.970.797 2/1961 Desbois..... 108/56 8/1961 2,996,276 Sorensen et al. ..... 108/57 3,006,590 10/1961 Hoag..... 108/56 3,012,747 12/1961 Green ..... 108/56

# [11] **3,881,429**

# [45] May 6, 1975

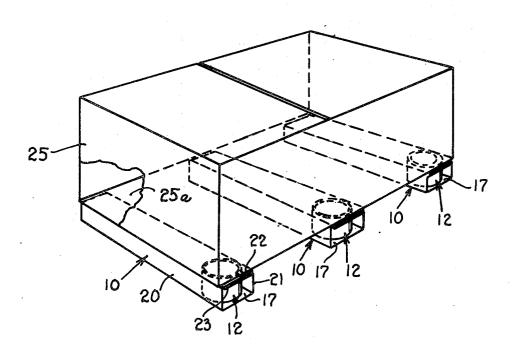
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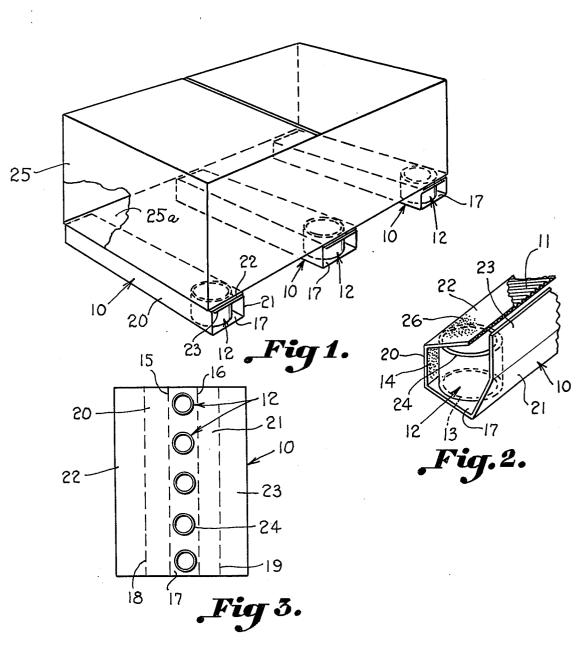
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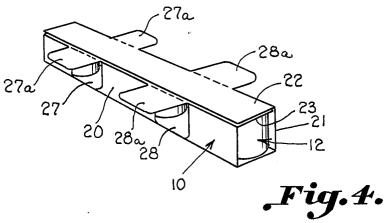
#### [57] ABSTRACT

A pallet runner for use in a disposable pallet assembly is constructed from a single rectangular section of cardboard with a plurality of aligned centrally disposed cylindrical fiber cores carried thereby, said rectangular section of cardboard has a plurality of parallel scores forming a base, sides and marginal flaps for forming a structural beam-like member having a double thickness of cardboard to cushion articles stacked thereon to avoid damage thereto due to the weight thereof bearing on the fiber cores.

#### 2 Claims, 4 Drawing Figures







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### 1 PALLET RUNNER

### **BACKGROUND OF THE INVENTION**

Disposable pallet constructions making use of fiber cores and the like have long been used as substitutes for 5 more expensive wooden pallets. Generally, however, such pallet constructions take the form of an integral assembly wherein a plurality of rows of cores form a slab like support. Such a prior art construction is illustrated in United States Letters Pat. No. 2,996,276. 10 Such constructions are subject to twisting forces tending to separate the components. Moreover, such pallets are bulky and difficult to apply to a variety of loads.

#### SUMMARY OF THE INVENTION

It has been found that a disposable pallet runner, for use with other such runners as a pallet assembly, capable of acting as a structural beam member while providing a cushion against indentation of articles carried thereby may be constructed from a single rectangular 20 section of cardboard utilizing a single row of fiber cores. The section of cardboard encompasses the row of cores and affords a double flap thickness adjacent the articles carried by a pallet assembly incorporating the runner.

Accordingly, it is an important object of this invention to provide a disposable pallet runner of great strength and lightweight for use with other such runners to form a pallet assembly.

Another important object of this invention is to pro-  $^{30}$ vide a versatile pallet runner which may be used to form a pallet structure meeting a variety of load requirements.

Another important object of this invention is to provide a pallet runner having the aforesaid advantages, 35 the like (not shown). providing a cushion against damage to the articles carried thereby.

#### BRIEF DESCRIPTION OF THE DRAWING

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

The invention will be more readily understood from a reading of the following specification and by reference to the accompanying drawing forming a part 45 thereof, wherein an example of the invention is shown and wherein:

FIG. 1 is a perspective view illustrating a pallet runner constructed in accordance with the present invention forming a disposable pallet for shipping articles stacked thereon,

FIG. 2 is an enlarged perspective view illustrating a runner constructed in accordance with the present invention, with parts broken away, for clarity of illustration.

FIG. 3 is a plan view illustrating the single rectangular section of cardboard and single rows of cores positioned thereon for forming a runner according to the invention, and

FIG. 4 is a perspective view illustrating a modified  $^{60}$ form of the invention having openings for accommodating a fork lift truck.

#### DESCRIPTION OF THE PREFERRED **EMBODIMENTS**

The drawing illustrates a pallet runner for use in a disposable pallet assembly for shipping articles stacked

thereon. A single rectangular section of cardboard broadly designated at 10 has fluting 11 (FIG. 2). A single row of aligned cylindrical fiber cores broadly designated at 12 is entrally disposed on the rectangular section of cardboard. A base portion 13 of each of the cores is glued to the rectangular section of cardboard as by the usual box sealer glue 14 covering an inner surface of the section 10. A first pair of centrally disposed parallel scores 15 and 16 (FIG. 3) are spaced a distance substantially equal to the diameter of the cores and aligned with said cores to form a base 17 for the runner.

A second pair of scores 18 and 19 are parallel to said first scores and spaced outwardly therefrom a distance substantially equal to the height of said cores forming

<sup>15</sup> sides 20 and 21 for the runner. Marginal flaps 22 and 23 have a width substantially equal to the diameter of the cores. The flaps are folded down and glued, as by box sealer glue 14, to upper portions 24 of the cores forming a beam-like runner having a flat double thickness of cardboard on top for attachment to a bottom portion of an article carrying member.

Thus, a plurality of such pallet runners may be attached by any suitable means in spaced relation to each other to the bottom portion of the article carrying member forming a disposable pallet assembly as shown in FIG. 1.

The article carrying member in FIG. 1 is illustrated in the form of a cardboard box 25 having a bottom 25a, an underside of which is secured to the upper flap 22 of the runner as by glue 26. However, any other suitable means may be employed for forming the pallet assembly. A box bottom may be similarly secured to the runners and articles secured thereto by strapping and

A modified form of the invention is illustrated in FIg. 4, wherein like reference characters are used to designate like parts. The sides 20 and 21 have spaced transverse openings 27 and 28 therein to accommodate the 40 forks of a fork lift truck. The openings or passageways are defined by flaps 27a and 28a, respectively, formed therein as by die cutting. If desired, strapping may be passed through these openings and extended about the article carrying member to form a palletized package.

It is desirable that the cores 12 be aligned in a direction across or transverse to the fluting 11 since such affords vertical strength to the sides to avoid crushing of the runners under a heavy load. The bases 17 of the runners act as the lower tension element of the beam 50 configuration formed by the runner. The upper flanges of the beam takes the form of the flaps 22 and 23. Due to the double thickness afforded by the flaps 22 and 23 a cushion is formed to avoid impressing the articles carried by the pallet assembly with the outline of the cores. 55

While a preferred embodiment of the invention has been described using specific terms, such description is for illustrative purposes only, and it is to be understood that changes and variations may be made without departing from the spirit or scope of the following claims. What is claimed is:

1. A pallet runner for use in a disposable pallet assembly for shipping articles stacked thereon having a single rectangular section of carboard having fluting 65 consisting essentially of:

A. a single row of aligned cylindrical fiber cores spaced across and centrally disposed on said rectangular section of cardboard with a base portion of

each of said cores glued to said rectangular section of cardboard;

- B. said cores being aligned in a direction across said fluting of said carboard;
- C. a first pair of centrally disposed parallel scores 5 spaced a distance substantially equal to the diameter of said cores aligned with said cores forming a base for said runner;
- D. a second pair of scores parallel to said first scores and spaced outwardly therefrom a distance sub- 10 stantially equal to the height of said cores forming sides for said runner;
- E. marginal flaps having a width substantially equal

to the diameter of said cores; and

- F. an upper portion portion of each of said cores to which said flaps are folded down and glued forming a beam like runner having a flat double thickness of carbdoard for gluing to a bottom portion of an article carrying member;
- whereby a plurality of such pallet runners may be glued in spaced relation to each other to said bottom portion forming a disposable pallet assembly.
- 2. The structure set forth in claim 1, including spaced transverse passageways in said sides of said runners for accommodating forks of a fork lift truck.

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