

PATENT SPECIFICATION

(11) 1 500 658

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- (21) Application No. 33846/76 (22) Filed 13 Aug. 1976
(31) Convention Application No. 662 651
(32) Filed 1 March 1976 in
(33) United States of America (US)
(44) Complete Specification published 8 Feb. 1978
(51) INT CL² B65D 5/02
(52) Index at acceptance B8P 2A1 8C1A5 8C1A8
(72) Inventor BENJAMIN AUSTIN DOWNING



(54) COLLAPSIBLE CONTAINER

(71) We, CATERPILLAR TRACTOR CO., a corporation organized and existing under the laws of the State of California, United States of America of 100 N. E. Adams Street, Peoria, Illinois 61629, United States of America, do hereby declare the invention, for which we pray that a patent may be granted to us and the method by which it is to be performed, to be particularly described in and by the following statement:—

This invention relates generally to collapsible containers formed from a single unitary blank.

There are a multitude of collapsible containers available in the art. Examples of such collapsible containers are found in United States Patent Specification Nos. 3,872,965; 3,881,648; 3,883,067; 3,883,068; 3,884,348; and 3,887,126. These containers may be used to store and transport a multitude of items. However, each of these containers generally has four sides and an open top. This construction prevents the stacking of a multitude of such containers one on top of the other without a special frame and also prevents easy retrieval of the contained items.

In accordance with the invention, an integral blank for a collapsible container comprises a pair of side panels; top and bottom panels with the side panels being hinged to opposite edges of the bottom panel and the top panel being hinged to one edge of one of the side panels, the top, bottom, and side panels defining an open ended generally rectangular shape in the erected condition; means to permit securing of the top panel to the other one of the side panels; means to close one end of the container; a front panel hinged to the bottom panel at the end of the bottom panel remote from the one container end, the front panel having a pair of front flaps hinged one to each of its opposite side edges, and each of the front flaps being arranged to overlie the inner face of a respective side panel in the erected condition upon folding up of the front panel out

of the plane of the bottom panel; a top locking panel hinged to the top panel and arranged to be folded inwardly to underlie the top panel and thereupon cooperatively engage each of the front flaps to secure the front flaps and front panel in a position defining a partially open area at the front of the container.

Preferably, the front panel is folded upwards out of the plane of the bottom panel through less than 90° in the erected condition.

Collapsible containers, made by erecting this new blank may be stacked one on top of the other, while permitting easy access into the interior of the containers while in the stacked condition.

Two examples of a container blank constructed in accordance with the invention are illustrated in the accompanying drawings, in which:—

FIG. 1 is a perspective view of one container in the erected condition;

FIG. 2 is a side view of the FIG. 1 container;

FIG. 3 is a front view of the FIG. 1 container;

FIG. 4 is an inside view of the blank used to form the container of FIG. 1;

FIG. 5 is a side view showing the FIG. 1 container in the collapsed condition;

FIG. 6 is a perspective view of the container of FIG. 1 with the front and rear panels partially folded;

FIG. 7 is a partial section of the front and top panel in the open condition; and,

FIG. 8 is a rear view of a second container.

Reference is now made to FIGS. 1 to 3 of the drawings, which illustrate a collapsible container 10. The container comprises top 12, bottom 14, side 16 and 18, end 20, and front 22, panels. In the erected or opened condition, the container 20 defines generally a box-like configuration with an open area 24 at one end thereof. A securing flap 19, hingedly attached at 21 to the top panel 12, is secured by any suitable means to the side panel 16. Any suitable means may be used to

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