

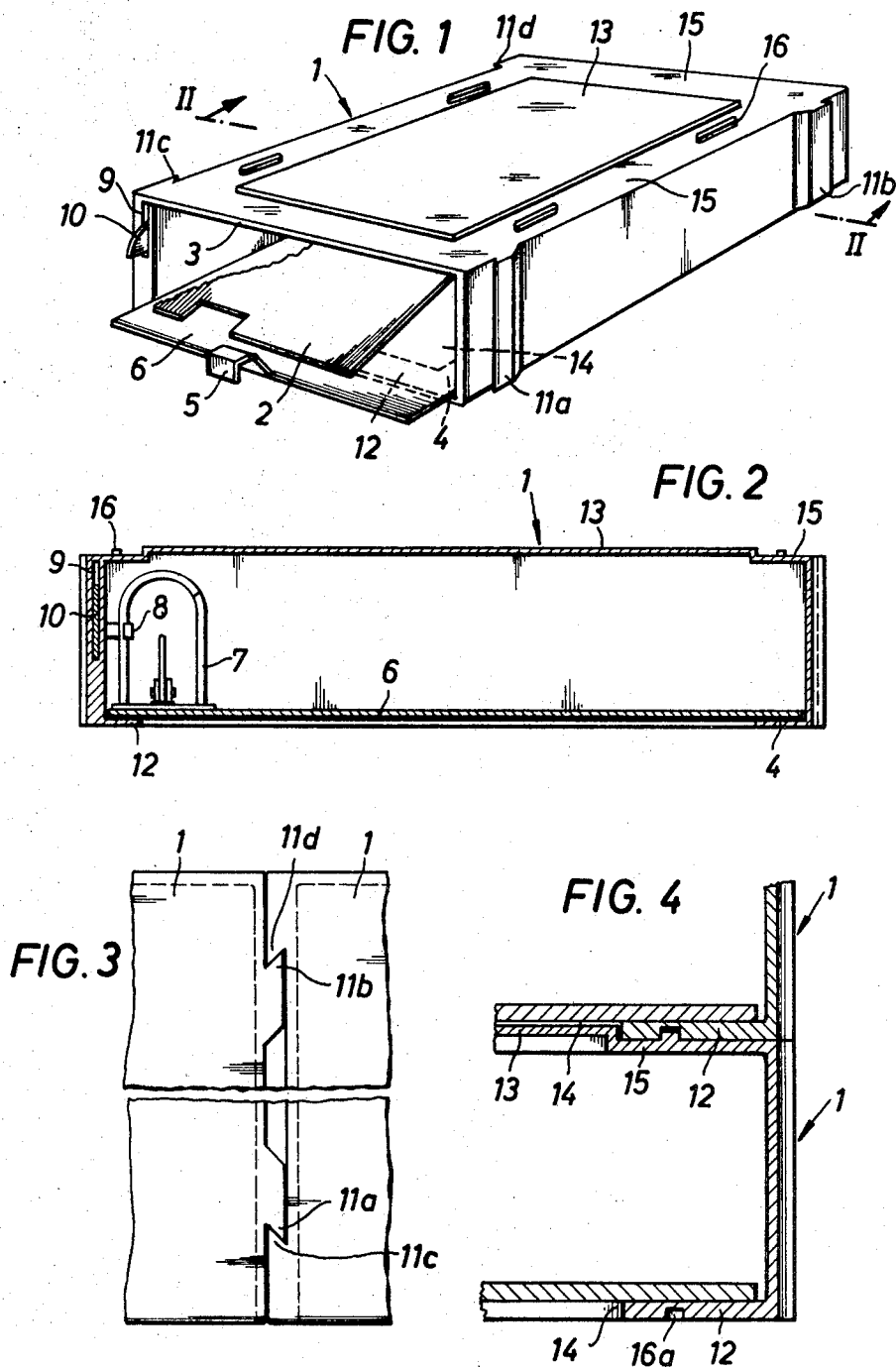
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STACKABLE BOX-LIKE CONTAINERS

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STACKABLE BOX-LIKE CONTAINERS

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1 Claim

ABSTRACT OF THE DISCLOSURE

A container for the storage of documents and the like is described wherein wedge-shaped grooves are provided on each of the longitudinal sides for interconnecting two or more horizontally disposed containers. The grooves face outwardly on one side and inwardly on the opposite side of each container. A raised flat portion and longitudinal humps disposed on the top of the container fit into corresponding reliefs in the bottom of a second container vertically superimposed on the bottom container. A flap may be used to cover the front opening, and an insert can be provided for carrying documents.

SUMMARY OF THE INVENTION

The invention concerns a stackable box-like container with an opening provided in the front part and, if needed, a flap closable over the front part, as well as complementary elevations and depressions at the floor and cover of the container, and a part insertable in the opening.

Stackable box-like containers of this type are chiefly used to file documents, file cards, etc. Of course they are also suitable for storing small material of all types.

The invention aims at a stable and economical arrangement of a number of these box-like containers so that these may be set up and also interchanged in a rapid and stable fashion according to the principle of building blocks. To perform this task, the invention provides, externally along the longitudinal walls of the container, for displacement grooves to achieve a form-fitting and detachable connection with additional box-like containers, with displacement grooves being shaped positively on one of the longitudinal walls and negatively on the opposite longitudinal side.

In this manner there is obtained not only a form-fitting detachable connection of vertically superimposed containers which, as is known, may be established by pins fastened to the floor of one of the containers and fitting into corresponding openings of the container below, but in addition there is a solid connection between any horizontally adjacent containers.

To prevent longitudinal sliding of the containers, the invention is further characterized by the mirror-image formation of the displacement grooves on each longitudinal side. The invention provides for the vertical attachment of the displacement grooves and for their wedge-shaped widening toward the point of opening.

The invention provides for a particularly suitable construction of the displacement grooves in such a way that on each longitudinal side of the container there is provided a displacement groove near the flap-closable front opening and a mirror-image of that displacement groove near the back wall. The advantage of the displacement grooves with a wedge-shaped widening toward the point of opening is in preventing any inconvenience in inserting the displacement grooves due to any inexactness of construction of the container.

A further characteristic of the invention is in the container floor consisting merely of lasts, for insertion, attached along part of the lateral floor edges, and as a result of the economy in floor space thus obtained the container cover exhibits a corresponding elevation. The advantage of this construction is in achieving stable stacking in a vertical direction while simultaneously economizing material for the container floor. In practice there is no floor at all, which is of no disturbing consequence at all since whenever box-like containers are stacked one on top of the other, the container floor is formed by the cover of the container below.

DESCRIPTION OF THE DRAWINGS

FIG. 1 shows the container in perspective, with the closing flap partially cut off;

FIG. 2 shows a section along the line II—II in FIG. 1;

FIG. 3 presents in detail two containers arranged side by side as seen from above, showing the lateral connection of the containers with the displacement grooves;

FIG. 4 presents in detail a section of two containers, one on top of the other.

DETAILED DESCRIPTION

A square-shaped container 1, made of synthetic material, in rectangular section, shows in front a closing flap 2 attached on hinges at the upper edge 3 of the point of opening and closing. On the inside of Container 1 there is provided an insertable part 6 resting upon Container Floor 4 and retractable from the opening by means of Grip 5. Insertable Part 6 has a well-known Mechanism 7 to file documents and which engages at the same time a Spring Latch 8 of a flat movable part 10 needed so that Closing Flap 2 may be moved up and held in position, and moving along a lateral wall of the container in Sliding Track 9.

On the outside along the lateral walls of Container 1, near the closing point and the back wall, there are attached displacement grooves 11a, 11b, 11c, and 11d. In relation to a longitudinal side, these displacement grooves are mirror-images and according to the opposite longitudinal sides are shaped positively and negatively, respectively. Displacement Grooves 11 are attached vertically and wedge-shaped, in such a way that they widen in the direction of their opening. The two-wedge-shaped displacement grooves 11c and 11d face each other on the left longitudinal side, seen from the opening, whereas the wedge-shaped displacement grooves 11a and 11b, arranged on the right longitudinal side, face away from each other.

As seen in FIG. 3, adjacent containers 1 may thus in a simple manner be solidly connected by lifting the new container to be added, with its lateral displacement grooves 11c and 11d, to the level of the corresponding displacement grooves 11a and 11b of the container already in position, and by subsequent lowering. Container Floor 4 merely consists of displacement lasts 12 for the insertable part 6 which are attached along the lateral floor edges and along the floor edge corresponding to the bottom part of Closing Flap 2. In this fashion, Container Floor 4 is merely formed by a limiting frame. The container cover shows an elevation 13 which in its dimensions corresponds to Floor Space 14 created by the floor frame.

If several containers 1 are to be stacked one on top of the other, Elevation 13, in the container cover engages the floor space 14 of Container 1 placed on top. Apart from the economy in material involved in Floor Space 14 there is the additional advantage that the surface of the box-like container is largely smooth. On the upper part on the lateral strips 15 corresponding to the displacement lasts 12

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of the floor there are additionally provided elongated humps 16 which in stacking engage corresponding depressions in the displacement lasts 12 constituting the limits of the floor. Humps 16 are no higher than Elevation 13 on the container cover so that there will be no surface irregularities of Container 1 produced by pins etc. that might get in the way.

With a container constructed according to the invention, several similar containers may thus simply be stacked like building blocks, on top or along-side each other, and may also achieve a form-fitting connection preventing sliding and shifting of the containers against each other.

Although a particular embodiment has been chosen to best illustrate the present invention, it is to be understood that the scope of the invention is to be limited only by the following claims.

The embodiments of the invention in which an exclusive property or privilege is claimed are defined as follows:

1. A stackable box-like container adapted to be assembled with a plurality of other like containers to form a stable assemblage of side-by-side, multi-level stacks, which resist horizontal displacement of one stack with respect to adjoining stacks, or of one container with respect to the containers immediately above and below it, said container comprising:

a top panel, a back wall, a pair of opposed side walls, and means forming a bottom;

said means comprising horizontal flanges projecting inwardly from the bottom edges of said side and back walls and extending across the front of the container from one side to the other, the inner edges of said flanges defining a rectangular opening;

said top panel having a raised rectangular portion of substantially the same configuration and dimensions as said rectangular opening in said bottom, whereby said raised rectangular portion fits snugly within said rectangular opening of a container mounted above it;

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said raised rectangular portion projecting above the marginal edges of the top panel a distance substantially equal to the thickness of said horizontal flanges, whereby the top surfaces of said horizontal flanges of the upper container are approximately flush with the top surface of said raised portion of the lower container;

a pair of laterally spaced, outwardly facing, wedge-shaped dovetail tracks extending vertically on the outer surface of one of said side walls;

a pair of inwardly facing, wedge-shaped, dovetail tracks extending vertically on the outer surface of the other of said side walls;

said outwardly facing dovetail tracks on said one side wall slidably interlocking with the inwardly facing dovetail tracks on said other side wall of an adjoining container, so as to lock them together against horizontal displacement in either direction; and

a flat floor panel slidably inserted into said container and resting on said horizontal flanges.

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