

(12) **UK Patent**

(19) **GB**

(11) **2571908**

(13) **B**

(45) Date of B Publication

11.03.2020

(54) Title of the Invention: **Storage containers**

(51) INT CL: **B65D 6/06** (2006.01) **A45C 9/00** (2006.01) **A47C 13/00** (2006.01) **B25H 3/02** (2006.01)
B65D 5/68 (2006.01) **B65D 81/36** (2006.01)

(21) Application No: **1801221.1**

(22) Date of Filing: **25.01.2018**

(43) Date of A Publication: **18.09.2019**

(72) Inventor(s):
Leon Brown

(73) Proprietor(s):
Leon Brown
11 Medway Court, 140 Selhurst Road, London,
SE25 6NA, United Kingdom

(56) Documents Cited:
US 4744613 A **US 4550828 A**

(74) Agent and/or Address for Service:
Agile IP LLP
Airport House, Purley Way, Croydon, Surrey,
CR0 0XZ, United Kingdom

(58) Field of Search:
As for published application 2571908 A viz:
INT CL **A01K, A45C, A47B, A47C, B25H, B65D**
Other: **EPODOC, WPI, Patent Fulltext**
updated as appropriate

Additional Fields
Other: **None**

GB 2571908 B

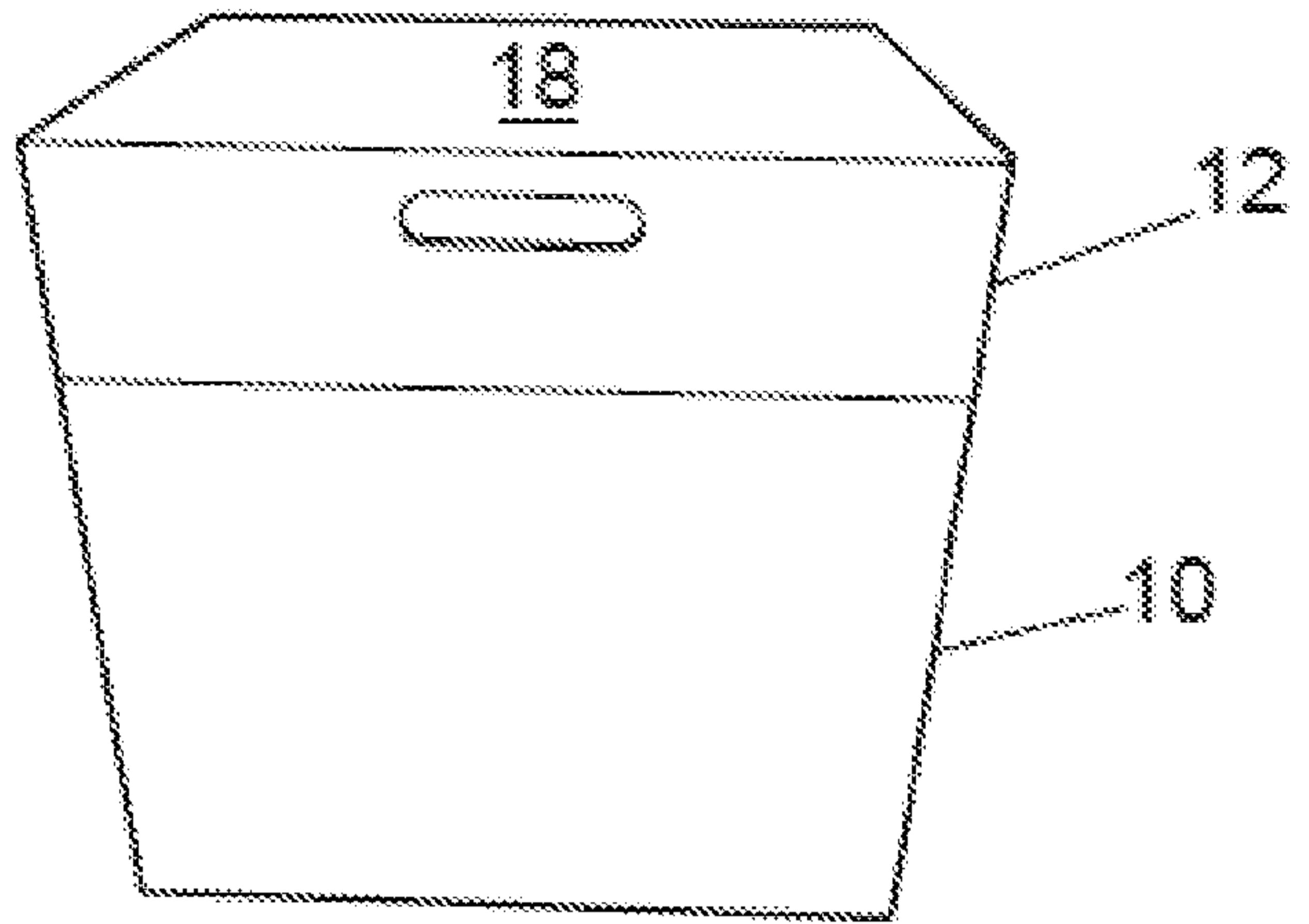


Fig. 1

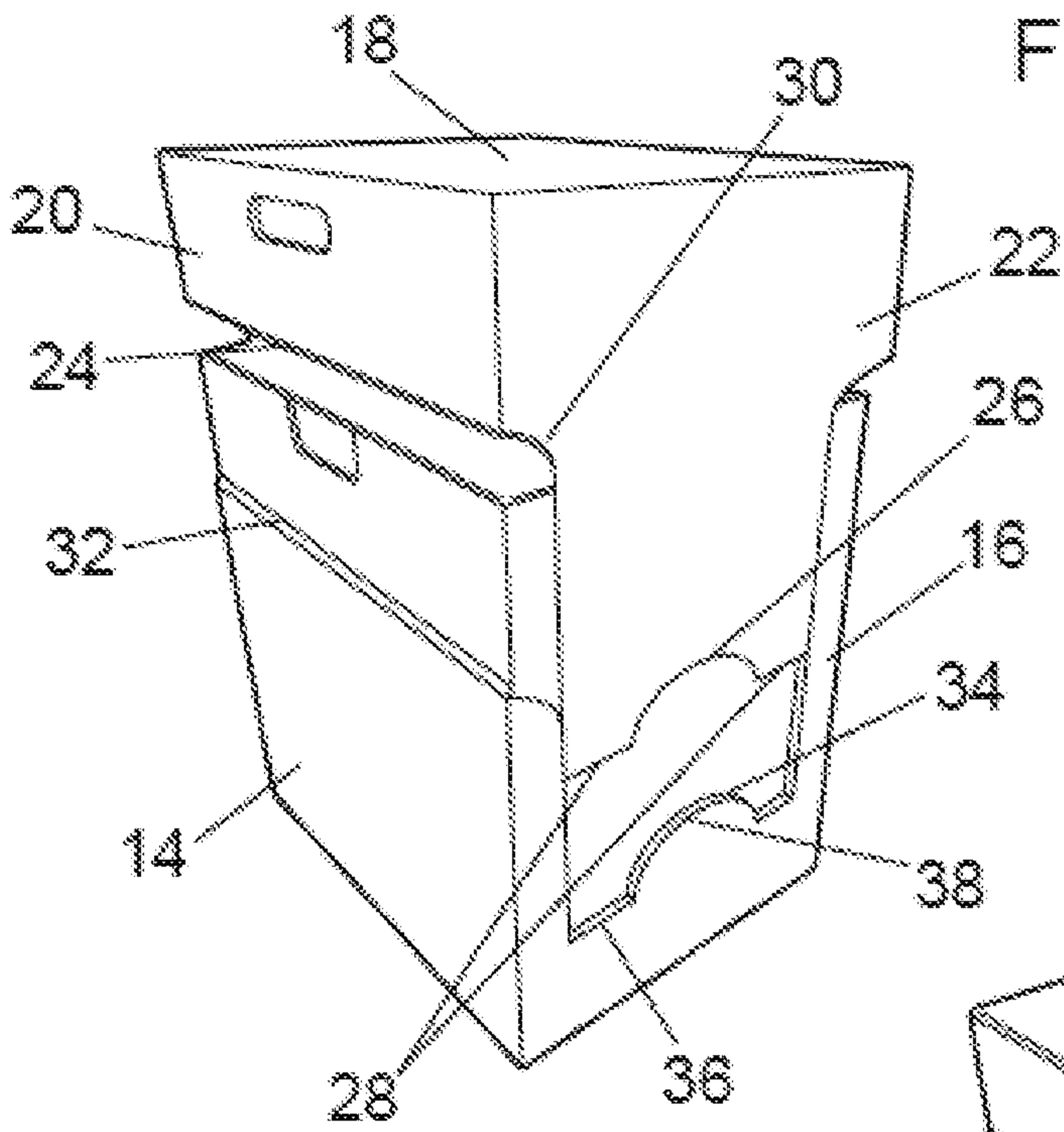


Fig. 2

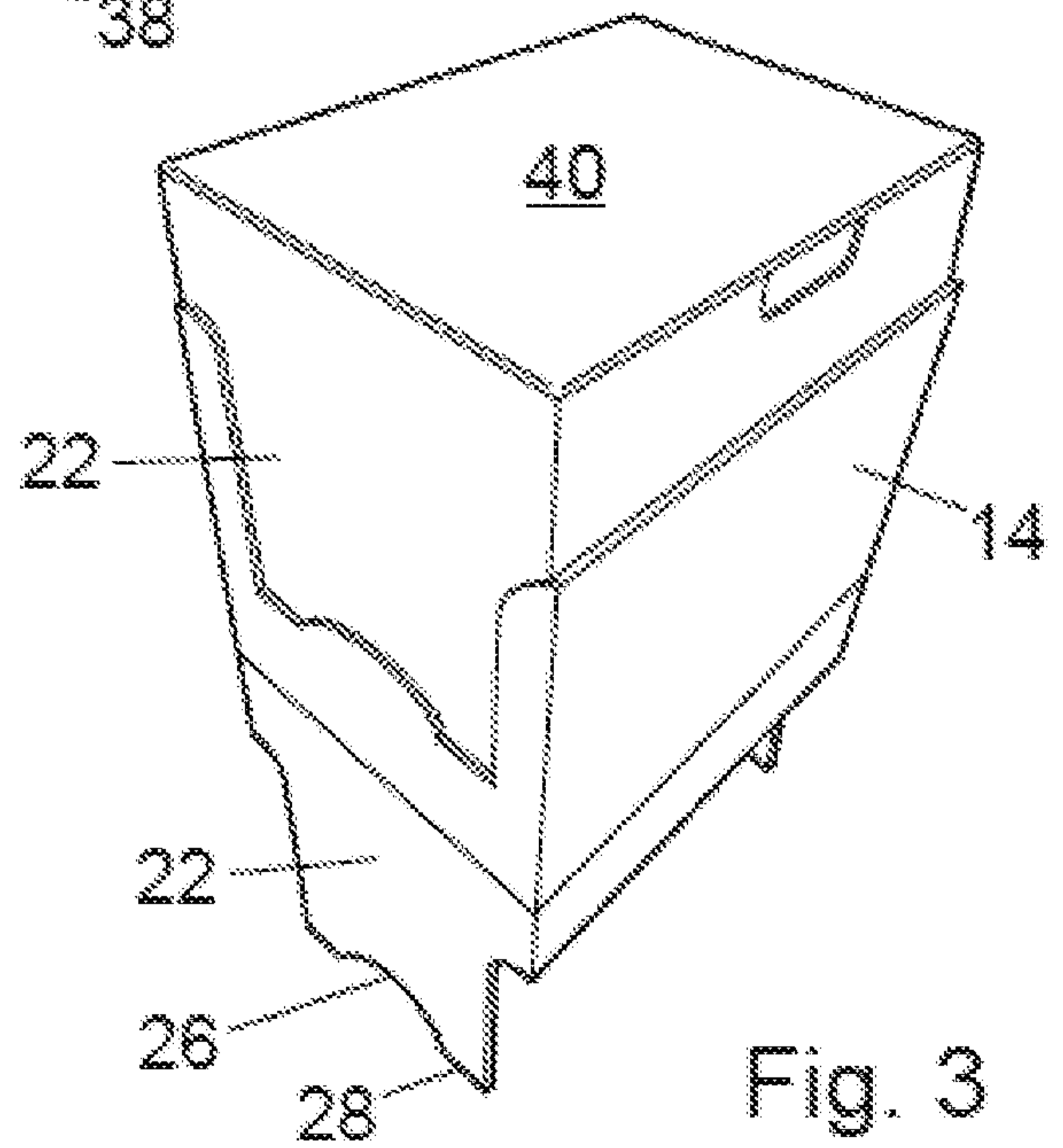


Fig. 3

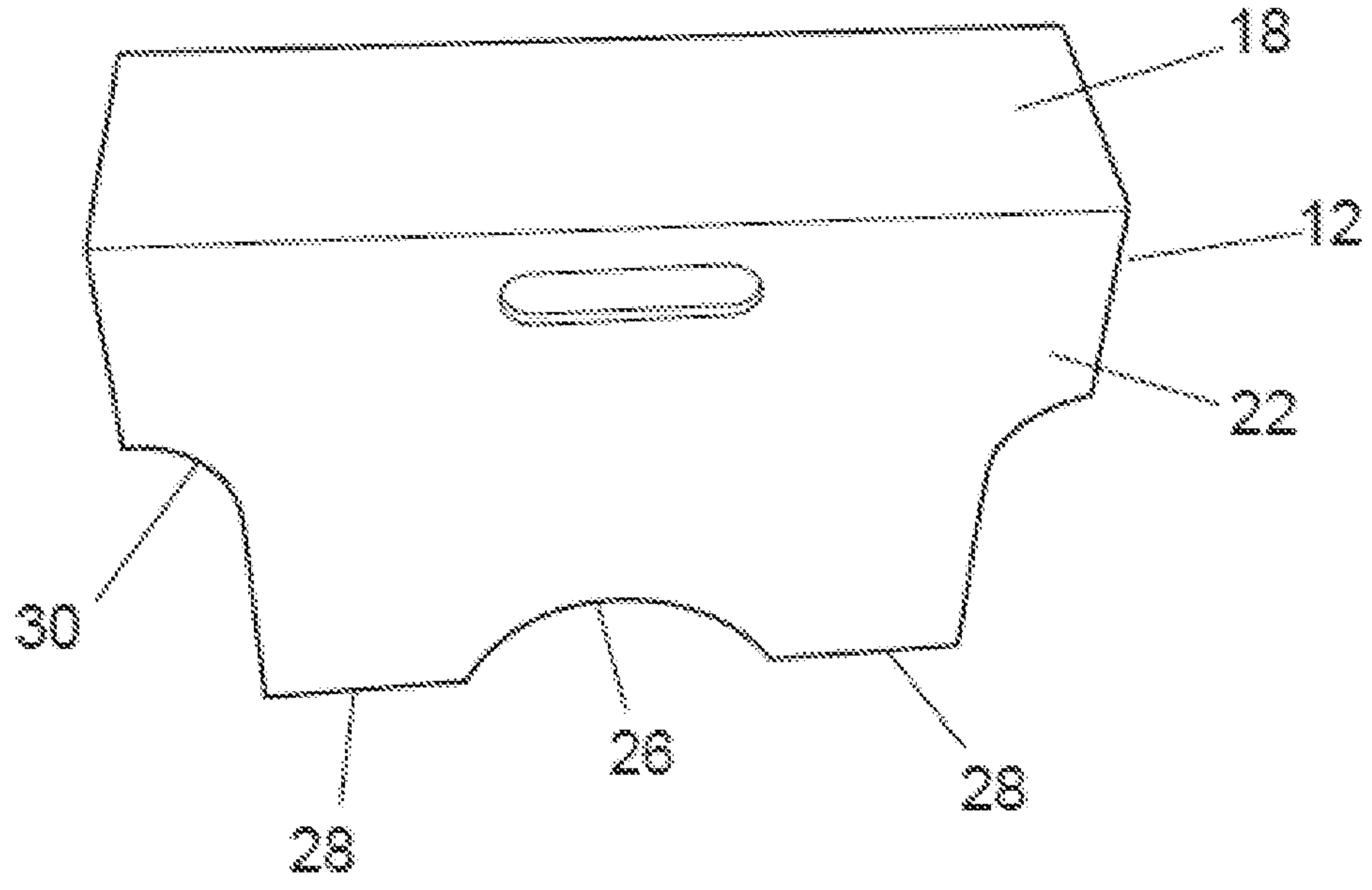


Fig. 4

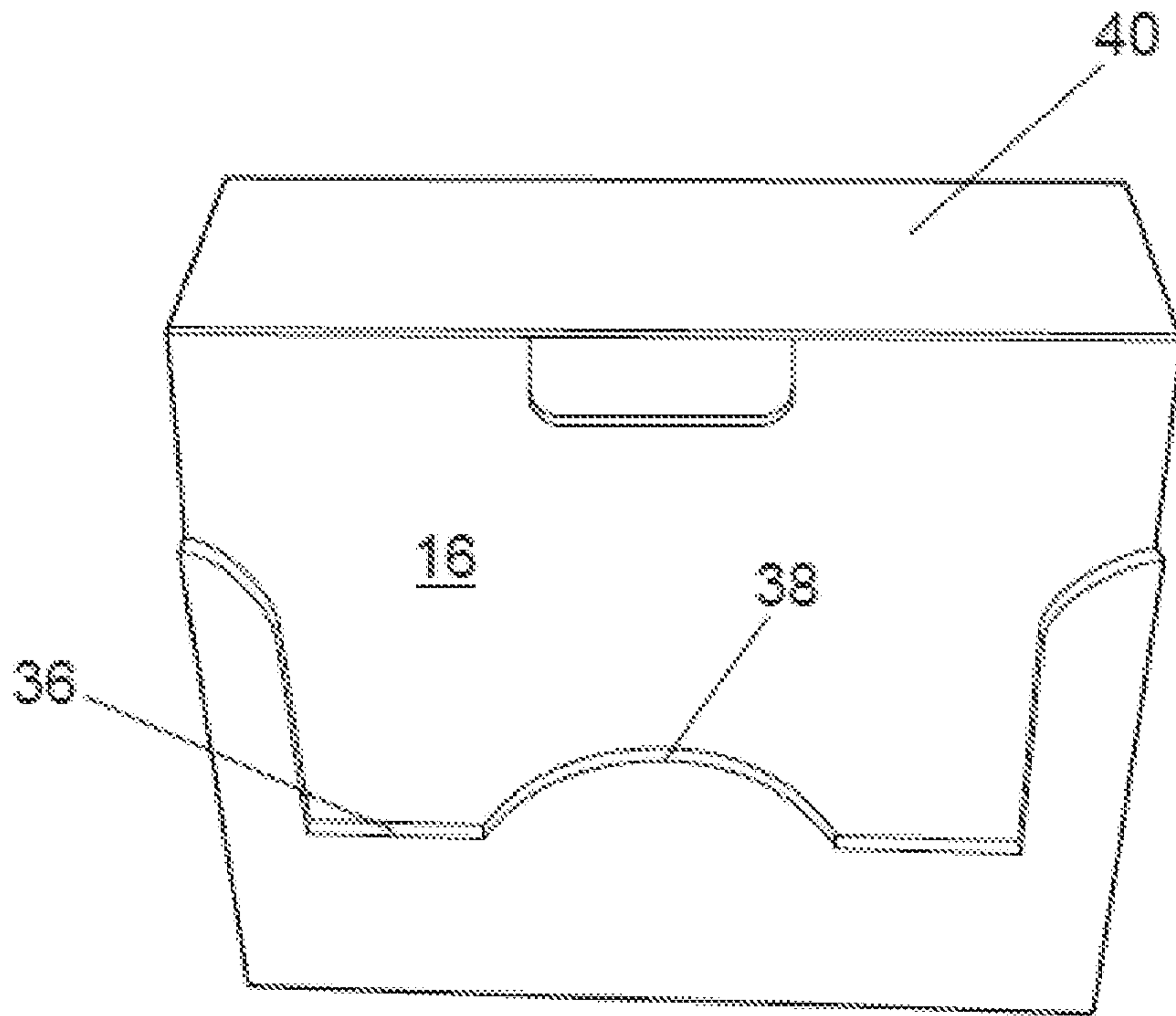


Fig. 5

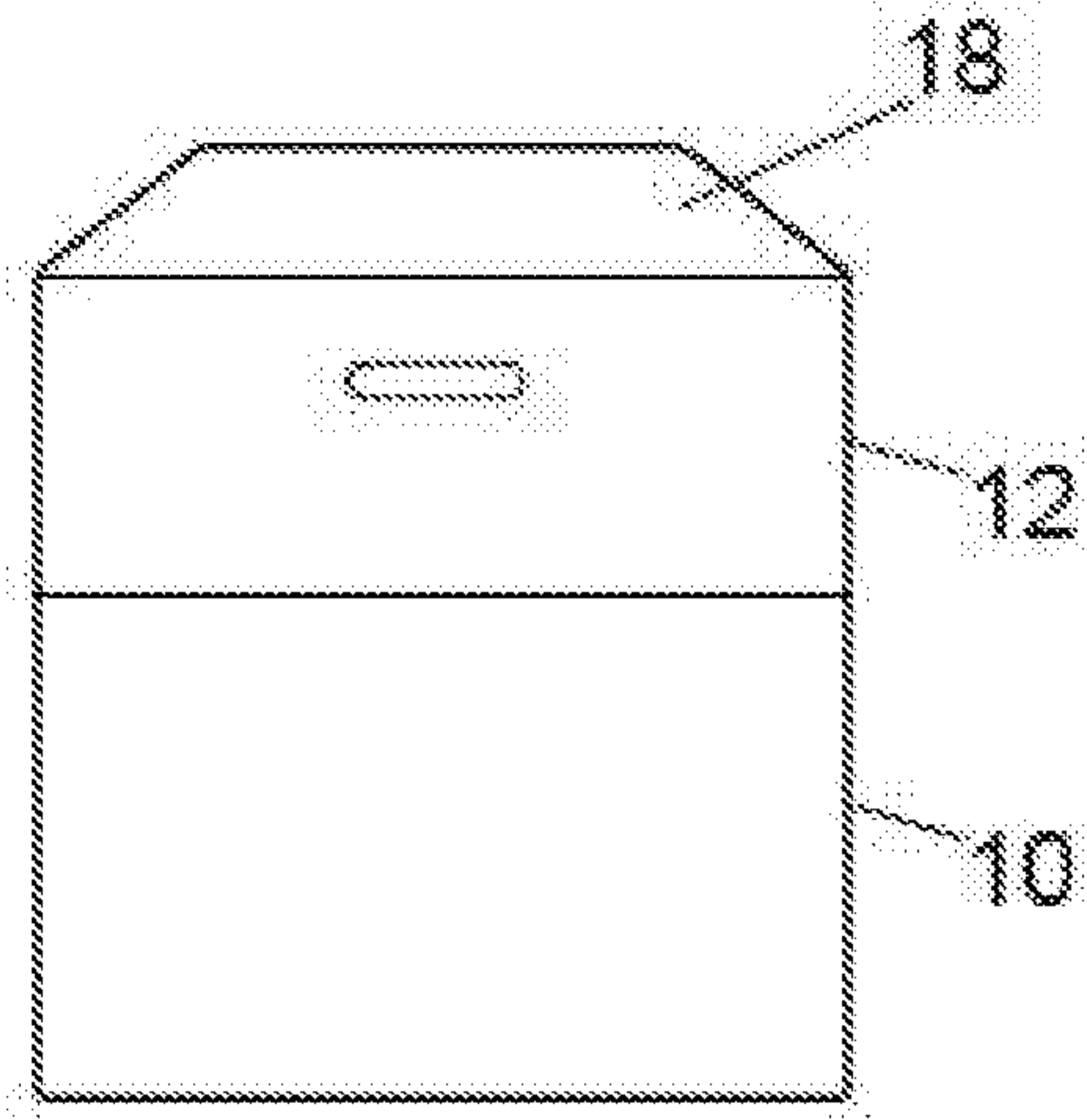


Fig. 6

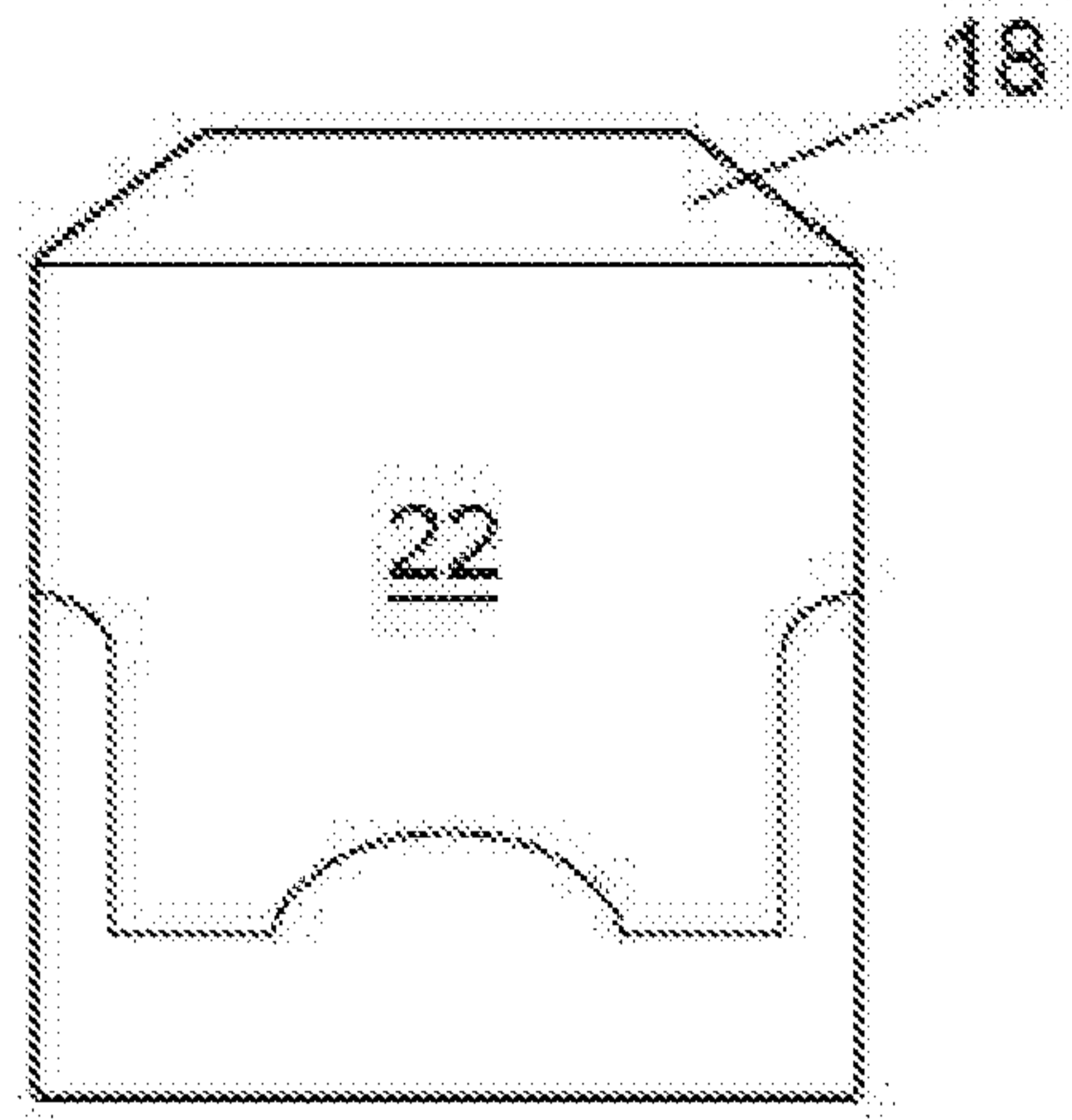


Fig. 7

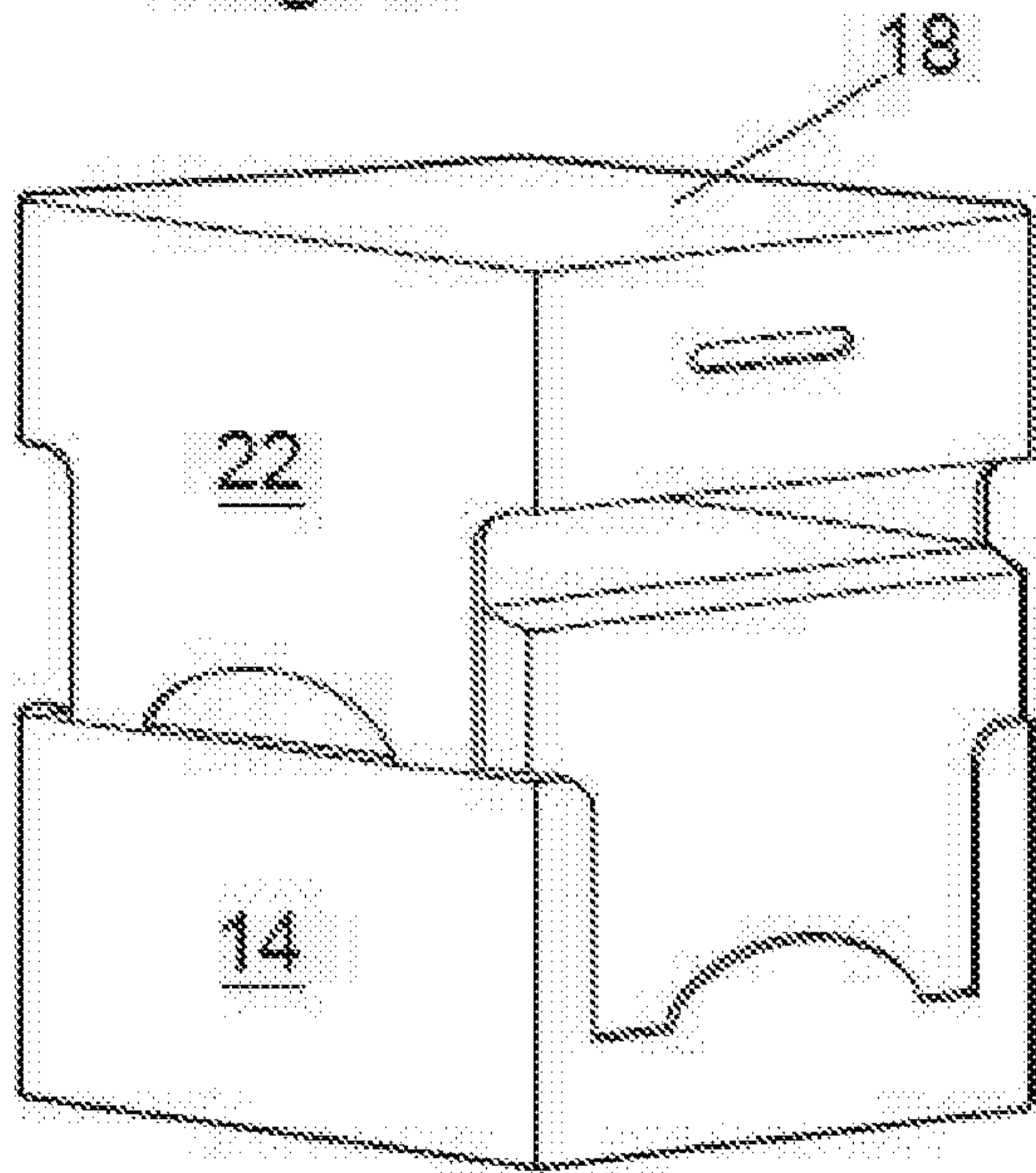


Fig. 8

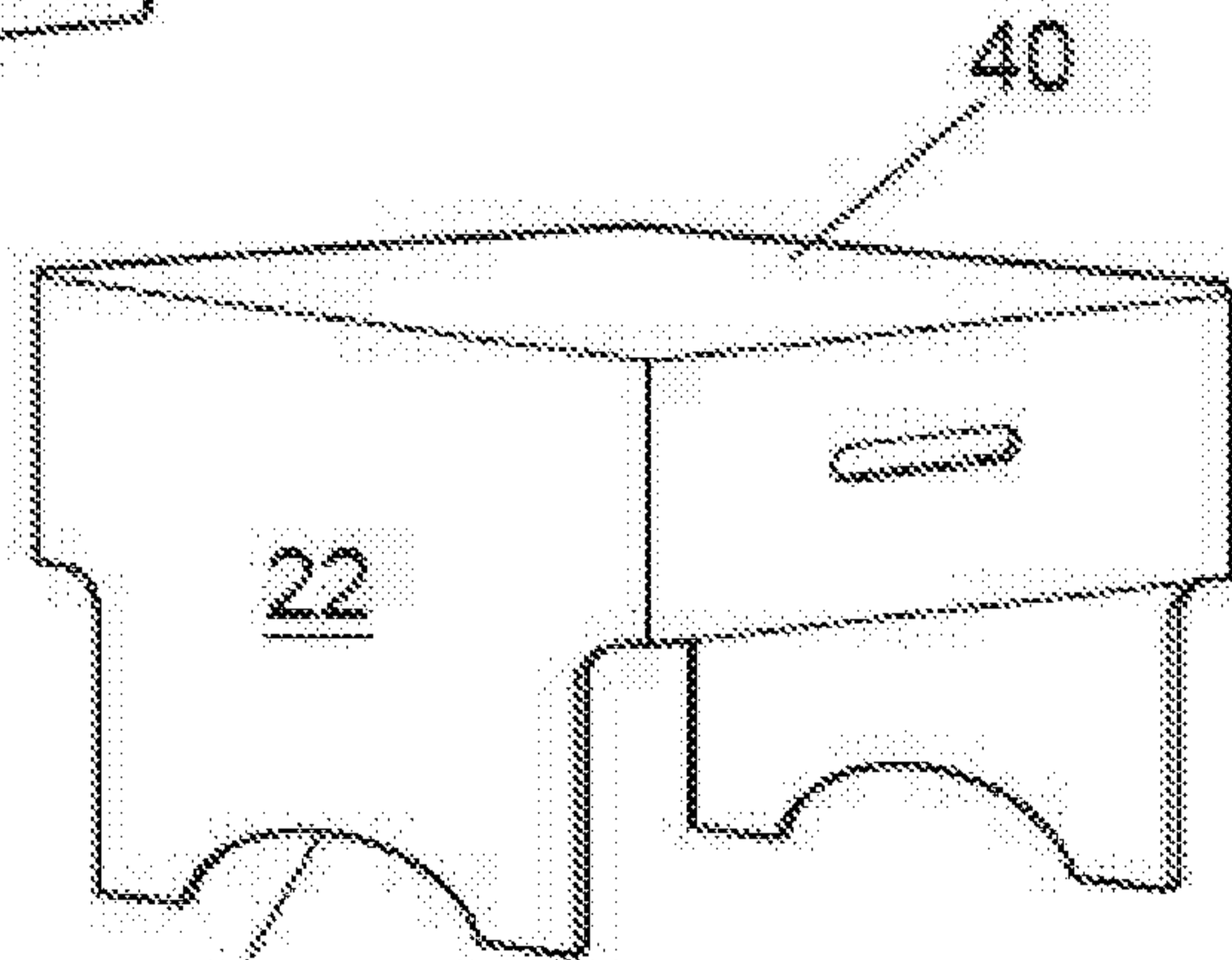


Fig. 9

STORAGE CONTAINERS**Field of the Invention**

This invention relates to storage boxes. More especially the invention relates to a storage box having a lid, the box and the lid being shaped and dimensioned to provide selectively in addition to a storage facility, one or more work surfaces, a stool and/or a stand for supporting the storage box or other objects.

10

Background to the invention

My earlier patent GB2319015 discloses a combined box and support stand/lid. The lid includes legs which are housed within discrete internal sections of the box when the lid is positioned to close the box and which when the lid is removed from the box define the legs of a support stand whose surface is the box lid. Whereas this combined box and support stand/lid has proved to be successful, in use the discrete internal sections reduce the internal volume of the box and the height of the stand remains fixed at one level.

15
20

The present invention provides an improved combined box and support stand/lid to that disclosed in my earlier patent. In particular, storage boxes in accordance with the present invention have the added advantages that the lid is designed to be a stool when removed from the box and that the combined height of the lid and box when assembled can be set at one of several different levels.

25

31 10 19

Summary of the Invention

In a first aspect, the invention provides a box having a cover, a base and a sidewall upstanding from the base and including two opposed pairs of side faces, the cover comprising an upper surface bordered by two opposed pairs of downwardly projecting side members, the length of the side members of one pair being less than that of the side members of the other pair, a ledge formed in each side face of the box with the ledges of one opposed pair located at a first distance below the lid and the ledges of the other pair located at a lesser distance below the lid, the arrangement being such that when removed from the box the cover can be employed as a stool or support surface with the lower edges of said other pair of downwardly projecting side faces defining ground engaging feet for the stool or support surface.

The box may be of circular, ovoid, square, rectangular or like cross-section.

The box cover may comprise a single lid which extends over substantially the entire upper surface of the box.

The lower edge of each of said other pair of downwardly projecting side members is preferably formed with two outer generally horizontal ground engaging sections which border a raised non-ground engaging central section.

Each raised non-ground engaging central section is preferably curvilinear. The central section may alternatively be other than curvilinear.

The box may include a generally flat lid which locates on the open top of the box and below the cover. The flat lid maybe attached to the box by one or more hinges.

5 In a preferred embodiment the box has four side walls on which the lid can be supported, opposed pairs of side walls being of equal or different length. Thus, in this arrangement the box could be either square or rectangular in cross section.

10 In an alternative embodiment, the box is of circular or oval construction.

In another arrangement, the box has more than four side walls; thus in cross section the box could, for example, be octagonal.

15
Wheels may be secured to the underside of the base to enable the box to be more easily transported from one location to another location. Additionally or alternatively one or more handles may be secured to one or more sides of the box to assist transport
20 of the box. If provided, the or each handle may be extendable.

In a still further embodiment, the box may form part of a trailer connectable to a vehicle for transport between different locations.

25

The or each side wall and/or lid may be produced from a relatively rigid material such as wood, plastics or metal.

Brief Description of the Drawings

The invention will now be described by way of example only with reference to the accompanying diagrammatic drawings in which:-

5 Figure 1 is an isometric view of a first box in accordance with the invention;

Figure 2 is an isometric view of the box illustrated in Figure 1 with the box cover partially removed;

10

Figure 3 is an isometric view of the illustrated box with its cover acting as a support;

15

Figures 4 and 5 are isometric views of separate parts of the illustrated box when used as a stool and as a work top;

Figure 6 is an isometric view from the front of a second box in accordance with the invention;

20 Figure 7 is an isometric view from one side of the box illustrated in Figure 7;

Figure 8 is an isometric view of the box illustrated in Figures 7 and 8 with its cover in an elevated position; and

25

Figure 9 is an isometric view of the upper section of the box illustrated in Figure 8 separated from the box lower section when used as a stool and as a work top.

5 Detailed Description of the Invention

The box illustrated in Figures 1 to 5 comprises an open-topped trunk section 10 closable by a cover 12. The trunk section 10 of the box is of rectangular cross-section and comprises opposed pairs of side walls 14 and 16 and a base (not shown).

10

The cover has a generally horizontal upper surface 18 bordered by downwardly extended sides 20 and 22. The sides 20 extend downwardly from opposite sides of the lid and are each of a length which corresponds to approximately one third of the height of the trunk section 10. The lower edge 24 of each side 20 is generally horizontal and extends across the full width of the respective side 20.

15

20

The length of each of the sides 22 is the same and equates to approximately two thirds of the height of the trunk. The lower edge 25 of each side 22 comprises a curvilinear central section 26 bordered by two generally horizontal sections 28.

25

Thus, the side walls 14 are mirror images of one other and, likewise, the side walls 16 are also mirror images of one another.

The quoted lengths are given simply by way of example and it is to be understood that other lengths may be adopted. Indeed, the

only criteria, is that the lengths of the sides 20 and 22 are different.

Below the level of the sides 20, the width of each side 22 is reduced, a curvilinear corner 30 being provided at each such width reduction.

The side walls 14 of the trunk section 10 each include a generally horizontal ledge 32 whose width and length equate to those of the edges of the sides 20 of the cover 12. Similarly, each side wall 16 includes a ledge 34 including sides 36 and central section 38 whose width, length and shape complement those of the width, length and shape of the lower edges of the sides 22 of the cover 12.

The box may be produced from any suitable material, these including wood, hardboard, metal, plastics or a similar relatively rigid or semi-rigid material. Thus, the box can be assembled from separate pieces of material by well-known joining procedures, or could be cast from plastics or metal as a single piece or as separate pieces for subsequent assembly.

The box is shown in its fully closed configuration in Figure 1 and in its partially or fully open positions in Figures 2 and 3.

As will be seen from Figure 3, the open upper surface of the box maybe closed by a second removable lid 40 which, in a preferred

embodiment, comprises a suitably dimensioned sheet which rests on a ledge formed around the rim of the box upper surface.

In use, the box can act simply as a container for, for example, carrying work tools from one location to another, access to the box interior being simply achieved by removing the cover 12 and, if in place, the second lid 40. If required, the box can also serve as a work surface by replacing the cover 12. The height of this work surface is simply the height of the box.

10

Additionally or alternatively, as shown in Figure 4, the cover 12 can be removed from the box and used as a stool or table, the four legs of the stool or table being defined by the generally horizontal side sections 28 of each side wall 22, with the upper surface 18 of the lid defining a seat or work surface. The floor engaging side sections 28 act in the same way as the legs of a stool or table to provide firm and stable contact with a floor surface.

As will be seen from Figure 5, with the lid 40 in place, the box can be used as a second working or support surface.

The box illustrated in Figures 6 to 9 is square in cross section rather than rectangular. Where appropriate, the same reference numerals have been adopted for this embodiment as were used for the previous embodiment.

One advantage of this second embodiment is that, as shown in Figure 8, the cover 12 can be removed from its position as shown

in Figures 6 and 7, then turned through a right angle and relocated onto the box with its generally horizontal side sections 28 located on the ridges 32. In this way the height of the box is increased to provide a work or support surface at a further different height to that illustrated in Figure 6

Whereas the illustrated boxes are described as being of rectangular or square section, the invention applies equally to boxes of circular or multi sided cross section.

10

It will be appreciated that the foregoing is merely exemplary of boxes in accordance with the invention and that modifications can readily be made thereto without departing from the true scope of the invention as set out in the appended claims.

31 10 19

15

Thus, wheels may be attached to the box to assist movement between different locations. Also, a handle may be secured to one or more sides of the box for ease of transportation. Such a handle may be extendable. In this way the box could be used instead of a conventional suitcase when travelling with the added advantage that the cover 12 can be removed and employed as a stool and the lid 40 employed as a table or work surface when, for example, a delay occurs at, say, an airport.

20

25

The box could also include road wheels and act as a vehicle trailer.

CLAIMS

1. A box having a cover, a base and a sidewall upstanding from the base and including two opposed pairs of side faces, the cover comprising an upper surface bordered by two opposed pairs of downwardly projecting side members, the length of the side members of one pair being less than that of the side members of the other pair, a ledge formed in each side face of the box with the ledges of one opposed pair located at a first distance below the lid and the ledges of the other pair located at a lesser distance below the lid, the arrangement being such that when removed from the box the cover can be employed as a stool or support surface with the lower edges of said other pair of downwardly projecting side faces defining ground engaging feet for the stool or support surface.
2. A box as claimed in claim 1 of circular, ovoid, square or rectangular cross-section.
3. A box as claimed in claim 1 or claim 2 wherein the box includes a lid which is positioned below the cover and extends over substantially the entire upper surface of the box.
4. A box as claimed in claim 3 wherein the lid is attached to the box by one or more hinges.

31 10 19

5

10

15

20

25

4

- 5 A box as claimed in any one of the preceding claims wherein
the lower edge of each of said other pair of downwardly
projecting side members is formed with two outer generally
horizontal ground engaging sections which border a raised
5 non-ground engaging central section.
- 6 A box as claimed in claim 5 wherein each raised non-ground
engaging central section is curvilinear.
- 10 7. A box as claimed in any one of the preceding claims which
is produced from a relatively rigid material such as wood,
plastics or metal.