

- [54] **CARTON WITH TWO COVERS**
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[51] Int. Cl..... **B65d 5/72**

[58] Field of Search..... **206/45.31, 44 R; 46/11, 46/13; 229/17 R, 38**

[56] **References Cited**

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Attorney, Agent, or Firm—Woodhams, Blanchard and Flynn

[57] **ABSTRACT**

A carton with two covers including a bottom plate provided with a pair of cover plates connected respectively to each side-end thereof through the intermediate of an outer side-plate, said cover plates having a width slightly wider than a half of the width of a top plate so that they cooperate with by each other to close or open, as required, the emptying passage defined on the top plate by being inserted inwardly through a gap defined between the top plate and the inner side-plate.

6 Claims, 9 Drawing Figures

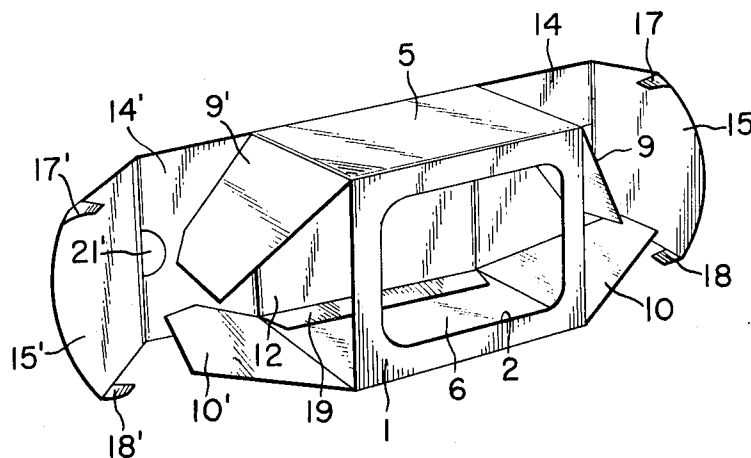


FIG. 1

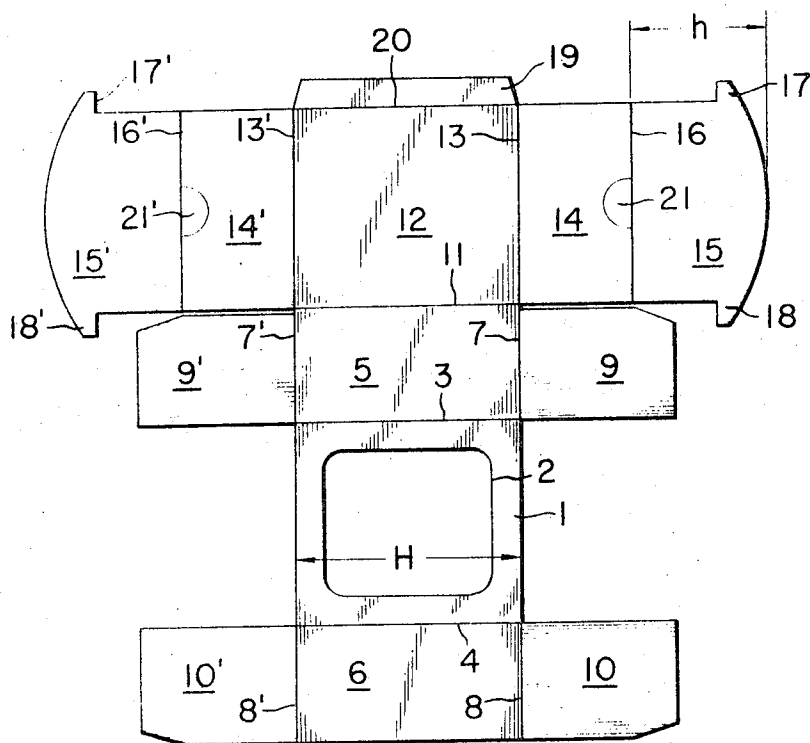


FIG. 2

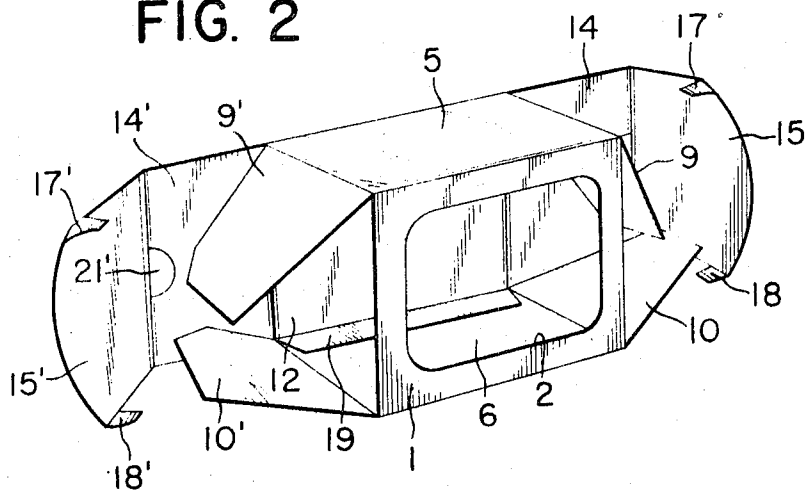


FIG. 3

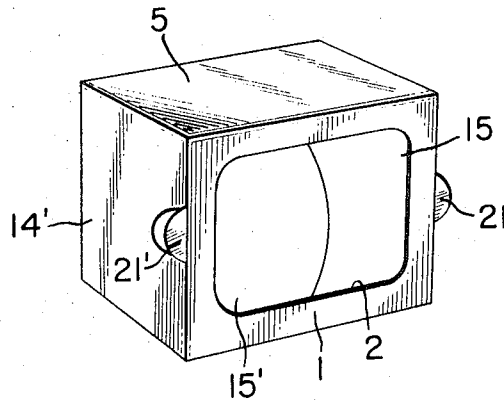


FIG. 4

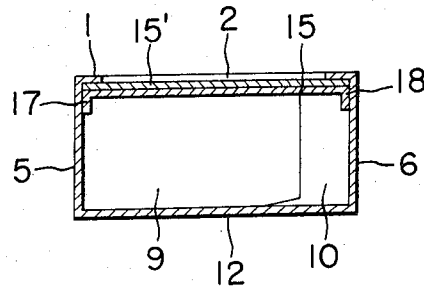


FIG. 5

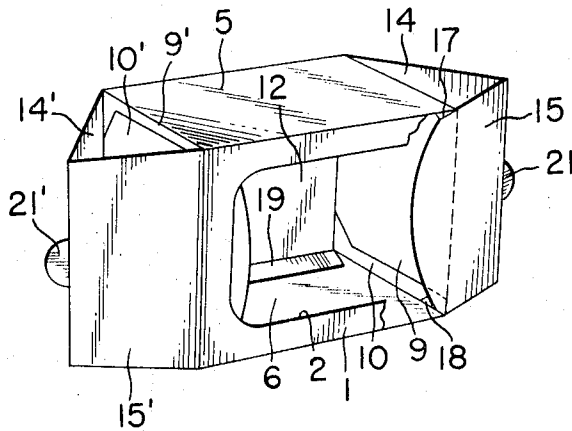


FIG. 6

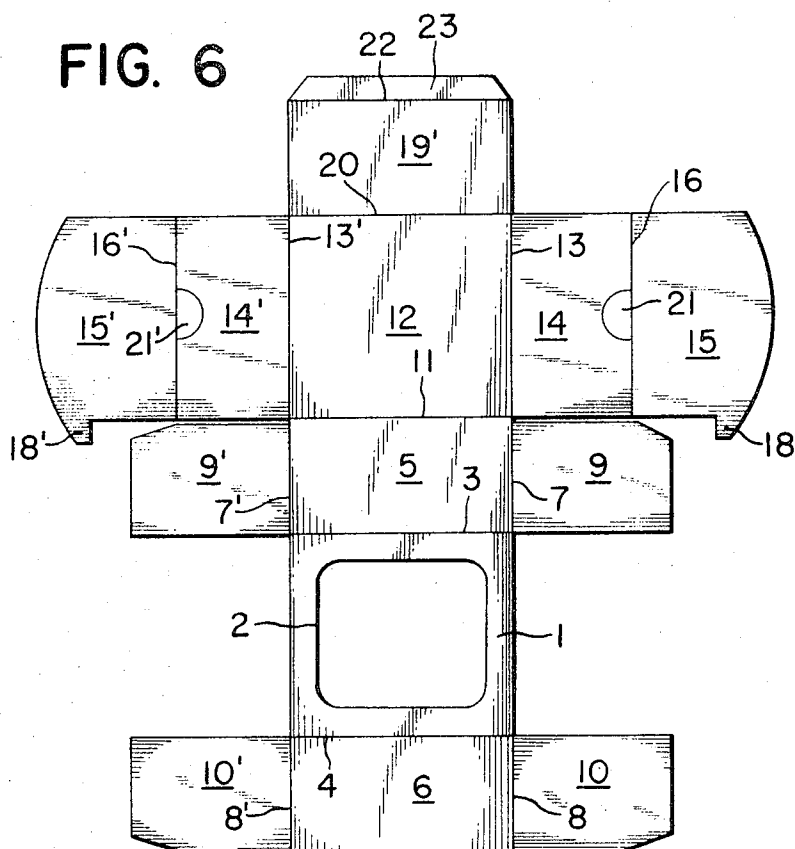


FIG. 7

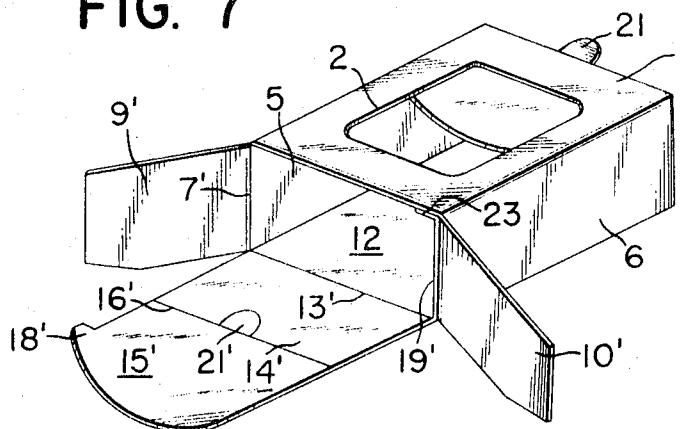


FIG. 8

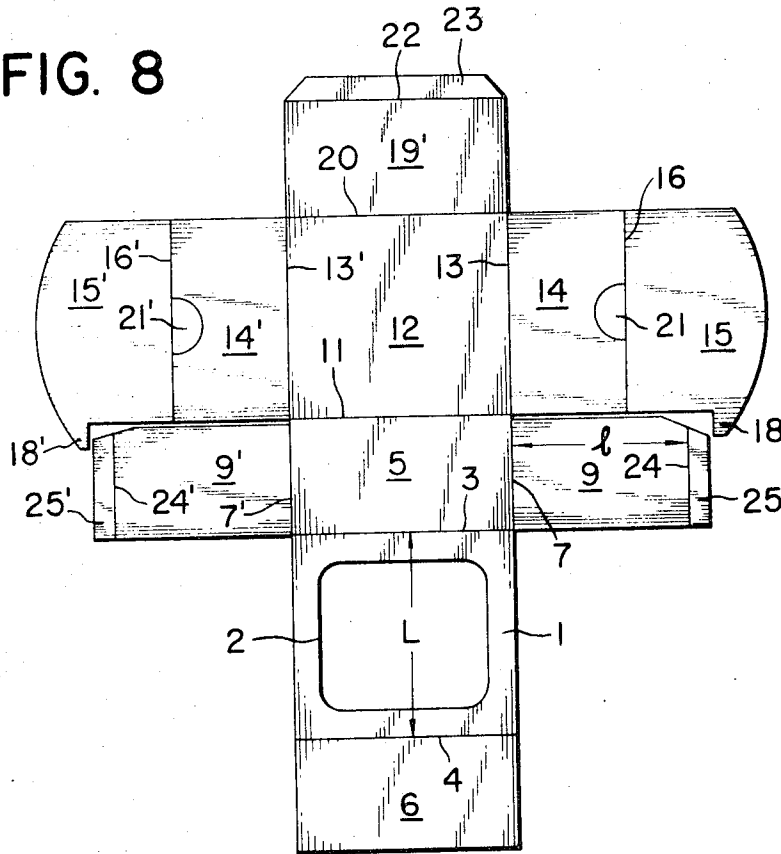
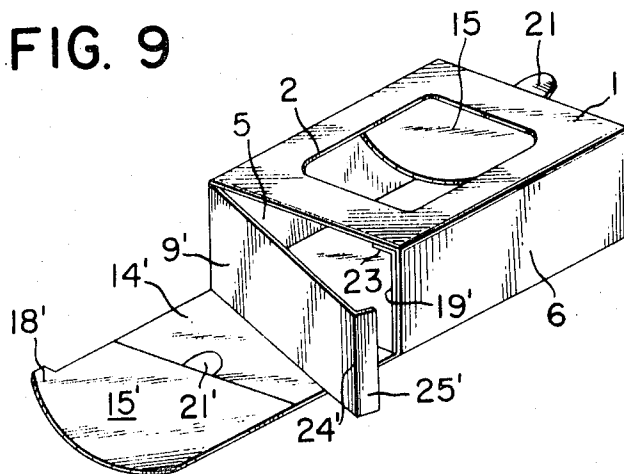


FIG. 9



CARTON WITH TWO COVERS

BACKGROUND OF THE INVENTION

The present invention relates to a carton with two covers made of cardboard or synthetic resin plate.

An object of the present invention is to provide a carton with two covers that is capable of being transported in a folded condition with a very small bulk thereof and being constructed into a carton at any place desired where articles are packed therein, and that is accordingly very convenient both for transportation and storage.

Another object of the present invention is to provide a carton with two covers that can restrain the packed articles from getting out so easily therefrom, since a pair of cover plates, which have the width slightly larger than a half of that of the top plate, serve to close the emptying passage defined on the top plate when they are inserted from each side of the carton just under the top plate.

A further object of the present invention is to provide a carton with two covers which can arouse interest of the user in looking at the marked figures every time when the cover plates open the emptying passage, provided that the contained articles are wrapped up with a packing paper marked with figures of the article to be packed, as the emptying passage can be opened easily by drawing said two cover plates outwardly so as to see the packed articles, and which, in the meantime, is very suitable for carrying thereof over to any place or locating thereof on the table, etc.

A still further object of the present invention is to provide a carton with two covers suitable for use in packing food for children, or suitable for use in an advertising campaign since the entire carton can be utilized as a box for use in a picture-story show by positioning thereof fixedly on a table, etc., so as to let the top plate face to the front after having drawn out two cover plates to the outside, in case the content of the carton is expended out.

A still further object of the present invention is to provide a carton having a pair of cover plates capable of being drawn outwardly by means of pick lips defined on the crease line portions, through which each of said cover plates is connected to the outer side-plate.

Now, it should be noted that, in descriptions given hereinbefore and hereinafter, certain terminology is used for convenience in referring to the drawings only. Said terminology includes the words specifically mentioned below.

The words "width" and "depth" refer respectively to the lateral breadth of the plate, i.e., the length spanning from left side end to right side end of the plate, and the longitudinal breadth of the plate, i.e., the length spanning from front side end to rear side end of the plate, as shown in FIGS. 1, 6 and 8, and they do not necessarily mean the width and depth of a completed carton.

The words "inwardly" and "outwardly" refer to the directions of movement of the cover plates and the pick lips toward and away from the inside of a completed carton.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a spread-out plan view of the first preferred embodiment of the present invention,

FIG. 2 is a perspective view of the preferred embodiment shown in FIG. 1 intentionally taken for the purpose to illustrate a way of construction thereof;

FIG. 3 is a perspective view showing a carton completed as a preferred embodiment shown in FIG. 1,

FIG. 4 is a sectional side view of said embodiment taken along a center line running in the longitudinal direction of said embodiment when it is placed having the top plate thereof faced upwardly and the front plate thereof faced leftwardly,

FIG. 5 is a perspective view of said preferred embodiment showing the cover plates having been drawn outwardly and the top plate partially cut off,

FIG. 6 is a spread-out plan view of the second preferred embodiment of the present invention,

FIG. 7 is a perspective view of the second preferred embodiment shown in FIG. 6 intentionally illustrating a way of construction thereof;

FIG. 8 is a spread-out plan view of the third preferred embodiment of the present invention,

FIG. 9 is a perspective view of the preferred embodiment shown in FIG. 8 intentionally illustrating a way of construction thereof.

DETAILED DESCRIPTION OF THE INVENTION

With regard to the first preferred embodiment of the present invention, the elucidation will be given hereinunder referring to FIGS. 1 through 5, wherein the reference numeral 1 denotes a top plate, on which an emptying passage 2 is defined. Along the front and back side-end thereof, said top plate 1 is connected with a front plate 5 and a back plate 6 respectively through the intermediate of a crease line 3 and a crease line 4.

A pair of inner side-plates 9 and 9' are connected respectively to said front plate on both sides thereof through the intermediate of a crease line 7 and 7' defined along each side-end of the front plate, while another pair of inner side-plates 10 and 10' are connected respectively to the back plate on both sides thereof through the intermediate of a crease line 8 and 8' defined along each side-end of the back plate.

Further, a bottom plate 12 is connected to said front plate 5 through the intermediate of a crease line 11 defined along a side-end of the front plate opposite to the side where the crease line 3 is defined. And a stick lip 19 is connected to the bottom plate 12 through the intermediate of a crease line 20 defined along a side-end thereof opposite to the side-end where said crease line 11 is defined.

Furthermore, a pair of outer side-plate 14 and 14' are connected respectively to the bottom plate on the respective sides thereof through the intermediate of a crease line 13 and 13' defined along each side of the bottom plate 12.

A pair of cover plates 15 and 15' are connected respectively to one of said outer side-plates through the intermediate of a crease line 16 and 16' defined along a side end of thereof opposite to where the crease line 13 and 13' is defined. And then said outer side-plate 14 and 14' is cut along a semicircular arc drawn thereon with its base just corresponded with an almost central portion of the crease line 16 and 16', whereby a pick lip 21 and 21' is formed with this semicircularly-cut leaf.

As to a cover plate 15 and 15', it has the width slightly larger than a half of the width of the top plate

and is provided with a hook lip 17, 18, and 17', 18' projecting from each corner of the free end thereof.

Now, hereinafter a further elucidation will be made with regard to a way of constructing a carton with a cardboard defined in the above-mentioned pattern.

Firstly, the front plate 5, back plate 6, bottom plate 12 and stick lip 19 are bent successively at a right angle relative to the adjacent one(s) along crease lines 4, 3, 11 and 20 in order, and then said stick lip 19 is stuck to the inner side surface of the back plate 6.

Subsequently, the inner side-plates 9, 9', 10 and 10' are bent respectively along the crease lines 7, 7', 8 and 8' and thereafter the outer side-plates 14 and 14' are bent along the crease lines 13 and 13'. Then the cover plates 15 and 15' are bent along the crease lines 16 and 16' and the hook lips 17, 17', 18 and 18' are bent inwardly at last.

As the final step, each cover plate 15 and 15' is inserted inwardly through a gap defined between the side-end of the top plate 1 and the upper side-end of the inner side-plate 9, 9', 10 and 10', until the inner surface of the outer side-plate is brought into contact with the outer surface of the inner side-plate, so that both cover plates 15 and 15' serve to close the emptying passage, as seen in FIG. 3.

On this occasion, the pick lips 21 and 21' project outwardly from both sides of the top plate 1, therefore, if these pick lips are pulled outwardly, as the result each cover plate 15 and 15' is drawn outwardly so as to open thereby the emptying passage. Thus, we can see the articles being contained therein by opening the emptying passage in such a way as above-mentioned.

In this occasion the hook lips 17, 17', 18 and 18' are caught by the upper end of the inner side-plates, so that the carton becomes in such a status as seen in FIG. 5.

When the patterns of figures are marked and painted previously onto the inner surface of the bottom plate as well as the outer surfaces of the cover plates, the carton can be utilized as a box for a picture-story show by positioning thereof on the table in such a manner that the emptying passage thereof faces toward the front, after the content thereof is consumed out.

In FIGS. 6 and 7, there is seen the second preferred embodiment of the present invention which is resulted from modification of the first one.

It should be noted that, in these Figures, the portions of the second preferred embodiment which are identical with and corresponded with those of the first preferred embodiment are to be denoted by the same reference numerals, but the portions which are different therefrom are to be given different reference numerals. And a further elucidation will be given with regard to only those portions different from the first embodiment.

As apparent from FIGS. 6, distinction of the second preferred embodiment over the first one lies in that an inner back plate 19' which has the dimensions almost the same as the back plate 6 is connected to said bottom plate 12 through the intermediate of a crease line 20 and a reinforcing stock lip 23 is connected to said inner back plate 19' through the intermediate of a crease line 22, and in that one pair of the hook lips 17 and 17' are removed respectively from each cover plate 15 and 15'.

Because of such an arrangement of the carton as above-mentioned, upon construction of a carton, the

inner back plate 19' can be stuck onto the inner surface of the back plate 6 and the reinforcing stock lip 23 can be left to stay free against the inner surface of the top plate 1 as seen in FIG. 7, while one side-end of each cover plate 15 and 15' is to be inserted between the top plate and the reinforcing stock lip 23 when the emptying passage is closed.

when a carton is constructed in such a manner as abovementioned, it is possible for the reinforcing stock lip 23 to restrain the cover plates 15 and 15' from coming down by supporting one side-end portion thereof, whereby the hook lips 17 and 17' such as possessed by the first embodiment become needless.

FIGS. 8 and 9 show the third preferred embodiment of the present invention, regarding which a still further elucidation will be given hereinafter in the same way as of the second one.

As apparent from FIG. 8, distinction of the third preferred embodiment over the second one lies in that the third preferred embodiment of the present invention is provided with a pair of inner side-plates 9 and 9' having the width l just the same as the depth L of the top plate 1 and a pair of insert lips 25 and 25' connected to said inner side-plates respectively through the intermediate of a crease line 24 and 24' defined along a side thereof opposite to where the front plate 5 connected thereto, and in that it lacks another pair of inner side-plates 10 and 10'.

Such an arrangement of the third preferred embodiment as above-mentioned makes it possible for the insert lips 25 and 25' to be inserted along the inner surface of the inner back plate 18' so as to support one side-end of the cover plates 15 and 15' with the inserted portion thereof in order to restrain them from coming down, whereby the pair of hook lips 17 and 17' such as possessed by the first preferred embodiment becomes needless just the same as in the second preferred embodiment.

Although particular preferred embodiments of the present invention have been disclosed hereinabove for the purpose of elucidation, it will be understood that variations or modifications thereof which lie within the scope of the invention as defined by the appended claims are fully contemplated.

In other words, there is no objection in that all the portions are connected together for construction of a carton after each portion having been patterned individually on the separate cardboard respectively. Further, such a modification can be done freely that a remaining pair of inner side-plates may be provided with a hook lip just the same as those 17, 17', 18 and 18' provided on the cover plates 15 and 15' when any pair of inner side-plates 9, 9' and 10, 10' is omitted.

What is claimed is:

1. A carton with two covers comprising a top plate, front plate, back plate and bottom plate characterized by provision of: an emptying passage defined in said top plate; a pair of inner side-plates being connected to said front plate respectively through the intermediate of a crease line defined along each side-end of the front plate; a pair of outer side-plates being connected to said bottom plate respectively through the intermediate of a crease line defined along each side-end of the bottom plate; a pair of cover plates having a width slightly wider than a half of the width of said top plate and being connected to said outer side-plates through the intermediate of a crease line defined along a side-end

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thereof opposite to where said bottom plate is connected thereto; and a hook lip defined projectedly on a corner of the free end portion of said cover plate adjacent to said inner side-plate, said carton being constructed by means of bending said inner side-plates and outer side-plates in order along each of said crease lines, bending said back plate, top plate, front plate and bottom plate at a right angle relative to adjacent plates, then further bending said cover plates with a hook lip having been bent inwardly along a crease line defined between the cover plate and the outer side-plate, and subsequently inserting said cover plates inwardly through a gap defined between the top plate and the inner side-plate.

2. A carton with two covers as defined in claim 1, wherein a pair of inner side-plates 10, 10' are connected to said back plate 6 respectively through the intermediate of a crease line defined along each side-end of the back plate and each said cover plate 15, 15' is provided with another hook lip 17, 17' defined at a corner opposite to where said hook lip 18, 18' is located.

3. A carton with two covers as defined in claim 1, wherein an inner back plate 19' is connected to said bottom plate 12 through the intermediate of a crease

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line defined along a side-end thereof opposite to where said front plate is connected thereto and a reinforce stick lip 23 is connected to said inner back plate 19' through the intermediate of a crease line defined along the foremost end thereof, said inner back plate 19' being adapted to be stuck to the back side surface of the back plate.

4. A carton with two covers as defined in claim 3, wherein said inner side-plate 9, 9', which is connected to said front plate through the intermediate of a crease line defined on both sides of the front plate, has a width *l* almost equal to the depth *L* of the top plate, and an insertion lip 25, 25' is connected to said inner side-plate through the intermediate of a crease line along the free end thereof.

5. A carton with two covers as defined in claim 3 wherein another pair of inner side plates are connected to said back plate respectively through the intermediate of a crease line defined each side-end of the back plate.

6. A carton with two covers as defined in claim 1, wherein a pair of pick lips are each provided on a crease line portion between said outer side-plate 14, 14' and cover plate 15, 15'.

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