Aug. 8, 1961 E. G. SWANSON ET AL 2,995,290

PANEL FOLDER

Filed May 28, 1957

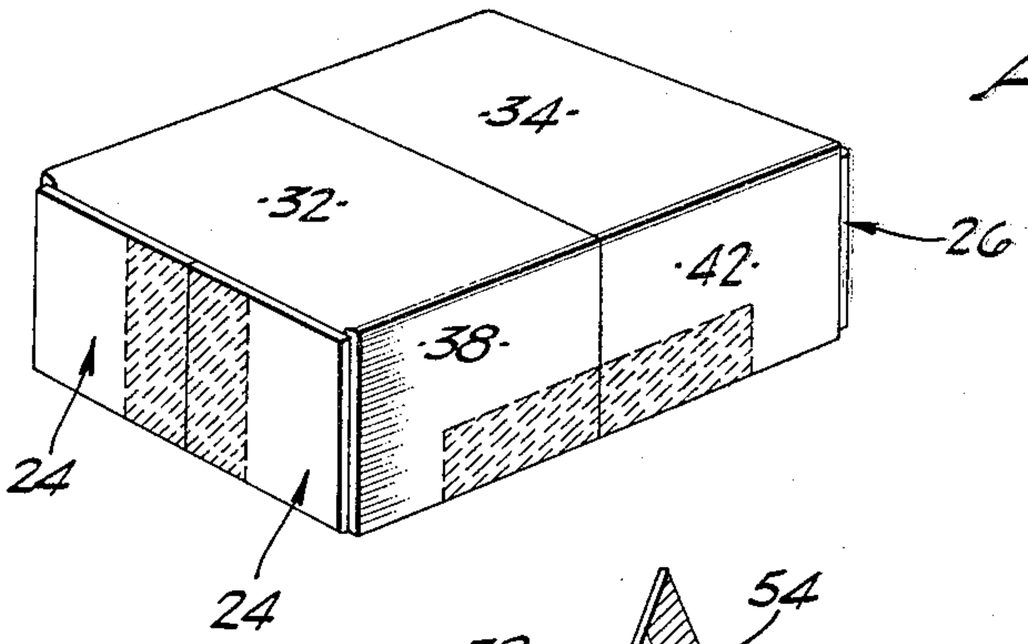

FIG. 3.

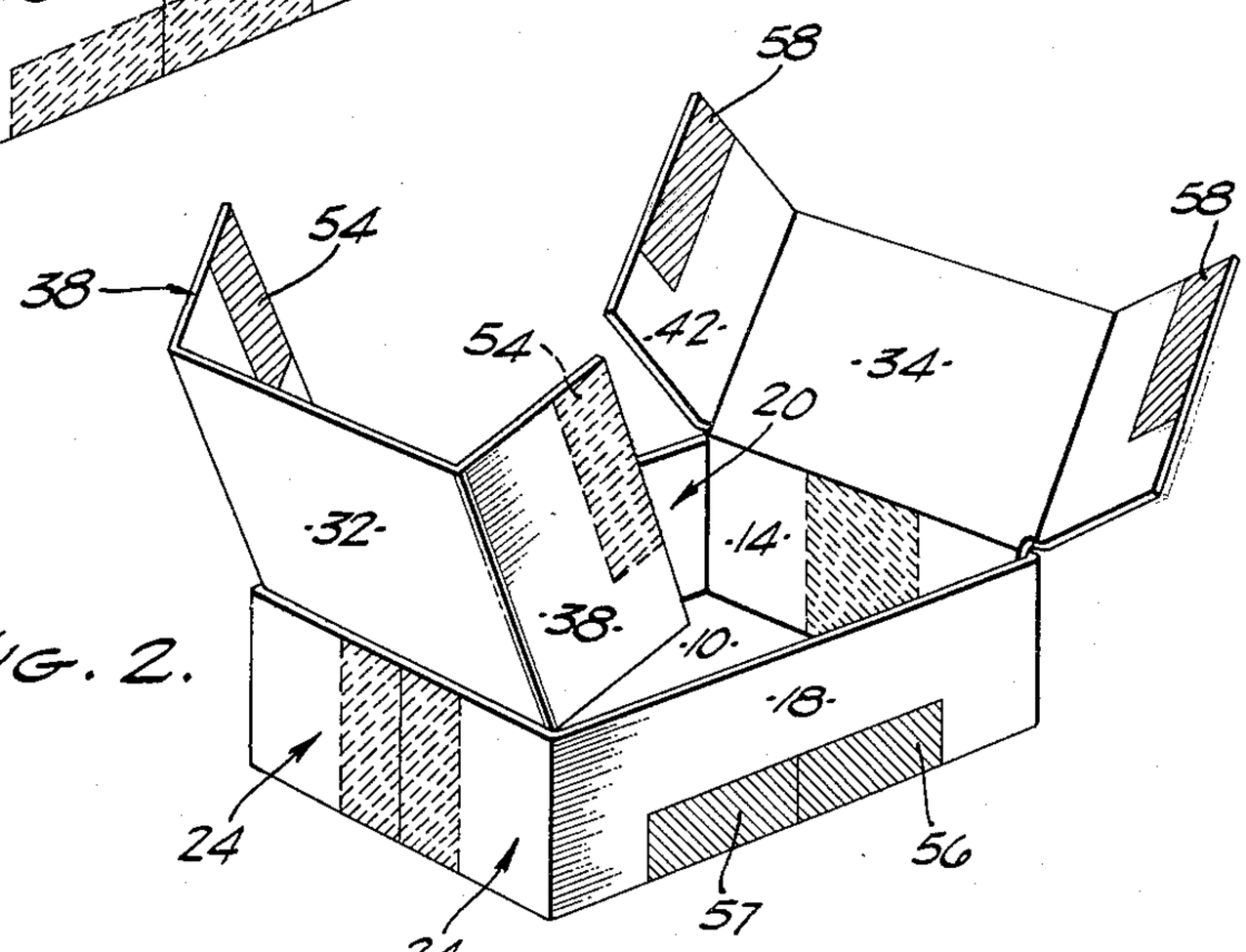

FIG. 2.

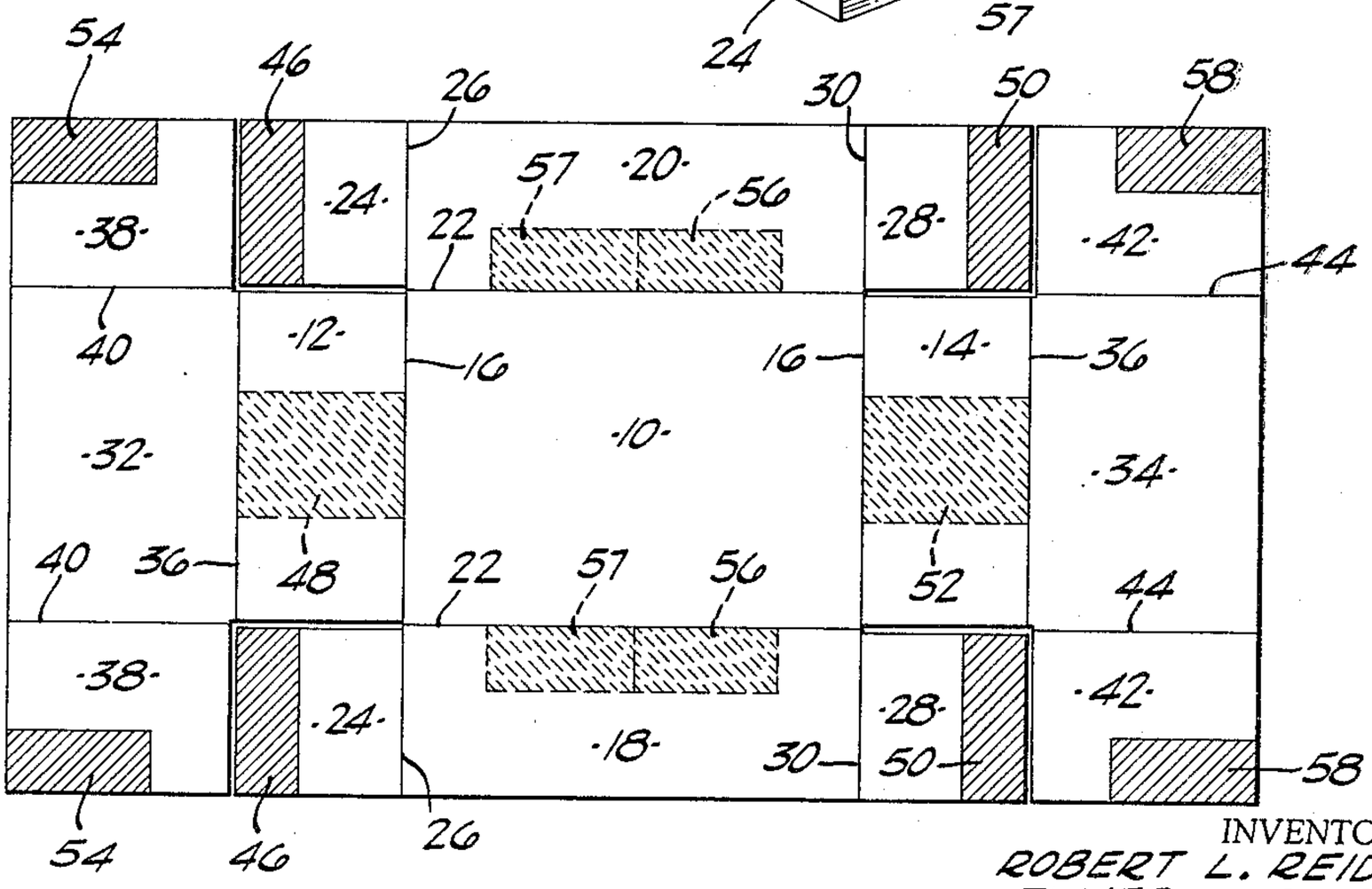

FIG. 1.

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2,995,290

Patented Aug. 8, 1961

2,995,290

PANEL FOLDER

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Filed May 28, 1957, Ser. No. 662,069

1 Claim. (Cl. 229—33)

This invention relates to folders and blanks therefor, and more particularly to a paperboard or fiberboard container known in the art of box making as a panel folder.

Panel folders may be used for a great many purposes. For example, paperboard panel folders may be used to package box lunches or for heavier duties. At any rate, several uses for panel folders require that they be set up from blanks within a minimum amount of time.

It is therefore an object of the invention to provide a panel folder which may be set up from a blank in a very short time.

In accordance with the invention, a pressure-sensitive adhesive coating is applied to several different areas on a panel folder of a particular construction. The advantages of the use of such an adhesive will thus conveniently be combined for use with a panel folder. Moreover, a specific coating arrangement is provided in accordance with the invention to prevent a panel folder from sticking to itself or from sticking to identical folders when stacked together.

The novel features which are believed to be quickest of the invention both as to its work and method of operation together with further objects and advantages thereof, will be better understood from the following description considered in connection with the accompanying drawings, made a part of this specification.

FIG. 1 is a plan view of a panel folder blank coated in accordance with the invention;

FIG. 2 is a perspective view of the panel folder of the invention partially assembled; and

FIG. 3 is a perspective view of the panel folder completely assembled.

In the drawing in FIG. 1 the panel folder of the invention is shown including a bottom panel **10**, first and second end panels **12** and **14**, respectively, hingedly connected to opposite ends of the bottom panel on a first set of score lines **16**. First and second side panels **18, 20** are hingedly connected to opposite sides of the bottom panel on a second set of score lines **22**. A first end flap **24** is provided at one end of each of the side panels, the first end flaps **24** being hingedly connected to corresponding side panels at a third set of score lines **26**. A second end flap **28** is provided at the opposite ends of each of the side panels **18, 20**, the second end flaps **26** being hingedly connected to the side panels **18, 20** at a fourth set of score lines **30**. First and second top panels **32, 34** are hingedly connected to the end panels on a fifth set of score lines **36** parallel to the first set of score lines **16**. A first pair of side flaps **38** are hingedly connected to opposite sides of the first top panel **32** at a sixth set of score lines **40**. A second pair of side flaps **42** then are hingedly connected to opposite sides of the second top panel **34** at a seventh set of score lines **44**.

A first end flap strip **46** of pressure-sensitive adhesive material is provided on the ends of each of the first end flaps **24** and a first end panel strip **48** of a pressure-sensitive adhesive coating is provided between a corresponding one of the first set of score lines **16** and a corresponding one of the fifth set of score lines **36** to underlie only the coated portions of the first end flaps **24**. The first end panel strip **48** has a width equal to twice the width of one of the first end flap strips **46**.

The first end panel strip **48** is spaced from the ends of the first end panel **12** to prevent the first end flap strips **46** from sticking thereto. The first end panel strip **48** is positioned at the symmetrical center of the first end panel **12**, the first end flap strips **46** being spaced from corresponding ones of the third set of score lines **26** a distance equal to the distance from one end of the first end panel **12** to the first end panel strip **48** to overlie exactly one half of the first end panel strip **48** and thereby effect an economical distribution of the pressure-sensitive adhesive over the first end flaps **46**.

A first side flap strip **54** is provided only in one corner of each of the first side flaps **38** spaced from the first end flap strips **46** to prevent inadvertent sticking thereto. A first area **57** is provided on each of the side panels identical to those of the first side flap strips **54** to underlie them, the first areas **57** also being coated with a pressure-sensitive adhesive material.

The panel folder blank is completely symmetrical in that a second end flap strip **50** of a pressure-sensitive adhesive material is provided on each end of each of the second end flaps **28** and a second end panel strip **52** of a pressure-sensitive adhesive is coated from a corresponding one of the first set of score lines **16** to a corersponding one of the fifth set of score lines **36** to underlie only the coated portions of the second end flaps **28**. The second end panel strip **52** has a width twice the width of one of the second end flap strips **50**. The second end panel strip **52** is then spaced from the ends of the second end panel **14** to prevent the second end flap strips **50** from sticking thereto. The second end panel strip **52** is positioned at the symmetrical center of the second end panel **14**. The second end flap strips **50** are spaced from corresponding ones of the fourth set of score lines **30** a distance equal to the distance from one end of the second end panel **14** to the second end panel strip **52** to overlie exactly one half of the second end panel strip **52** and thereby effect an economical distribution of the pressure-sensitive adhesive over the second end flaps **28**.

A second side flap strip **58** is provided only in one corner of each of the second side flaps **42** spaced from the second end flap strips **50** to prevent inadvertent sticking thereto. A second area **56** on each of the side panels **18, 20** identical to those of the second side flap strips **58** are provided to underlie them, the second areas **56** being coated with a pressure-sensitive adhesive material.

The panel folder of the invention is shown partially assembled in FIG. 2 with end panels **12** and **14** folded vertically upwardly. Similarly side panels **18** and **20** are folded vertically upwardly, whereby first end flaps **24** may be folded over end panel **12** with first end flap strips **48** overlying first end panel strip **48**. Similarly, second end flaps **26** are folded over second end panel **14**, whereby second end flap strips **50** overlie second end panel strip **52**.

As shown in FIG. 3, top panels **32** and **34** are then folded over the top of the panel folder, whereby side panels **38** may be positioned outside of, but immediately adjacent side panels **18** and **20**. Similarly, side flaps **42** are positioned adjacent a second half of the external portions of side panels **18** and **20**, respectively.

In each of these cases, corresponding adhesive coated areas on the side flaps **38** and **42** will overlie corresponding areas on each of the side panels **18** and **20**. Specifically, side flap strips **54** will overlie side panel strips **57** and side flap strips **58** will overlie side panel strips **56** to provide a completed panel folder of a sturdy construction as indicated in FIG. 3. The panel folder thus may be set up completely from the blank shown in FIG. 1 in a relatively short time.

Furthermore, the fact that end panel strips **48** and **52** are spaced from the ends of corresponding first and second end panels **12** and **14** make it impossible for any

coated areas on first and second end flaps **24** and **26** from sticking to the end panel strips **48** and **52**.

Similarly, the fact that side flap strips **54** and **58** are spaced from end flap strips **46** and **50** respectively, prevent side flaps **38** and **42** from sticking to end flaps **24** and **26** respectively.

Still further, it is to be noted that as dotted hachures are employed to indicate coatings on the opposite side of the blank shown in FIG. 1 and not visible in this view and that therefore no coatings occupy same corresponding areas on opposite sides of the blank. This means that a stack of blanks identical to the ones shown in FIG. 1 will not stick to one another when they are stacked together.

It is to be understood that although one embodiment of the invention has been shown and described, that this has been done merely for purposes of illustration and that the true scope of the invention is defined only in the appended claim.

What is claimed is:

A panel folder blank comprising: a bottom panel; first and second end panels hingedly connected to opposite ends of said bottom panel on a first set of score lines; first and second side panels hingedly connected to opposite sides of said bottom panel on a second set of score lines; a first end flap at one end of each of said side panels, said first end flaps being hingedly connected to corresponding side panels at a third set of score lines; a second end flap at the opposite end of each of said side panels, said second end flaps being hingedly connected to said side panels at a fourth set of score lines; first and second top panels hingedly connected to said end panels on a fifth set of score lines parallel to said first set of score lines; a first pair of side flaps hingedly connected to opposite sides of said first top panel at a sixth set of score lines; a second pair of side flaps hingedly connected to opposite sides of said second top panel at a seventh set of score lines; a first end flap strip of a pressure-sensitive adhesive material coated onto the ends of each of said first end flaps; a first end panel strip of a pressure-sensitive adhesive coating extending from a corresponding one of said first set of score lines to a corresponding one of said fifth set of score lines to underlie only the coated portions of said first end flaps, said first end panel strip having a width equal to twice the width of one of said first end flap strips, said first end panel strip being spaced from the ends of the first end panel to prevent said first end flap strips from sticking thereto, said first end panel strip being positioned at the symmetrical center of said first end panel, said first end flap strips being spaced from corresponding ones of said third set of score lines a distance equal to the distance from one end of said first end panel to said first end panel strip to overlie exactly one half of said first end panel strip and thereby effect an economical distribution of said pressure-sensitive adhesive over said first end flaps; a first side flap strip only in one corner of each said first pair of side flaps spaced from said first end flap strips to prevent inadvertent sticking thereto; a first area on each of said side panels identical to those of said first side flap strips to underlie them, said first areas being coated with a pressure-sensitive adhesive material; a second end flap strip of a pressure-sensitive adhesive material coated onto the end of each of said second end flaps; a second end panel strip of a pressure-sensitive adhesive coating extending from a corresponding one of said first set of score lines to a corresponding one of said fifth set of score lines to underlie only the coated portions of said second end flaps, said second end panel strip having a width equal to twice the width of one of said second end flap strips, said second end panel strip being spaced from the ends of the second end panel to prevent said second end flap strip from sticking thereto, said second end panel strip being positioned at the symmetrical center of said second end panel, said second end flap strips being spaced from corresponding ones of said fourth set of score lines a distance equal to the distance from one end of said second end panel to said second end panel strip to overlie exactly one half of said second end panel strip and thereby effect an economical distribution of said pressure-sensitive adhesive over said second end flaps; a second side flap strip only in one corner of each of said second side flaps spaced from said second end flap strips to prevent inadvertent sticking thereto; a second area on each of said side panels identical to those of said second side flap strips to underlie them, said second areas being coated with a pressure-sensitive adhesive material.

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