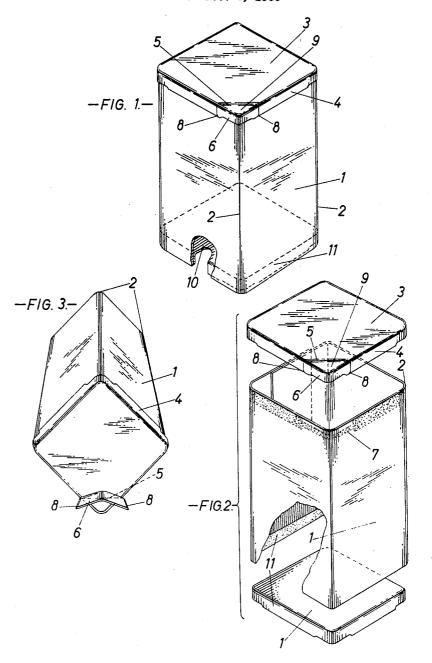
CARTONS

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3,082,926 CARTONS Edward John Everard Powell, 42 Palace Road, London SW. 2, England Filed Dec. 5, 1960, Ser. No. 73,570 5 Claims. (Cl. 229—7)

This invention relates to cartons of the kind whose bodies are of substantially flat-sided cross-section. The expression "substantially flat-sided" is used to include 10 bodies whose cross-section is triangular, square, rectangular or polygonal and also includes figures of the simpler shapes having rounded corners. When cartons of this kind are used for liquids, particularly beverages, it is essential that a suitable pouring orifice is provided which 15 will enable the contents to be discharged without contacting and running over surfaces or edges of the carton as is the case when liquid is poured from a carton or container having a pouring orifice in the lid. It is also desirable for packaging, storage and transport purposes that 20 the carton or container has no projections liable to become damaged or take up excess space.

According to the present invention the carton is provided with a closure lid having a peripheral flange which is heat sealed to the body of the carton by means of a 25 gluing strip extending throughout its length and substantially its full width except for a portion at and adjacent to one corner thereof where the heat sealing is of a reduced width and at the end of the sealing portions of reduced width, leading cuts are formed in the edge of the 30 flange of the closure lid. The top surface of the closure lid may be pre-creased along a line extending across the aforesaid corner connecting the ends of sealing or glue band of reduced width.

In order that the invention may be fully comprehended 35 and readily carried into effect the same will now be described with reference to and by the aid of the accompanying drawings, wherein:

FIGURE 1 is a perspective view partly in section of a carton constructed in accordance with the invention.

FIGURE 2 is a similar view to FIGURE 1 but showing the top and bottom closures prior to being sealed to the body.

FIGURE 3 is a perspective view of a carton showing the pouring orifice.

In a practical embodiment of the invention the carton 1 is constructed of white kraft cartridge paper laminated with thermoplastic material and is of substantially flatsided construction provided with rounded corners 2. The lid 3 of the container is of cap-fitting form having a 50 adjacent said flap. substantially flat top and annular flange 4 which is capable of being heat sealed to the carton body. In the preferred example, the lid and carton have 38" radiused corners and the lid has a flange and glue band 38" deep. The top of the lid 3 is pre-creased across one corner at 55 5 and on the flange at 6 between the ends of the crease, the glue band 7 is of reduced thickness say 1/8". At each end of this 1/8" glue band, cuts of 1/8" deep are provided in the edge of the flange to act as leading cuts for facilitating tearing through the flange when it is de- 60 sired to open the carton by raising the hinged corner piece 9 of the lid.

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The bottom closure 10 is of inserted or push in fit being heat sealed at 11 to the body of the carton.

A carton constructed in accordance with the present invention is eminently suitable for being manufactured, filled and sealed by automatic machinery and in practice, the carton is sealed with its lid 3 and then filled whilst inverted and then finally closed by the heat sealing of its bottom closure 10. In this way a full width filling orifice is provided.

What I claim is:

1. A closed carton for a liquid product consisting essentially of a polygonal body of rigid, sealable packaging material having a closed bottom sealed wholly within the bottom portion of said body, substantially flat parallel opposite sides and rounded corners between adjacent sides defining an open upper end having free edges of single thickness in the plane of the body at the bottom and top ends of said body over which the body contents is poured; and a flanged unitary rigid closure lid of single thickness for said upper end; said top closure lid having a central flat section overlying said upper end and having no exposed portion thereof recessed with respect to a plane defined by said top end edges, said flange of said top closure being a continuous flange of single thickness extending downwardly from the periphery of said central section and being continuously sealed to the exposed outer surface of said upper end, said central section including a foldable flap integral with said central section and hinged across one of said corners, wherein a rounded pouring lip will be formed by the side edges and interconnecting rounded corner including a portion of the single thickness free edge of the body, said foldable flap having side flanges on opposite sides of the pouring corner which are separable from the closure flange to be readily movable to an open position of said flap and to snap back onto the body during closing due to the rigidity of said central section behind the crease at the hinge.

2. The carton recited in claim 1 wherein said body is formed of thermoplastic coated paper material heat sealable to the flange of said closure lid.

3. The carton recited in claim 1 wherein the flange of said closure lid is formed of thermoplastic coated paper material heat sealable to said body.

4. The carton recited in claim 1 wherein both the body and closure lid are formed of thermoplastic coated paper material heat sealable to each other.

5. The carton recited in claim 1 wherein said closure lid flange is provided with a pair of spaced leading cuts adjacent said flap.

## References Cited in the file of this patent UNITED STATES PATENTS

2,338,019	Baker et al Dec. 28,	1943
2,349,732	Howard May 23,	1944
2,350,930	Salfishery June 6,	1944
2,399,241	Markle Apr. 30,	1946
2,473,391	Roselle June 14,	1949
2,580,586	O'Reilly Jan. 1,	1952
2,820,585	Nerenberg et al Jan. 21,	1958
2,971,686	Miihlhoff Feb. 14,	1961
3,033,435	Forrer May 8,	1962