

Aug. 4, 1931.

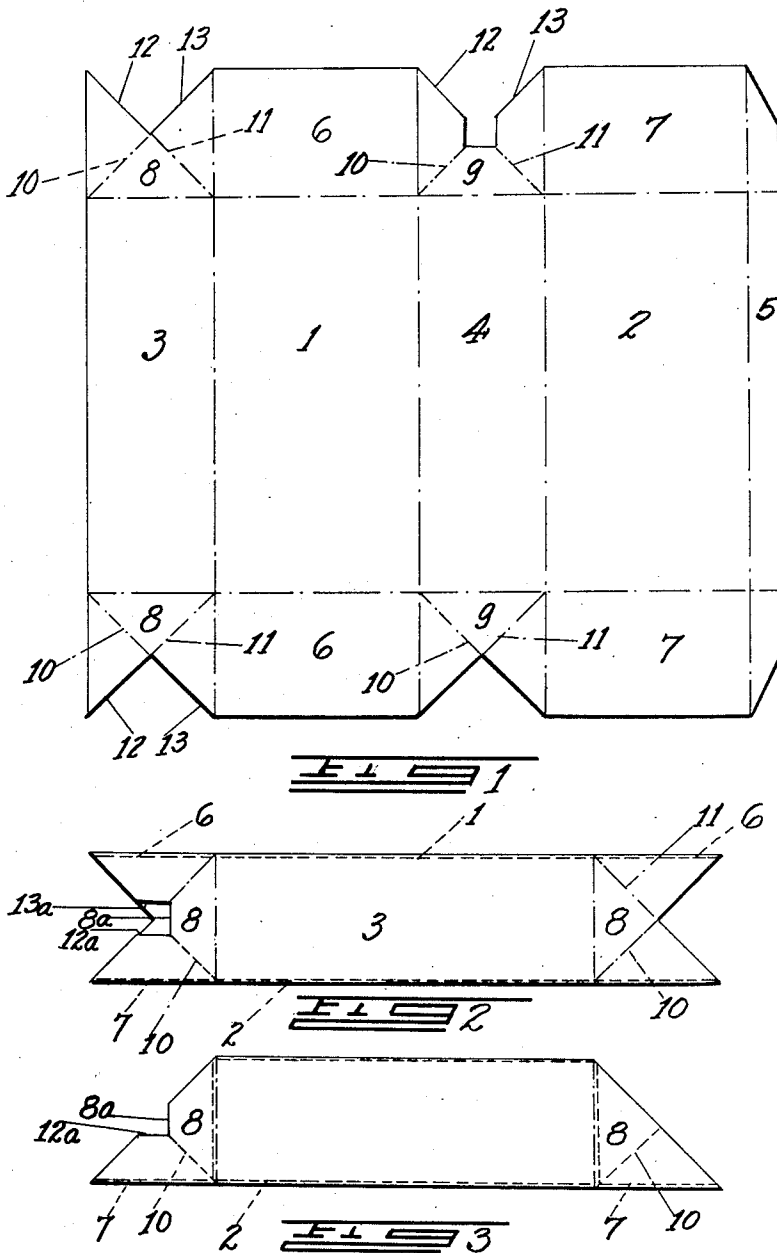
W. A. MORRIS

1,816,985

CARTON AND POURING SPOUT THEREFOR

Filed March 5, 1928

2 Sheets-Sheet 1.



INVENTOR.

Warren A. Morris

BY

Allen + Allen

ATTORNEYS

Aug. 4, 1931.

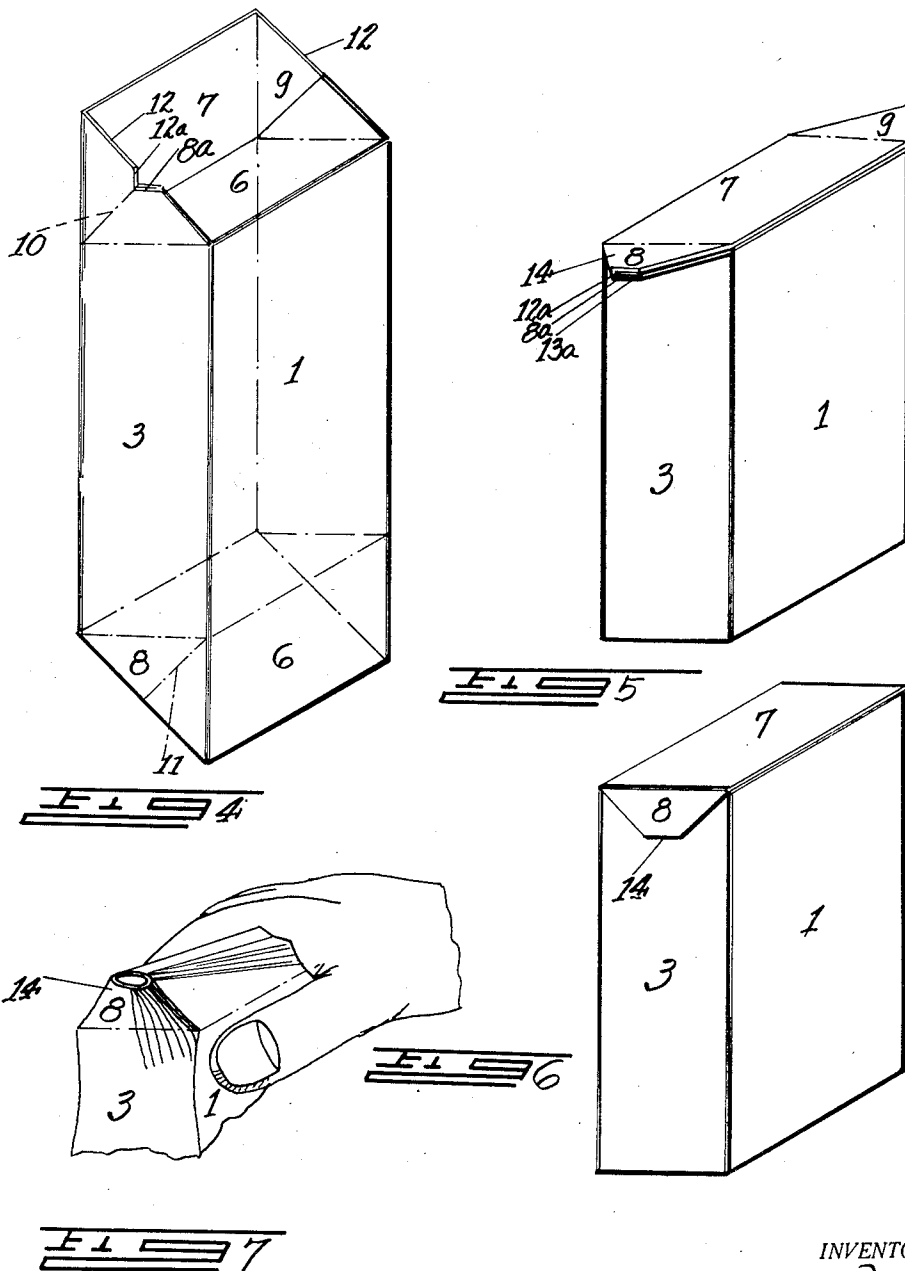
W. A. MORRIS

1,816,985

CARTON AND POURING SPOUT THEREFOR

Filed March 5, 1928

2 Sheets-Sheet 2



INVENTOR.

Warren A. Morris

BY

Allen & Allen

ATTORNEYS

UNITED STATES PATENT OFFICE

WARREN A. MORRIS, OF WYOMING, OHIO, ASSIGNOR TO THE RICHARDSON COMPANY,
OF LOCKLAND, OHIO, A CORPORATION OF OHIO

CARTON AND POURING SPOUT THEREFOR

Application filed March 5, 1928. Serial No. 259,273.

My invention relates to cartons, and particularly to a novel carton closure which provides a dispensing spout.

In the art, to the best of my knowledge and belief, no one has provided a carton closure which is formed with articulated closing flaps in which there is not an opening in the flaps at the corners thereof, which, due to insufficient glue or insufficient pressure during sealing, is not likely to leak, and which further will provide when opened up a dispensing spout through which the contents of the carton may be poured.

In order to provide a carton the closure of which is leak-proof and will not sift at the corners, and which, if the board of which the carton is made be waterproof, will be substantially water-tight, I provide a carton having side and end closure flaps which are scored but not slit at their articulated joints, and which can thus be folded with bellows folds which will make closed corner joints. The subject matter of this type of carton is disclosed in my co-pending application Serial No. 241,662, filed December 21, 1927. It is specifically my object in an improved carton of this type to provide a dispensing spout in the closure portions which may be readily extended for use and which, when not extended, will form a closure.

The above and other objects to which reference will be made during the ensuing disclosure I accomplish by that certain combination and arrangement of parts of which I have shown a preferred embodiment.

In the drawings:—

Figure 1 is a plan view of a blank from which a carton of my novel type may be made.

Figure 2 is an end elevation of the carton folded into tubular form with the closure flaps extending in alignment with the walls of the carton.

Figure 3 is an end elevation with one of the side closure flaps at each end folded in.

Figure 4 is a perspective view of the carton with one of the side flaps at each end folded in, as in Figure 3.

Figure 5 is a perspective view of the car-

ton with both side closure flaps at each end folded in.

Figure 6 is a perspective view of the carton with the angular tongues formed from the end closure flaps sealed down against the end walls of the carton.

Figure 7 is a perspective view of a portion of a carton provided with my novel type of dispensing spout showing the spout in operative position.

The carton illustrated has the two side walls 1 and 2 and the end walls 3 and 4, with a sealing extension 5 extending from one of the side walls. The tops and bottom of the tubular form which results with the sealing of the extension 5 to the end wall 3 are closed by the closure flaps composed of the side closure flaps 6 and 7 which are extensions from the walls 1 and 2 respectively, and the end closure flaps 8 and 9 which are extensions from the end walls 3 and 4 respectively.

The end closure flaps are divided diagonally from corner to corner with the articulated score lines 10, 11 and the triangular uppermost portion of each end flap is cut away by the cut lines 12, 13.

The opening for the dispensing spout is formed by cutting away portions of the end flaps 8 or 9 as indicated at 8a, 12a and 13a. I have shown the dispensing spout as formed in the articulated portions of the flap 9 although the flap 8 may also be formed into a spout in a similar manner. The dispensing aperture is shown as square, but any other shape will serve the purposes of a spout mouth equally as well.

In order to close the carton, one of the side closure flaps is bent inwardly at a right angle to the walls to which it is articulated. This causes the end closure flap portions formed by the scored lines 11 and the cut lines 13 to fold inwardly and lie in alignment with the remaining portions of the end closure flaps. The opposite side closure flap is then folded over so that it lies against the first folded flap and the end flaps form a tongue such as is indicated in Figure 5 at 14. The angular tongues 14, as will be apparent, are composed of the end flaps folded in a triple fold with the plies not sealed together. The

inner surfaces of the tongues are preferably sealed against the end walls of the container as indicated in Figure 6. They may, however, be sealed against the top surface of the uppermost side flap, but this somewhat mars the appearance of the carton.

On regular sealing machines which are common in the art, and which are adapted to seal four closing flaps which are not articulated one to another, but which are divided by a cut line at their adjacent side edges, the change which is required to fold and seal cartons made in accordance with my invention is slight.

While I have shown a rectangular carton with both ends provided with sift-proof and water-tight corner joints, and with a spout formed in one of the end flaps, I do not wish to limit myself to such a construction as the essence of my invention is the provision of a dispensing spout in the closure flaps of a carton.

In order to utilize the dispensing spout, the end flap 14 having the cut away portions 8a, 12a and 13a is torn loose with the thumb nail from the side wall of the carton. The top portion of the carton is then squeezed between the thumb and the other fingers with the result that the spout opens out as indicated in Figure 7. When the carton is set down the mouth of the spout is drawn closed by the expansion of the walls of the carton.

It will also be well within the realms of mechanical equivalency to vary the shape of the closing flaps and of the carton, and of the specific shape of the spout indicated, but in so far as such modifications adopt the principle involved, I consider them within the scope of my invention.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent, is:—

1. A carton having two pairs of closure flaps, opposite pairs of said flaps being adapted to fold correspondingly, one pair adapted to be folded so as to lie one over another forming a top closure for the carton, and the other pair being provided with bellows folding lines of articulation which will permit their being folded into tongues formed of three-ply layers which are not sealed one to another and which may be secured to the carton to form a closure, and one of said tongues having cut away portions forming the mouth of a dispensing spout.

2. A carton having two pairs of closure flaps, opposite pairs of said flaps being adapted to fold correspondingly, one pair adapted to be folded so as to lie one over another forming a top closure for the carton, and the other pair being provided with bellows folding lines of articulation which will permit their being folded into tongues formed of three-ply layers forming a dispensing spout and which may be secured to the carton

to form a closure, and one of each of the pairs of closure flaps being articulated to one of each other pair by scored lines.

3. A carton having closing flaps, said flaps being articulated at their side edges, with score lines so arranged in some of said flaps that the flaps will fold into a plural-ply closure with closed corner joints, and at least one of said scored flaps forming an outwardly projecting closed dispensing spout which, with the squeezing of the end of the carton, will open out so as to discharge material.

4. A carton having closing flaps, said flaps being articulated at their side edges, with score lines so arranged in some of said flaps that the flaps will fold into a closure with closed corner joints, said flaps having score lines adapting them to be folded into angular tongues consisting of triplicate folds, said tongues being adapted to be sealed against walls of the carton to form the last sealed flaps of the closure, and one of said tongues having its end cut away thereby forming a dispensing spout.

5. A carton having closing flaps each flap being joined at each of its side edges to the side edge of an adjacent flap, and certain of said flaps being provided with diagonally extending score lines and cut away portions which will enable said flaps to be folded into outwardly disposed tongues with the cut away portions of one of the tongues forming the mouth of a dispensing spout.

6. In a carton having closure flaps, a flap provided with score lines extending thereacross which will permit said flap to be folded outwardly in a triple-ply bellows fold, said scored portions being non-adherent, whereby the contraction of the end of the carton will open out said scored flap into a dispensing spout.

7. A carton having closing flaps, said flaps being articulated at their side edges, with score lines so arranged in some of said flaps that the flaps will fold into a closure, said flaps having score lines adapting them to be folded into angular tongues consisting of triplicate folds, said tongues being adapted to be sealed against walls of the carton to form the last sealed flaps of the closure, and one of said tongues having its end cut away thereby forming a dispensing spout.

WARREN A. MORRIS.