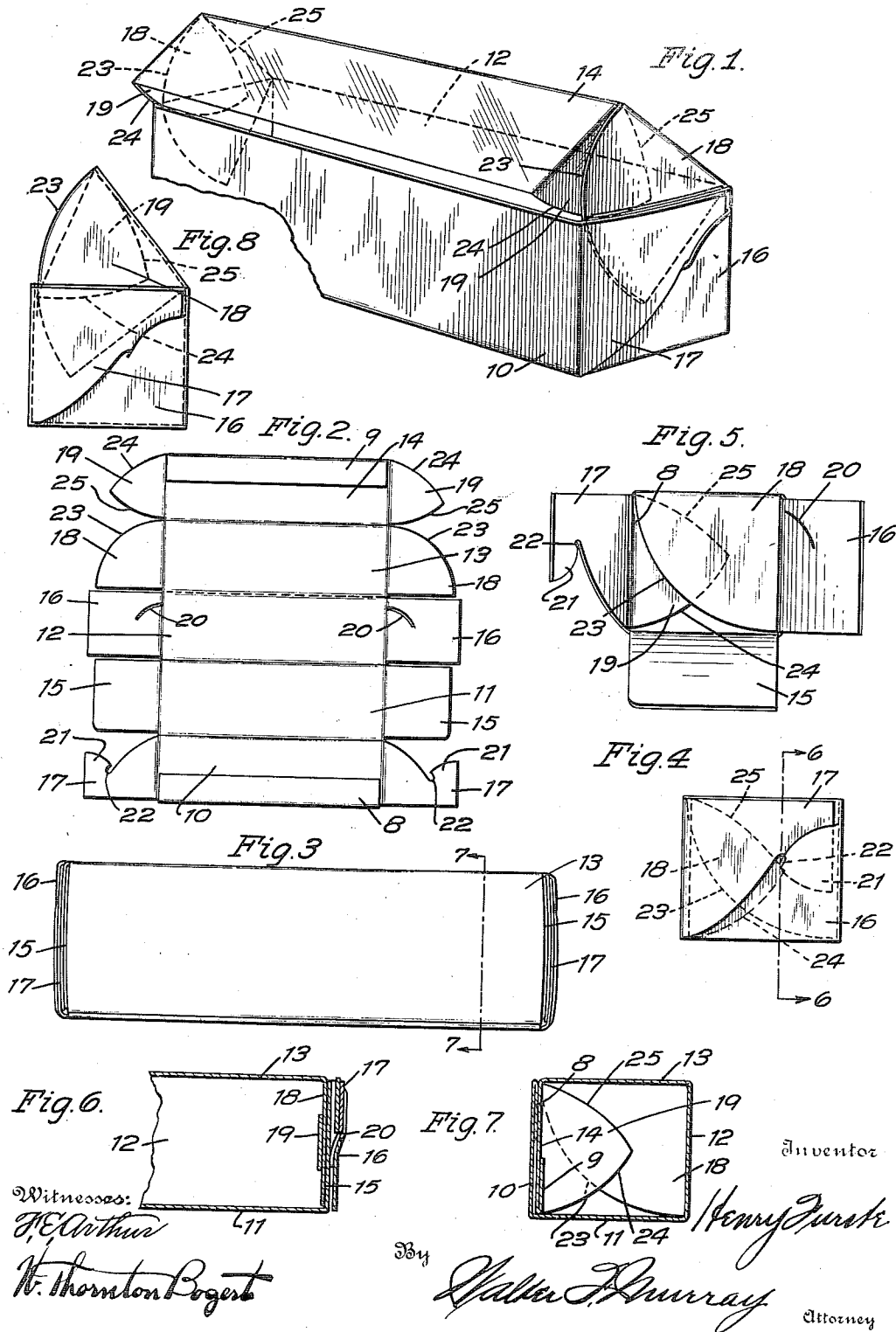


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 CARTON.
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1,305,707.

Patented June 3, 1919.



UNITED STATES PATENT OFFICE.

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CARTON.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, HENRY FURSTE, a citizen of the United States of America, and resident of Cincinnati, in the county of Hamilton and State of Ohio, have invented a new and useful Improvement in Cartons, of which the following is a specification.

This invention relates to an improved card board or heavy paper carton and has for an object to produce a carton adapted to seal the interior thereof against admission of air and light in a more effective manner than other cartons heretofore used and known to me.

A further object is to produce a card board or heavy paper carton of the side opening type in which the free edges of the construction are reinforced to prevent tearing of the material thereof or collapse of the carton and in which the various portions may be folded and locked in their folded positions without straining or bending the material thereof.

These and other objects are attained in the construction described in the following specification and illustrated in the accompanying drawings, in which:

Figure 1 is a perspective view of a carton or box embodying my invention, the lid being shown partly raised.

Fig. 2 is a plan view of a carton or heavy paper blank from which a box embodying my invention may be constructed.

Fig. 3 is a plan view of the box folded.

Fig. 4 is an end elevation of the box.

Fig. 5 is an end elevation of the box with certain of the flaps unfolded to disclose other folded flaps.

Fig. 6 is a fragmental elevation taken on the line 6—6 of Fig. 4.

Fig. 7 is a transverse sectional view taken on the line 7—7 of Fig. 3.

Fig. 8 is an end elevation showing the position of the top of the box and certain of the other elements in the closing operation.

My improved carton is made of a sheet of card board or heavy paper cut to form a blank of the shape disclosed in Fig. 2, in which two portions 8 and 9 of the blank are shown folded on the other portions thereof. In this blank, portion 10 forms the front of the box and portions 11, 12 and 13 respectively form the bottom, back and top of the box. Attached to top portion 13 is a

portion 14 adapted to form an auxiliary front. Attached to the end edges of respective portions 11, 12 and 10 are flaps 15, 16 and 17. These flaps when folded form the ends of the box. Attached to the end edges of portions 13 and 14 are respective flaps 18 and 19, these flaps also cooperating with flaps 15, 16 and 17 when the lid and auxiliary front of the box are folded to close the box. Flaps 16 are provided with slits 20 adapted to receive tongues 21 formed on flaps 17. These tongues 21 are distinguished from the main portions of flaps 17 by notches 22, the purpose of which will be hereinafter more fully described.

The formation of flaps 18 and 19 permits of their being moved readily to their folded positions with relation to the body of the box because of the curved edges thereof, edges 23 of flaps 18 being cut to the arc of the circle formed with a radius extending from the back corner to the corresponding front corner of the box, and edges 24 of flaps 19 being curved to substantially the radius of the arc drawn from the point of connection of portion 14 with the lid or top of the box, to the edge of portion 14. The remaining edges 25 of flaps 19 are curved so as to facilitate the movement of flap 14 with relation to top 13 of the box when they are being moved to their folded positions, the object of so forming edges 25 being to permit portion 14 to be folded at a sufficient angle with relation to portion 13, that the bottom edge of portion 14 will clear the top edge of the front without having to spring the material thereof in closing the box. In preparing the blank for folding, the portions and flaps are preferably distinguished from one another by means of scoring which facilitates their being bent or folded in constructing the box. Portions 8 and 9 are folded with relation to portions 10 and 14 and are preferably attached thereto by gluing them in the positions disclosed in Fig. 2. The blank is now ready for use.

The first operation is to fold portions 10, 11 and 12 at right angles to one another to form the body of the box, then to fold flaps 15 upwardly from the bottom portion 11 to meet the end edges of portions 10 and 12. Flaps 16 are then bent at right angles to portion 12 and against the outer faces of flaps 15. Flaps 17 are now bent at right angles to portion 10 and are brought to en-

gage the outer faces of flaps 16. Tongues 21 of flaps 17 are now passed through slits 20 of flaps 16, and notches 22 are brought into engagement with the lower ends of slits 20 of flaps 16. The ends of the body portion of the box having thus been constructed, portion 14 is bent at right angles to portion 13 and portion 13 is bent at right angles to box portion 12, flaps 19 and 18 being bent upwardly from the blank as disclosed in Fig. 2, to stand at right angles to portions 14 and 13. The box is now closed by locating flaps 19 within flaps 18 and then passing flaps 18 within flaps 15, 16 and 17 which have previously been folded to form the ends of the body of the box.

In my improved construction it will be seen that I have produced a carton which is particularly adapted to contain articles which must be kept away from the deteriorating influences of light and air, such as rubber and similar articles.

In addition to this I have provided a construction in which the free edges are materially reinforced and strengthened by reason of the folding of portions 8 and 9 with relation to portions 10 and 14, thereby avoiding the usual raw edges found in other box constructions. Not only are these edges reinforced, but the top or lid possesses no raw edges and owing to the presence of flaps 18 and 19, dust and other elements as objectionable as light and air, are also excluded from the contents of the box.

A further feature of improvement lies also in the hook-like construction of the tongues 21 formed on flaps 17, for the purpose of engaging slits 20 of flaps 16, this construction

positively locking the body portion of the box and preventing the portions becoming unfolded.

What I claim is:

A carton blank comprising a series of portions adapted to be folded to form the body of a carton, portions attached to the body-forming portions adapted to be folded to close the body, flaps attached to certain of the first and second mentioned portions adapted to be folded into engagement with said certain portions to form reinforced edges, flaps attached to the end edges of the body-forming portions adapted to be folded to form the ends of the body, certain of the flaps being attached to the front and back-forming portions, the flaps attached to the back-forming portion having a diagonally extending slit formed therein adjacent to its attached edge, the flap attached to the front-forming portion having a hooked tongue formed on the edge opposite its attached edge for locking cooperation with the slit when the flaps are folded, and flaps attached to the end edges of the body-closing portions, having curved edges adapted to facilitate closing of the box without distortion of the material thereof and to reinforce and close the ends of the carton when the body-closing portions are moved to closed position.

In testimony whereof, I have hereunto subscribed my name this 11th day of January, 1917.

HENRY FURSTE.

Witnesses:

WALTER F. MURRAY,
W. THORNTON BOGERT.