March 12, 1929. G. R. GRIGG 1,704,739

CARTON

Filed Oct. 4, 1927

Fig. 1.

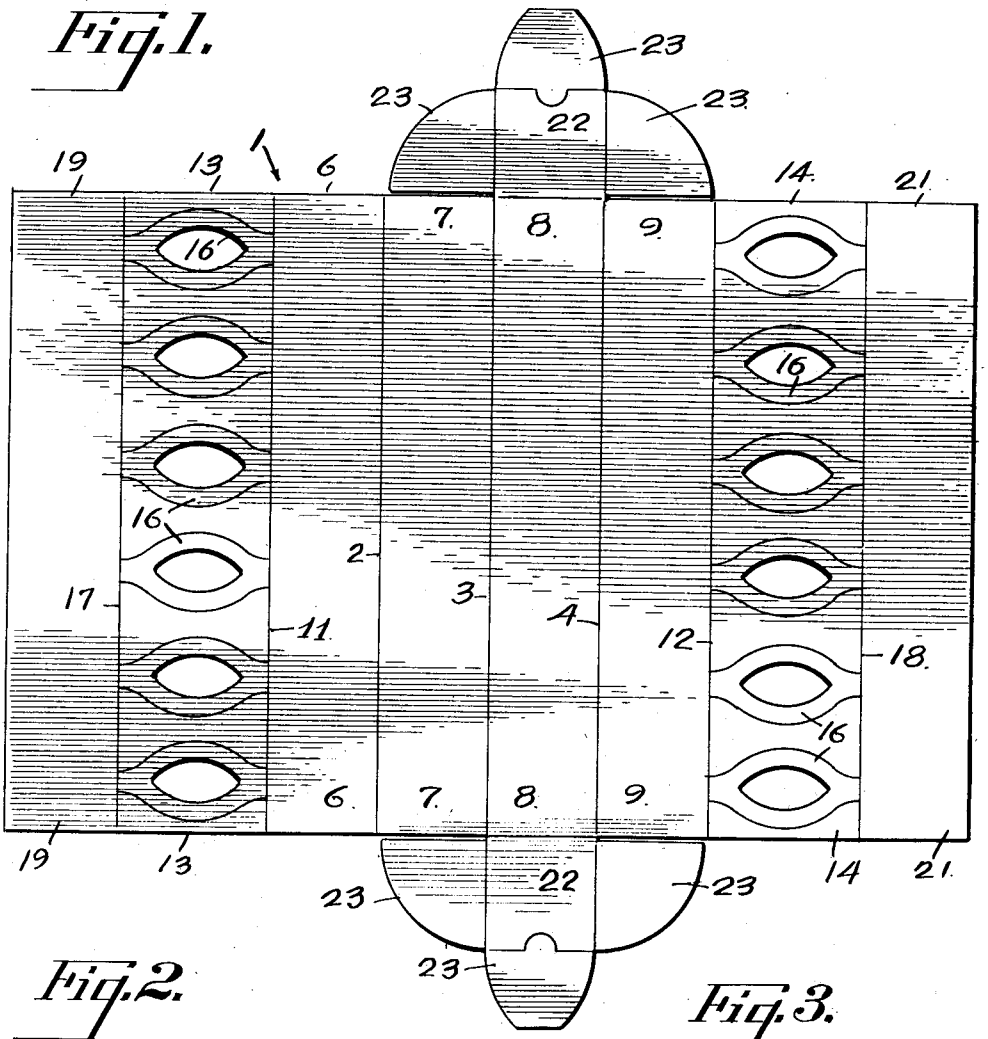


Fig. 2.

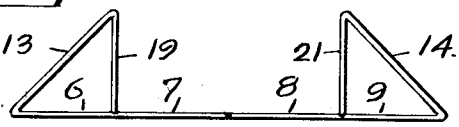


Fig. 3.

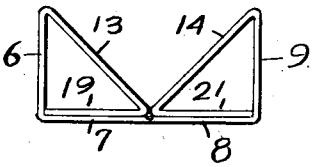


Fig. 4.

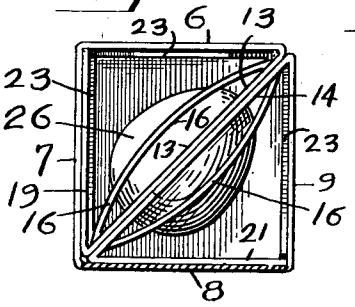
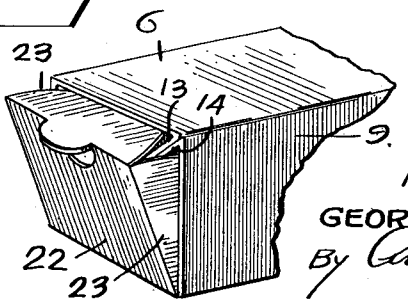


Fig. 5.



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UNITED STATES PATENT OFFICE.

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CARTON.

Application filed October 4, 1927. Serial No. 223,909.

My invention relates to improvements in cartons and the like wherein a blank is scored to form four adjacent side portions arranged to be folded into a rectangular carton or body and having apertured diagonals formed on the outer sides of the outer side-portions, said diagonals extending diagonally and in contact with each other within the carton when formed to suspend articles between them and out of contact with the sides of the carton.

The primary object of the present invention is to provide a new and improved carton.

Another object of the present invention is to provide a new and improved blank scored to form a rectangular carton or body arranged to engage and suspend fragile articles such as eggs, bottles, and other fragile objects out of contact with the sides of the body of the carton to prevent breakage and other damage.

A further object is to provide an improved carton of the character set forth wherein a single blank is scored to form a carton of the type set forth and provided with diagonals and extensions thereto lying within a folded or formed carton in such manner that the rectangular shape of the carton is rigidly preserved, to prevent contact of the contents with the sides of the carton.

I accomplish these and other objects by means of the preferred form of the invention disclosed in the drawings forming a part of the present application wherein like characters of reference are used to designate similar parts throughout the specification and drawings, and in which—

Fig. 1 is an elevation of the scored blank;

Fig. 2 is an end view of the blank after being partially folded, in order to disclose the diagonal members;

Fig. 3 is an end view of the successive operation in folding the carton and in a receptive position;

Fig. 4 is an enlarged end view of the folded carton, the near end being open, in order to disclose the manner in which fragile articles are suspended between the diagonals and out of contact with the sides of the carton; and

Fig. 5 is a broken perspective view disclosing the manner in which the diagonals are locked together by the tabs on the end portions of the carton.

Referring to the drawings the numeral 1 is used to designate in general a card board blank scored as at 2, 3 and 4 to form four adjacent side portions such as two inner side portions 7 and 8 and two outer side portions 6 and 9 respectively. The blank 1 is further scored as at 11 and 12 to form what I term diagonals 13 and 14, said diagonals 13 and 14 having apertured lateral strips 16 cut therein, as disclosed in Fig. 1 of the drawings. The blank 1 is still further scored as at 17 and 18 to form extensions 19 and 21 on the outer sides of the diagonals 13 and 14, the purpose of which will hereinafter be more fully set forth.

One of the inner side portions, in this case, the inner side portion 8, is provided with end portions 22 on the ends thereof, said end portions 22 having tabs 23 formed integral therewith arranged to fold inside of the folded carton to close the ends thereof, as disclosed in Fig. 5 of the drawings.

In operation, the blank 1 is folded along the several scored portions by first moving or folding the extensions 19 and 21, and the diagonals 13 and 14 to form triangles with the outer side portions 6 and 9 respectively, as disclosed in Fig. 2 of the drawings. The blank 1 is then next folded along the scored portions 2 and 4 which will superimpose the extensions 19 and 21 upon the outer side portions 6 and 9 respectively. This is what is termed the receptive or receiving position of the carton, which position will expose the diagonals 13 and 14 face upwards and inclined away from each other as shown in Fig. 3 of the drawings.

While in this position, eggs 26 or other fragile articles to be enclosed, are seated within the apertures of the apertured lateral strips 16 of one of the diagonals 13 or 14. It is to be particularly noted, that while I have, in the present case, disclosed oval-shaped apertures adapted to receive eggs, that said apertures may be formed or suitably shaped to receive other fragile articles, such as bottles, or any other fragile articles.

After the articles are properly seated within or upon the apertured strips 16 of one diagonal 13 or 14, the carton is closed by folding the opposite diagonal upon the filled diagonal which will fold the blank 1 into a rectangular carton or body as disclosed in Fig. 4 of the drawings, in which position the apertured strips 16 will be

slightly distended, thereby tightly embracing the eggs 26 or other fragile articles, and suspending the same between the apertured strips 16 of the diagonals 13 and 14, as shown in Fig. 4 of the drawings, the said diagonals, operating in conjunction with the extensions 19 and 21, to rigidly preserve the rectangular shape of the carton.

It should be noted that when folded in this position two edges or sides of the diagonals will be directly opposite a hinged portion formed by the scored portion 3 of the blank 1, which hinged portion or scoring 3 will tend to lock said two edges of the diagonals together. The opposite edges of the diagonals will be locked together when the end portions 22 are closed and the tabs 23 thereof are inserted within the side portions of the carton, as disclosed in Fig. 5 of the drawings.

While the open or free edges of the diagonals 13 and 14 are rigidly engaged between adjacent tabs 23 of the end portions 22 it is quite obvious that the carton will be effectively locked in a closed position and by the same means the diagonals 13 and 14 will be effectively locked together and suspended eggs 26 or other fragile articles held therebetween will be effectively and tightly suspended between the diagonals 13 and 14 by means of the apertured lateral strips 16 thereof, which apertured strips 16 will engage and hold said fragile articles out of contact with the sides of the carton and thus prevent damage or breakage from blows or jars or other shocks delivered to the sides of the carton.

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

1. A carton comprising a blank scored to form a rectangular body having a pair of apertured diagonal portions formed integral therewith to engage and suspend between them by means of said apertures articles embraced by said apertures and to maintain said articles out of contact with the sides of the carton; and end tabs formed integral with said blank and arranged to engage and lock said diagonals together.

2. A carton comprising a blank scored to form a rectangular body having a pair of contacting diagonal portions provided with lateral apertured strips to engage and suspend articles between said strips and out of contact with the sides of the carton; end portions formed integral with said blank and having tabs arranged to engage and lock said diagonal portions together when the carton is closed; and means for rigidly maintaining the rectangular shape of the carton.

3. A carton comprising a blank scored to form a rectangular body having a pair of contacting diagonal portions provided with lateral strips having apertures for engaging articles and holding the same between said apertured strips and out of contact with the sides of the carton, said carton being formed into two portions, each portion consisting of two adjacent sides and a diagnal across them, and hinged together adjacent one end of the diagonals; and end portions formed integral with the blank and having tabs formed integral therewith to engage and lock the diagonals together when the carton is closed; and extensions formed integral with the edges of the diagonals adjacent the said hinge portion and lying along the inner adjacent sides of the carton to rigidly preserve the rectangular shape of the carton.

4. A carton comprising a blank scored to form four adjacent side portions; end portions formed integral with one of the inner side portions and arranged to extend across the ends of the carton, said end portions being provided with tabs to fold into said carton when formed; two diagonals formed integral on the outer side of each outer side portion, said diagonals being provided with lateral apertured strips to engage and suspend articles within said carton when formed and out of contact with the sides thereof.

5. A carton comprising a blank scored to form four adjacent side portions to form a rectangular carton when folded; apertured diagonals formed on each outer side of each outer side portion and arranged to extend diagonally within said carton when folded and to suspend articles between said apertured diagonals and out of contact with the sides of the carton; and end portions formed upon the ends of one of the inner side portions and provided with tabs arranged to engage and lock the diagonals together when the carton is closed.

6. A carton comprising a blank scored to form four adjacent side portions to form a rectangular carton when folded; apertured diagonals formed on the outer side of each outer side portion and arranged to extend diagonally within said carton when folded and to suspend articles between them and out of contact with the sides of the carton; and extensions similar to the side portions formed on the outer sides of the diagonals and arranged to lie within the carton superimposed upon a side portion when folded to rigidly preserve the rectangular shape of said carton when folded.

7. A carton comprising a blank scored to form four adjacent side portions to form a rectangular carton when folded; apertured diagonals formed on the outer side of each outer side portion and arranged to extend diagonally within said carton when folded and to suspend articles between them and

out of contact with the sides of the carton; and extensions similar to the side portions formed on the outer sides of the diagonals and arranged to lie within the carton when folded to rigidly preserve the rectangular shape of said carton when folded; and end portions formed integral with the ends of one of the inner side portions and provided with integral tabs arranged to engage and lock the diagonals together when the carton is closed.

In witness whereof, I hereunto set my signature.

GEORGE R. GRIGG.