L. P. BROWN.

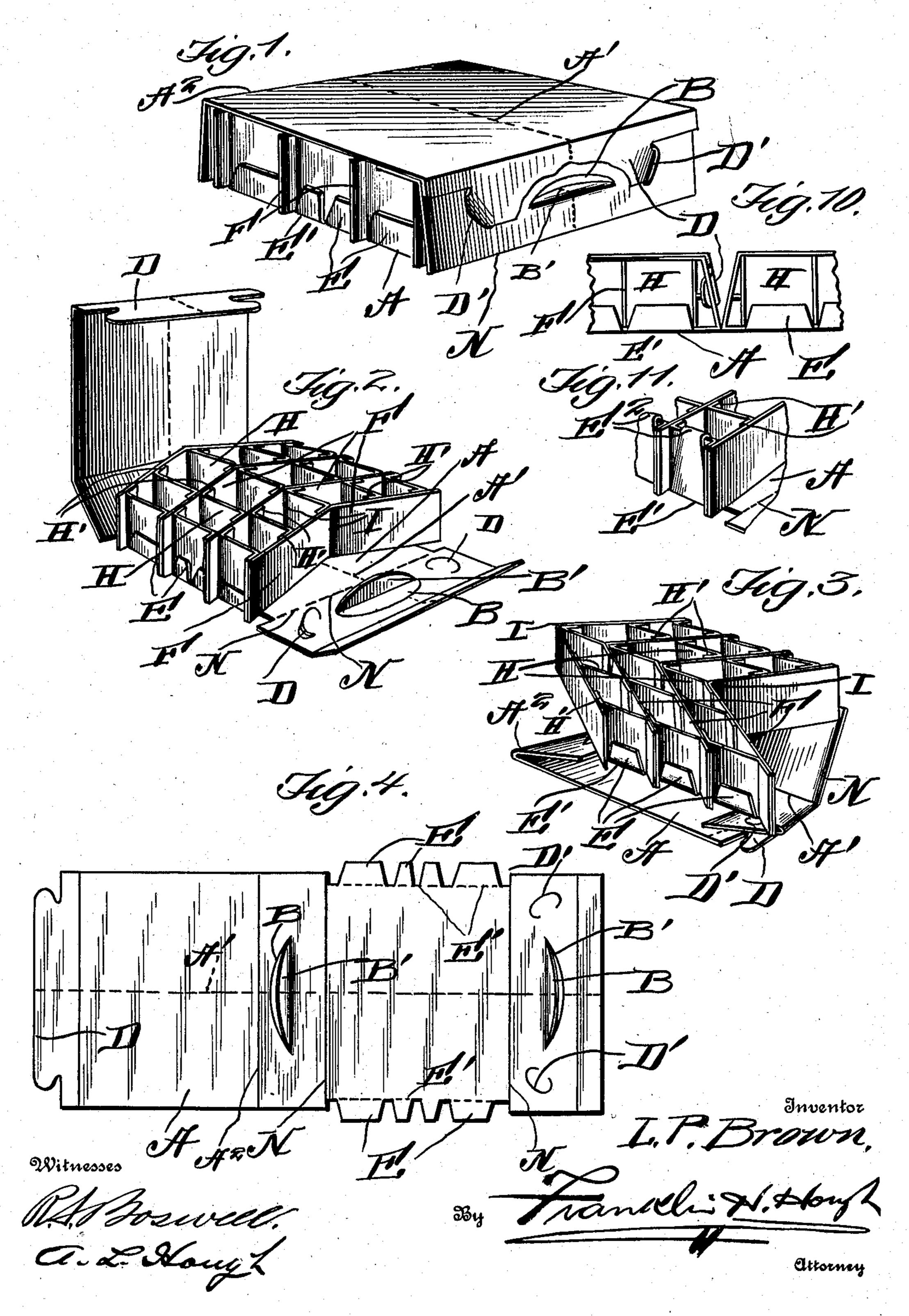
COLLAPSIBLE CARTON.

APPLICATION FILED JAN. 5, 1909.

930,835.

Patented Aug. 10, 1909.

3 SHEETS-SHEET 1.



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3 SHEETS-SHEET 3.

UNITED STATES PATENT OFFICE.

LUTHER P. BROWN, OF PORT HURON, MICHIGAN.

COLLAPSIBLE CARTON.

No. 930,835.

Specification of Letters Patent.

Patented Aug. 10, 1909.

Application filed January 5, 1909. Serial No. 470,838.

To all whom it may concern:

Be it known that I, LUTHER P. BROWN, a citizen of the United States, residing at Port Huron, in the county of St. Clair and State of Michigan, have invented certain new and useful Improvements in Collapsible Cartons; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to new and useful improvements in collapsible cartons and fillers and so arranged that the devices may be reduced to a compact shape for conven-

20 ience in shipping, storing, etc.

The invention consists further in a device of this nature so arranged that the contents of the carton may be protected against jar or vibration coming against the sides of the same.

The invention comprises various details of construction, combinations and arrangements of parts which will be hereinafter fully described and then specifically defined

30 in the appended claims.

My invention is illustrated in the accom-

panying drawings, in which:—

Figure 1 is a perspective view showing one of my improved cartons of square outline. 35 Fig. 2 is a detail view showing the carton opened. Fig. 3 is a detail view showing the carton and filler partially folded. Fig. 4 is a detail view of the bank. Fig. 5 is a cross sectional view through the carton. Fig. 6 40 is a perspective view of an oblong form of the carton. Fig. 7 is a view in perspective showing the form shown in Fig. 6 opened and illustrating the filler partially folded. Fig. 8 is a sectional view on line 8—8 of Fig. 45 6. Fig. 9 is a perspective view showing the carton nearly folded. Fig. 10 is an end view showing two cartons held side by side and illustrating the space intervening between the two to protect the contents of the recep-50 tacle, and Fig. 11 is a detail of a modification of the invention. Fig. 12 is a perspective view of a modification of the invention. Fig. 13 is a perspective view of the modified form shown in Fig. 12 illustrating the box 55 open. Fig. 14 is a modified form of the in-

vention. Fig. 15 is an end view of the modification as shown on Fig. 14. Fig. 16 is a detailed perspective of a portion of the modified form as illustrated of Fig. 14. Fig. 17 is a perspective view showing the modified 60 form of Fig. 12 partly folded and, Fig. 18 is a perspective view of a modification com-

pletely folded.

Reference now being had to the details of the drawings by characters, A designates a 65 blank of paper or other suitable fabric, made preferably in the shape shown in Fig. 4 of the drawings, in which the blank is scored along the line A' centrally and longitudinally, upon which line the blank is 70 adapted to be folded and said blank is also scored along the line A2 so that the blank may be folded transversely in the manner shown in Fig. 3 of the drawings. Said blank is provided with crescent or other 78 shaped slits B, two of which are shown in the drawings formed in what will form the the flaps B' are adapted to be folded out opposite sides of the carton when folded and at right angles to the sides with which they 80 are integral and serve as cushioning means intermediate the side of the carton and the filler. Said blank is provided with usual tongue D, the ends of which are adapted to fold into slits D' in one of the sides of the 85 carton, as shown in Fig. 1 or, if preferred, may fold into the top or portion of the blank which forms the closure over the filler. Tongues E are formed of different widths upon the opposite edge of the blank 90 and are adapted to be bent along the scored lines E' when the box is made up in the manner shown in Figs. 1 and 2 of the drawings or as illustrated in the detail Fig. 11.

The filler consists of the longitudinal 95 partitions F extending between the scored lines E', and transverse divisional partitions II, the ends II' of which are bent at right angles and fastened to said partitions F in the manner shown plainly in Fig. 2 of the 100 drawings. Each of said longitudinal partitions is scored along the lines I at their longitudinal centers to allow the same to fold in the manner shown in Figs. 2 and 3 of the drawings, said folding line along the 105 scored lines I being adapted to be coincident with the scored line A' when the carton and filler are folded. The flaps E formed on the opposite edges of the blank are bent up along the scored lines E' and are adapted 110

to be glued or otherwise secured to the end transverse partitions H in the manner shown in Figs. 1 and 2 of the drawings or, in the event of it being desired to have the flaps 5 E² formed upon the opposite edges of the end extend up over the upper edges of said transverse partitions as shown in Fig. 11 of the drawings, said flaps E2 may be fastened their entire length to said partitions 10 and overlapping the upper edges thereof.

It will be noted that the scored lines N, N upon the blank A form means whereby, when the sides containing the flaps B' are bent up in the form shown in Fig. 1 of the 15 drawings, a triangular space will intervene between the inner face of each of said sides and the outer of said longitudinal partitions, thus affording a cushioning means for protecting the contents of the filler as well as 20 allowing a space through which air may circulate. When the carton is made up, the tongue's B' which are bent at right angles to the side with which they are integral also serve as additional cushioning means to 25 protect the contents of the filler.

In Figs. 6 to 9 of the drawings, I have shown a slight modification in the shape of my improved carton and filler in which, instead of making the same square in outline, 30 the device is of rectangular form and in other respects similar in construction and manner of folding as described of the other forms illustrated in Figs. 1 to 3 inclusive.

In opening up the carton when in a folded 35 position, the carton is straightened out along its central scored line A', then the closure A unfolded, the filler opened up and the sides turned up along the scored lines N, after which the closure with the tongue 40 folded over the top and the tongue D made to engage the slits D'.

In Fig. 12 I have shown the modification of the invention in which the box may be made of any shape provided with the usual 45 longitudinal scored line A' while the flap A⁵ forming the cover has longitudinal flanges Ac adapted to fit round over the ends of the box while the bottom of the box is provided with flaps at A7 which extend up adjacent 50 to the other parts of the sides of the box.

In Fig. 14 I have shown a slightly different modification of the box in which the flanges upon the cover illustrated in Figs. 12 and 13 are dispensed with, and the end D⁴ 55 of the flap engages slits D' formed in one side of the box. It will be noted however that the idea of scoring the box longitudinally obtains in each of the modifications shown in Figs. 12 and 14. It will be noted 60 also, that a box made in accordance with the modified forms, while illustrated as square in outline may be made of any two different shapes and size and will be especially adapted for use in shipping various commodities, l and without a filler as illustrated in Figs. 2 65 and 7 of the drawing.

What I claim to be new is:—

1. A carton and filler, comprising a blank scored transversely to allow the blank to be bent to form the sides and end flaps of the 70 carton and also scored its entire length along its longitudinal center upon which the blank is adapted to be folded, integral tongues projecting from the opposite edges of the blank, a filler fastened at its opposite sides to said 75 tongues and adapted to fold in a plane coincident with the longitudinal center of said

flap, as set forth.

2. A carton and filler, comprising a blank which is scored along its longitudinal center 80 upon which the blank is adapted to be folded, integral tongues projecting from the opposite edges of the blank, a filler fastened at its opposite sides to said tongues and adapted to fold in a plane coincident with the longi- 85 tudinal center of said flap, said blank being scored a short distance from the opposite free sides of the filler, thereby allowing a space to intervene between the sides of the carton and filler which serve as a cushioning 90 and ventilating means, as set forth.

3. A carton and filler, comprising a blank which is scored along its longitudinal center and transversely at one side of its center upon which lines the blank is adapted to be 95 folded, integral tongues projecting from the opposite edges of the blank, a filler fastened at its opposite sides to said tongues and adapted to fold in a plane coincident with the longitudinal center of said flap, said 100 blank being scored transversely adjacent to the opposite free sides of the filler, said sides adapted to be folded along said transverse scorer, and flaps upon said sides extending toward the filler and adapted to serve as 105 cushions, as set forth.

4. A folding carton comprising a blank scored along its longitudinal center, tongues upon the opposite edges of said blank, said tongues being scored in parallel lines inter- 110 mediate the opposite edges of the blank, a filler made up of longitudinal partitions and intermediate partitions, each of which has angled ends fastened in opposite directions to said longitudinal partitions, said tongues 115 being adapted to be fastened to the outer face of said transverse partitions, said blank having transverse scores slight distances from the opposite free faces of the filler, the bottom of the carton extending beyond the 120 opposite free faces of the filler thereby allowing a space to intervene between the sides of

the carton and the filler, as set forth. 5. A folding carton comprising a blank scored along its longitudinal center, tongues 125 upon the opposite edges of said blank, said tongues being scored in parallel lines intermediate the opposite edges of the blank, a

filler made up of longitudinal partitions and intermediate partitions, each of which has angled ends fastened in opposite directions to said longitudinal partitions, said tongues being adapted to be fastened to the outer face of said transverse partitions, said blank having transverse scores slight distances from the opposite free faces of the filler, the bottom of the carton extending beyond the opposite free faces of the filler thereby allow-

ing a space to intervene between the sides of the carton and the filler, and flaps upon said sides turned at right angles to the latter toward the free sides of the filler, as set forth.

In testimony whereof I hereunto affix my signature in the presence of two witnesses.

LUTHER P. BROWN.

LILLIE MAE BROWN, CHARLES W. ADAMS.