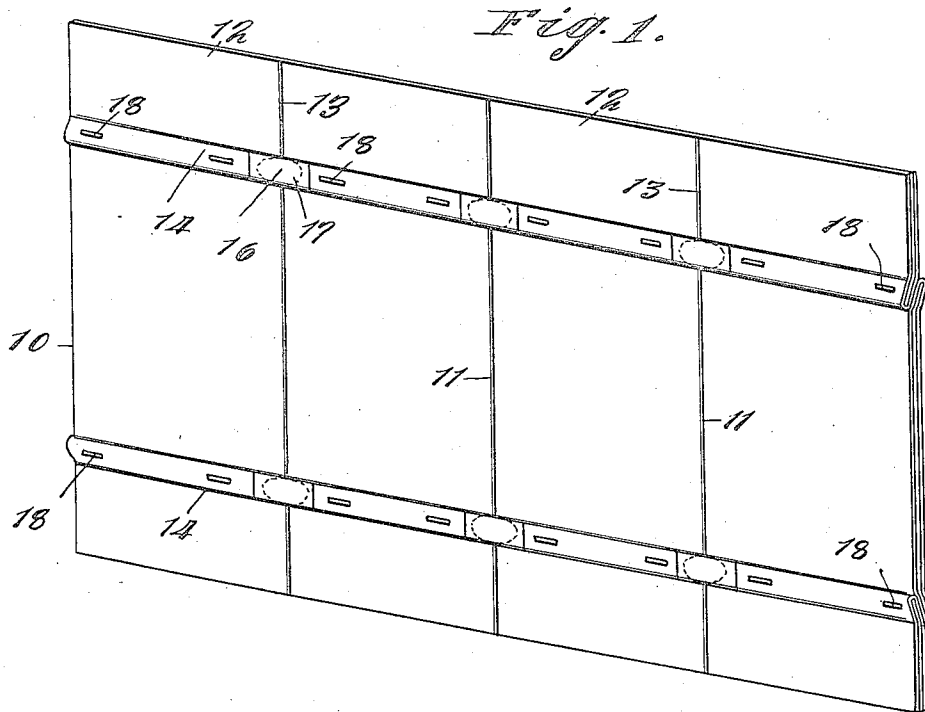
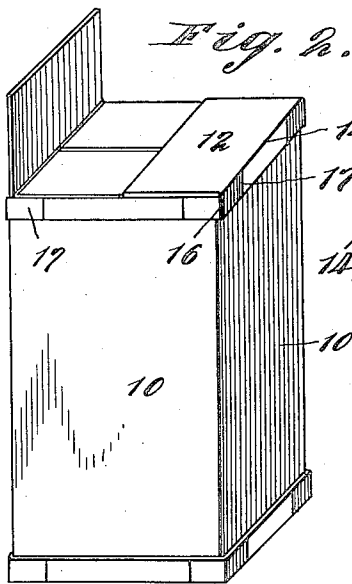
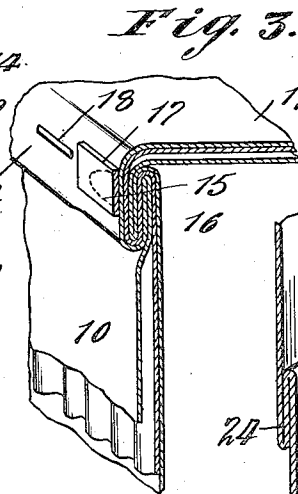
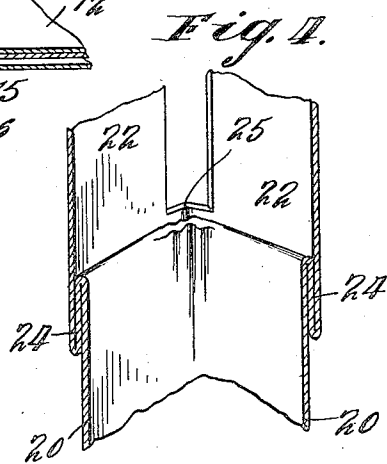


J. W. WEISS.
COLLAPSIBLE BOX.
APPLICATION FILED SEPT. 20, 1913.

1,132,292.

Patented Mar. 16, 1915.



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JOSEPH W. WEISS, OF BALTIMORE, MARYLAND.

COLLAPSIBLE BOX.

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Specification of Letters Patent.

Patented Mar. 16, 1915.

Continuation of application Serial No. 770,923, filed May 31, 1913. This application filed September 20, 1913. Serial No. 790,820.

To all whom it may concern:

Be it known that I, JOSEPH W. WEISS, a citizen of the United States, and resident of Baltimore city, Maryland, have invented certain new and useful Improvements in Collapsible Boxes, of which the following is a specification.

This invention relates to collapsible boxes or cartons and has for its primary object to provide a carton of this character with reinforcing means out of the material of the body thereof fashioned so as to present a continuous ridge about the perimeter of the box.

A further object is to provide strengthening means out of the material of the body of the carton disposed about the perimeter of the box and held thereto by the disposition of the material itself.

Still further objects and advantages will appear from the detailed description and the features of novelty will be particular pointed out in the claims.

The present application forms a continuation of my application Serial No. 770,923, filed May 31st, 1913.

In the accompanying drawings illustrating the preferred embodiments of this invention, Figure 1 is a perspective view of a corrugated board blank fashioned in accordance with my invention previous to uniting the extremities thereof. Fig. 2 is a perspective view of the box when set up. Fig. 3 is a detail perspective view partly in section illustrating the structure of the fold at the corners. Fig. 4 is a fragmental detail perspective view of a modified form in which single ply board is used.

Referring in detail to Figs. 1 and 3, the carton is made of corrugated board and consists of side walls 10 separated from each other by scores 11. Extending from the sides are flaps 12 which are turned over to form closures for the ends of the box when the latter is set up. Previous to or after forming the slits 13 which divide the flaps from each other I provide folds 14 adjacent to the junction of the sides and flaps, these folds extending across the entire width of the blank, as illustrated in Fig. 1. I then apply pressure or impact upon a zone 15 (shown in dotted lines Fig. 1) about the corners or apices 16 of the box, so as to break down the corrugations to a certain extent and thus allow the yielding of the material

about the corners to permit the encircling of the folds 14 about the body of the box when the same is set up. Preferably I paste strips 17 of some strong flexible material, as cloth, tough paper, or the like, upon the folds 14 at the corners so as to protect and reinforce the same during the process of bending the material to form the corners. If desired, also, a staple 18 or some other means may be used for holding the fold to the body. However, it is clear that when the meeting edges of the extremities of the blank are united the fold will by its own formation be held in place, and any additional fastening means may be dispensed with.

In the modified form illustrated in Fig. 4, the box is made of single ply fibrous board. The box consists of the sides 20 and flaps 22, a fold 24 being formed between the sides and flaps similarly to the fold 14 in the other form described. At the corners the stiffness of the material of the body and flaps is broken down forming a yielding portion 25 which readily yields inward under the tension of the fold when the box is set up. This yielding portion 25 presents a somewhat crimped appearance when the box is set up and permits the encircling of the body of the box by the fold which is originally of the same length as the combined width of the sides.

I have described the step in the process consisting in the breaking down of the stiffness of the material about the corners as being accomplished after the fold is formed. It will be clear, however, that this step may be carried out previous to the forming of the fold without sacrificing any of the advantages of my improved box.

It will thus be seen that I have provided a collapsible reinforced box of fibrous board, the reinforcement consisting of folds extending about the exterior of the sides adjacent to the end edges and forming continuous ridges out of the material of the box itself. The folds are not slit at the corners and are merely rounded off slightly due to the slight yielding of the material of the body. Although no external fastening means need be used to attach the folds to the body, they are securely held to the same and effectively reinforce and brace the same and form projections which space the body of the box from the surface on which it is supported.

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

1. A collapsible box formed of an integral sheet of fibrous board, comprising rectangular sides, end flaps, and a continuous fold between the sides and end flaps, the stiffness of the material at a zone about the apices of the box being broken down to permit the fold to readily bend about the corners of the body when set up, said fold forming a continuous two ply strengthening ridge extending entirely around the sides of the box adjacent to the edges and forming a continuous strengthening ridge for the sides and the corners of the box.

2. A collapsible box formed of an integral sheet of corrugated board comprising rectangular sides, end flaps, and a continuous

fold between the sides and end flaps extending outwardly from the body of the box and spacing the same from the supporting surface upon which the box rests, the corrugations at a zone about the apices of the box being collapsed to permit the fold to readily bend about the corners, said fold forming a continuous two ply strengthening ridge extending entirely around the sides of the box adjacent to the edges and forming a continuous strengthening ridge for the sides and the corners of the box.

Signed at Baltimore, in the State of Maryland, this thirteenth day of September, A. D. 1913.

JOSEPH W. WEISS.

Witnesses:

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