

(Model.)

J. DEAN.
MANUFACTURE OF BOXES.

No. 247,320.

Patented Sept. 20, 1881.

Fig. 1.

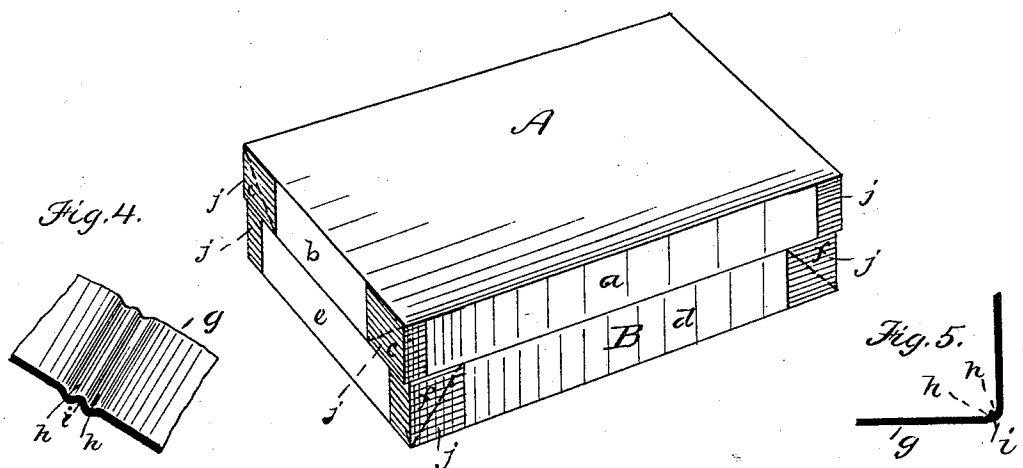


Fig. 2.

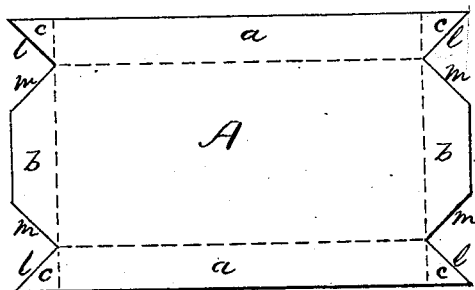


Fig. 6.

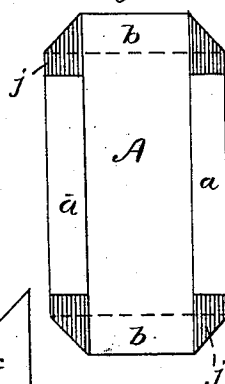
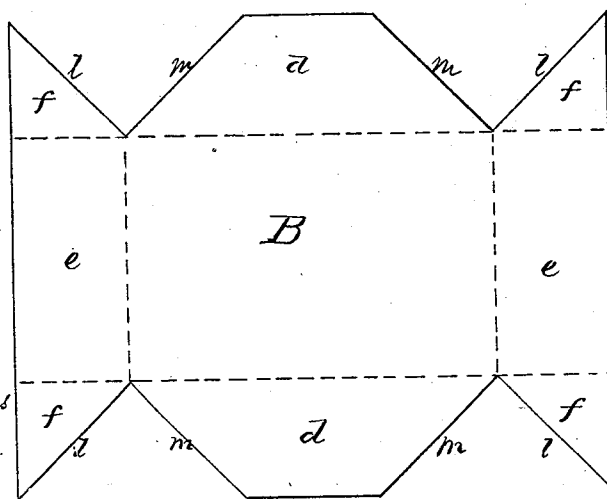


Fig. 3.



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UNITED STATES PATENT OFFICE.

JEREMIAH DEAN, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO HENRY K. DEAN, OF SAME PLACE.

MANUFACTURE OF BOXES.

SPECIFICATION forming part of Letters Patent No. 247,320, dated September 20, 1881.

Application filed June 9, 1881. (Model.)

To all whom it may concern:

Be it known that I, JEREMIAH DEAN, of Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in the Manufacture of Boxes, of which the following is a specification.

My invention relates to an improvement in the manufacture of boxes of the kind which are capable of being folded or flattened for packing and transportation, and when required for use can readily be transformed into boxes by simply straightening or turning up the folded sides and ends.

The invention consists in cutting out two V-shaped pieces from the ends or sides of a sheet of pasteboard or other suitable material of a flexible nature, the said V-shaped pieces commencing at the corners of the sheet, and the cut edges forming a right angle each with the other. The sides of the sheet are then bent up and the edges of the cut portions brought together so as to exactly meet, and over the cut edges is pasted a piece of paper, cloth, or other thin flexible material, so as to hold the sheet in the form of a box open at the top or upper side, and at the same time admit of its being folded or flattened to occupy a small space for packing and transportation.

The invention further consists in scoring the inner side of the sheet where it is to be bent upward, so as to form a central longitudinal ridge or projection, with a depression on each side of the same, or somewhat of a W shape in cross-section, so that in bending the sheet a great portion of the strain will be taken from the outer corner, and thus prevent its breaking or cracking.

Referring to the drawings, Figure 1 represents the two parts of a box embodying the features of my invention. Fig. 2 represents a sheet of pasteboard or other material, having the V-shaped pieces cut from the ends to form one part. Fig. 3 is the same with the V-shaped pieces cut from the sides to form the other part. Fig. 4 shows the peculiar score on the flat sheet, and Fig. 5 is the same with ends or sides turned up. Fig. 6 is a plan view of one of the parts of the box when folded or flattened.

The box is made in two parts, one part to

close over the other, and consequently to be made a little larger than the other. In Fig. 2, A may represent the upper part or cover of the box. Two V-shaped pieces are cut out at each end, leaving the portions *b b c c c c*, as shown, the cut commencing at each corner, and the edges *l m* being at right angles each with the other, so that when the sheet is bent up on a line indicated by the dotted lines the edges *l m* will exactly coincide, in which position they will be held together by pasting over the same a thin piece of paper, cloth, or other suitable material, *j*.

In Fig. 3, which shows a blank designed for the bottom part of a box, the V-shaped pieces between *f* and *d* are cut out from the sides of the sheet instead of the ends, as in Fig. 2, so as to bring the joined edges of the upper and lower portions of the box in different relative positions for the purpose of imparting greater strength to the box.

The sheet or blank on the lines indicated for turning up the edges is first to be scored by an instrument designed for the purpose. The score consists of a longitudinal ridge, *i*, having on each side a corresponding depression, *h h*, so that as the sides and ends of the sheet are turned up the depression *h h* will fit over the sides of the ridge *i*, thus relieving the outer bent corner from undue strain and preventing the stock from breaking.

The two parts of the box, A and B, are designed to close one over the other when in use.

When prepared for transportation or packing the two parts of the box are flattened down, as shown in Fig. 6, and when desired for use they can be readily straightened out.

What I claim as my invention is—

1. The herein-described blank for a box, consisting of a rectangular piece provided with bending or folding scores parallel to its edges, to distinguish the bottom from the side and end portions, and having at each corner a V-shaped recess, the apex of which lies at the junction of the scores and one of the sides of which extends therefrom to the corner of the blank, substantially as set forth.

2. As an improved article of manufacture, the herein-described box, consisting of a bottom and side and end portions, made of a continu-

ous blank, the said side and end portions terminating in diagonal lines, four of which extend from the scores to the corners of the blank, as described, and brought together and united
5 by a binding, whereby, by the turning of the sides and ends on the diagonal joints and on the scores, the sides and ends may be folded down, substantially as shown and described.
3. A box-blank, A B, having on the side to-
10 ward which it is to be folded the score, con-

sisting of the longitudinal ridge *i* and the depressions *h h*, substantially as and for the purpose specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JEREMIAH DEAN.

Witnesses:

JOS. H. ADAMS,
B. O'HARA.