G. A. BISLER. FOLDING BOX.

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NO MODEL. Fig. 3. thin mountain Fig. 5. Inventor Witnesses

United States Patent Office.

GUSTAV A. BISLER, OF PHILADELPHIA, PENNSYLVANIA.

FOLDING BOX.

SPECIFICATION forming part of Letters Patent No. 763,142, dated June 21, 1904.

Application filed November 14, 1903. Serial No. 181,183. (No model.)

To all whom it may concern:

Beit known that I, Gustav A. Bisler, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented new and useful Improvements in Folding Boxes, of which the following is a specification.

My invention consists of an improvement in a folding box, as will be hereinafter de-

10 scribed, and pointed out in the claim.

Figure 1 represents a perspective view of a folding box embodying my invention, one end of which being shown closed and the other end opened. Fig. 2 represents a section of a portion on line x x, Fig. 1. Fig. 3 represents a vertical section of the complete box. Fig. 4 represents a vertical section of a portion on an enlarged scale. Fig. 5 represents a perspective view of the body of the box in folded condition of a portion of the box in folded condition on an enlarged scale. Fig. 7 represents a vertical section of a portion of the lid of the box.

Similar letters of reference indicate corre-

sponding parts in the figures.

Referring to the drawings, A designates the body of a box formed of paper or other suitable material, such as pasteboard generally 30 used in the manufacture of boxes of the class, said body consisting of the bottom B, the sides C, the end folds D, and the flaps E, the latter being at the terminals of said sides C. On the exterior of the end folds D are the staples 35 F, and in the flaps E are openings G, which are adapted to receive said staples F. When the parts of the box are in assembled operative position, said staples protrude sufficiently to have straps H pass therethrough, said 40 straps being connected with the end folds D and appear on the exterior thereof, said straps and staples thus connecting the adjacent end folds and flaps and retaining the same in the upright position of the box. When the lid 45 J is placed on the body of the box, the ends of the straps H are connected by the strap K, the latter extending above the lid J and forming a convenient handle for the box and serving to retain the lid in position.

L designates the creased lines between the

bottom B and sides C, and M designates the creased lines between the bottom B and end folds D, it being noticed that each of said creased lines is formed by compressing the material of the body of the box along the lines 55 of the creases so as to upset said material, whereby the latter appears on one side as a groove and the other side as a bead, without fracturing the material or injuring the fiber thereof and in other respects forming a well-de- 60 fined joint of the order of a hinge which permits of ready folding and unfolding of the sides, end folds, and flaps and also preserving the strength of the box at the respective creases. On the end folds D are creases N, which ex- 65 tend parallel with the creases M and are adjacent thereto, it being noticed that the material existing between the creases M and N forms additional folds or walls P, which subsequently occupy the ends of the box when in 70 folded condition, as will be hereinafter more fully explained. As the tendency of the additional walls P is to drop, and thus lower the end folds D, the flaps E on the sides C serve to brace and hold up said end folds, and then 75 as said flaps and end folds are coupled by the staples F and straps H, said staples passing through the openings G in said flaps, as has been stated, the contiguous flaps, end folds, and additional walls are connected as one, 80 thus vastly stiffening the ends of the box.

In order to fold the box, the handle-strap K is removed and the straps H withdrawn from the staples F. The flaps E are then folded upon the sides C and said sides C and 85 flaps E folded on each other on the bottom B. Then the end folds D are folded inwardly over the sides C, it being noticed that said folds turn on the creases M as their hinges, bringing the folds P at the ends of the sides C and 90 flaps E. Then said folds D are folded downwardly on the sides C and turned on the creases N as their hinges, the folds P permitting the folding of the end folds D flat on the sides C regardless of the several thicknesses of mate- 95 rial between the bottom B and the end folds D without straining the creases M and N and without fracturing or cracking of the side creases M N and folds P, as will be apparent in Fig. 6. The box in its folded condition 100 appears as in Fig. 5, when, if desired, the straps H may pass through the staples F, thus preventing opening of the parts, and the body may be placed in the lid J with the handle-strap therein, forming convenient package for carrying, packing, transportation, &c., or the body of the box may be flattened out in knockdown condition, if desired.

Various changes may be made in the details of construction shown without departing from the general spirit of my invention, and I do not, therefore, desire to be limited in

each case to the same.

Having thus described my invention, what

I claim as new, and desire to secure by Letters 15 Patent, is—

A folding box having a bottom, a foldable side, a foldable end piece, a foldable flap on said side, an auxiliary foldable wall on the end piece integral therewith, a staple on said end piece, said flap having an opening adapted to receive said staple, and a strap connected with said end piece and adapted to pass through said staple on the exterior of said end piece.

GUSTAV A. BISLER.

Witnesses:

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