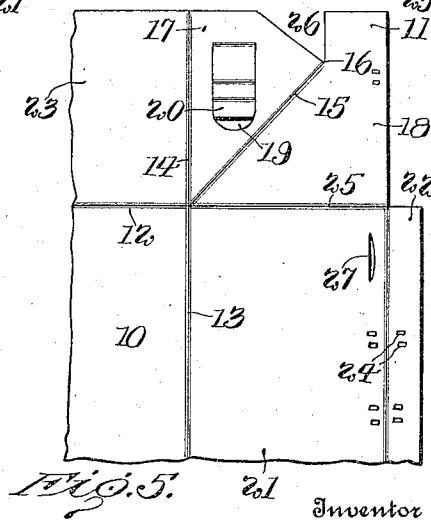
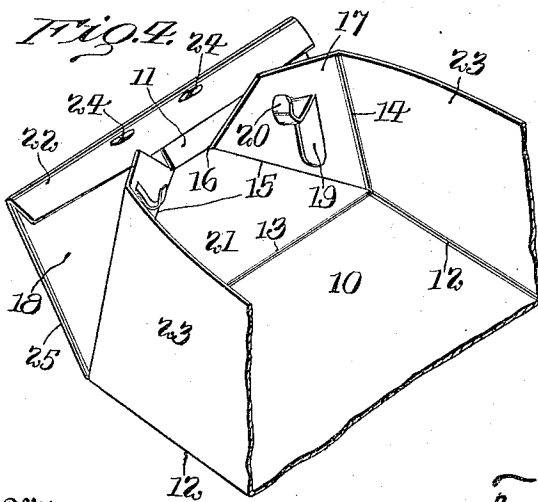
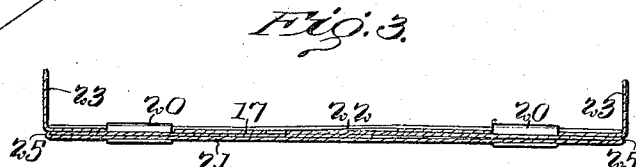
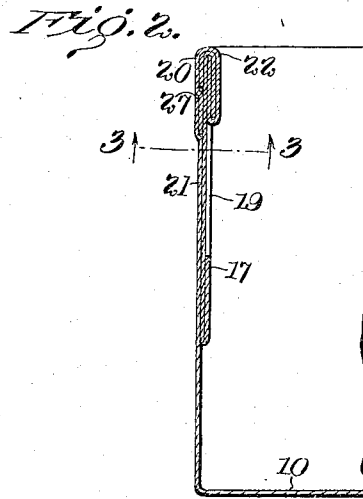
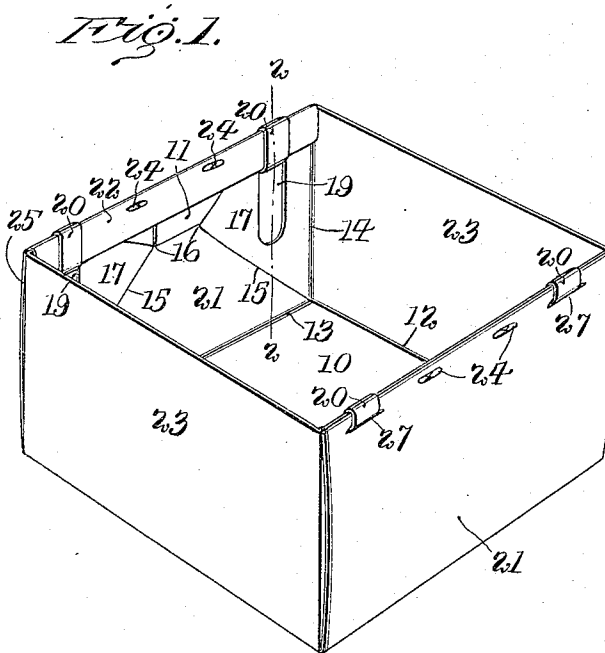


F. H. HOUGHLAND.
 COLLAPSIBLE BOX.
 APPLICATION FILED MAY 26, 1915.

1,168,073.

Patented Jan. 11, 1916.



Witnesses
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FRANK H. HOUGHLAND, OF HOUSTON, TEXAS.

COLLAPSIBLE BOX.

1,168,073.

Specification of Letters Patent.

Patented Jan. 11, 1916.

Application filed May 26, 1915. Serial No. 39,588.

To all whom it may concern:

Be it known that I, FRANK H. HOUGHLAND, a citizen of the United States, residing at Houston, Horns county, and State of Texas, have invented and discovered certain new and useful Improvements in Collapsible Boxes, of which the following is a specification.

My said invention consists in certain improvements in the details of construction and arrangement of parts of collapsible boxes of that type ordinarily constructed of pasteboard, or similar material, for packing purposes, such as are commonly used by tailors, millinery establishments, laundries, etc., whereby such a box is provided which is strong and durable, having ends and sides that are imperforate and capable of resisting considerable strain, as well as adapted to protect the contents from dust and moisture, all as will be hereinafter more fully described and claimed.

Referring to the accompanying drawings, which are made a part hereof, and on which similar reference characters indicate similar parts, Figure 1, is a perspective view of a box constructed in accordance with my said invention, it being understood that the top of the box is of similar construction, and adapted to telescope over the box proper, Fig. 2, a detail sectional view on the dotted line 2—2 in Fig. 1, Fig. 3, a sectional view on the dotted line 3—3 in Fig. 2, Fig. 4, a detailed perspective view showing one end of the box partially collapsed, and Fig. 5, a detail plan view showing one corner of the box blank as it appears before folded.

In forming this improved box the blank 10 is first cut with notches 26 in the edges near each end, leaving projecting flaps 11, which overlap somewhat when the sides are folded together. The sides are folded along lines 12, while the ends are joined to the bottom and fold along lines 13 and to the side pieces along lines 14. A diagonal fold 15 extends from the juncture between lines 13 and 14 to the point 16, in the end between the flap 11, dividing the section between lines 14 and 25 (Fig. 5) into an angular part 17, and an angular part 18, which parts double together on line 15 when said end is folded. In the angular part 17 are cut openings 19, forming tongues 20. The outside parts of the ends 21 of the box are formed with flaps 22, extending beyond the mean height of the box and adapted to fold over

onto the face of the upper edges of sections 17, when the box is erected. When the box is collapsed the sides 23 fold toward each other onto the bottom 10, the edges of the sides overlapping somewhat. The end pieces 21 lie flat and straight in line with the bottom 10, and the parts 17 and 18 lie flat and folded upon said ends 21. When it is desired to erect the box the sides 23 are opened out and brought into an upright position, which draws the end pieces 21 also to an upright position. The parts 17 and 18 double upon each other along the diagonal line 15, and the top edges of the angular part 17 come into parallel relation with the upper edges of the angular parts 18 and are inserted under the overlapping edge of the respective flaps 22, at each end of the box. The tongues 19 are then brought over the tops of the ends thus formed, as shown in the Figs. 1, 2 and 5, and are inserted through slits, or openings, 27, in the outer part 21, of the end of the box, thus tying the several folds of the end together and holding the box in erect position. The flap 22 is permanently secured in folded position at top of upper edge of the ends by staples 24, which extend through said flaps and the parts 18, as shown.

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

1. A collapsible box formed of a blank with its ends creased and adapted to be folded along lines extending from the juncture between the sides and bottom at right angles with each other, with sections between said lines adapted to fold on a diagonal line between said right angular lines, one of said sections being formed with a tongue adapted to be folded over the top edge and inserted in a slit in the outer end of said box when erected, substantially as set forth.

2. A collapsible box formed of a single piece blank having notches cut in opposite edges near each end, forming flaps at the corners thereof, and folded with the section between the lines of the fold between the bottom and the sides and the bottom and the ends adapted to double over along a diagonal line one part on the other, the part of each corner piece connected with the end being normally doubled over onto said end and secured thereto and the other part being formed with a tongue adapted to fold

over the top edge of the end of the box and be inserted in a slit on the outside, whereby said end is secured together, substantially as set forth.

- 5 3. A box formed of a blank having notches cut near each end on opposite sides thereof forming flaps at each corner, the section of the blank at each corner between the line of the bottom fold and the line of
10 the end fold being normally doubled on a diagonal line extending from the juncture between said two main folds to the bottom of the notch in said corner, the part of said corner connected with the end of the box

being normally folded onto said end and 15 permanently secured thereto by staples, and the other part being formed with a tongue adapted to fold over the top edge of the end and be inserted in a slit in the outside part thereof, substantially as set forth. 20

In witness whereof, I have hereunto set my hand and seal at Cincinnati, Ohio this 31st day of March, A. D. nineteen hundred and fifteen.

FRANK H. HOUGHLAND. [L. s.]

Witnesses:

W. R. ELLIOTT,

EDWIN L. MITCHELL.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."