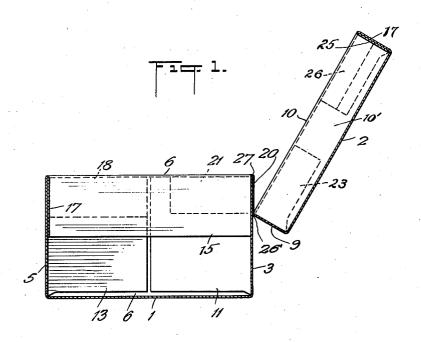
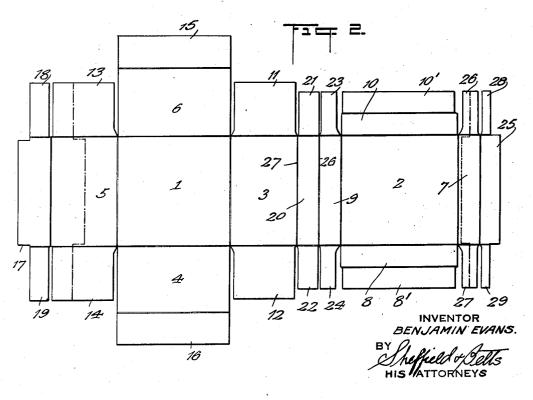
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FIBERBOARD BOX AND BLANK THEREFOR Original Filed June 3, 1930





## UNITED STATES PATENT OFFICE

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## FIBERBOARD BOX AND BLANK THEREFOR

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2 Claims. (Cl. 229-34)

The present application is a substitute for application Serial No. 459,041, filed June 3, 1930, which was abandoned through failure to pay the final fee after allowance.

This invention relates to boxes used as containers for various articles of commerce in which the latter are placed and shipped by a manufac-

turer or dealer in such articles.

Heretofore, boxes for the above mentioned pur-10 pose made of cardboard or fiberboard of various kinds have either been manufactured and assembled complete before delivery to the users or have been cut or stamped out in the form of flat blanks, in which form they are shipped to the user and 15 then assembled or made up in the form of boxes by the user.

The object of the present invention is to provide a blank of novel form and of greater utility which can be stamped or cut out into the desired 20 shape, shipped to the user either unfolded, partly folded or fully folded. The blanks may be assembled by the user by hand or by the use of a suitable machine which is supplied to the user for rapidly shaping and fastening the blanks in 25 the desired form to be used as containers.

One object of the present invention is also to provide a blank which may be made and shipped as above described, and one that may be embodied in various shapes and designs, particularly of the 30 form known as "telescopic" boxes, that is, having covers which are provided with depending margins which telescope with the bottom or main portion of the box and which at the same time will be made into the desired shape from an integral 35 blank of cardboard or similar material.

Heretofore, it has been found to be a comparatively easy matter to make such boxes having telescope covers in two pieces and which have been assembled by the user; but according to the best 40 of my knowledge and information it has not been considered practicable to make a box having a telescope cover of a single piece so that when assembled into the desired shape the cover will have the appearance and all of the functions of a box

45 having a separate cover.

Broadly stated, the box made according to the present invention is provided with a hinged cover, the hinge being integral as between the cover and the main body of the box, while at the same 50 time the cover telescopes with the main body of the box and the parts are provided with certain flaps or binding and retaining tongues which more securely hold the parts of the box in position than heretofore has been considered to be possible.

For a detailed description of one form of my

invention, reference may be had to the following specification and to the accompanying drawing forming a part thereof in which

Fig. 1 is a cross-sectional view of the preferred form of the improved box; and

Fig. 2 is a plan view of a blank from which the

box of Fig. 1 may be formed.

Referring to the drawing, the numeral I indicates the bottom member of the box and 2 indicates the top member thereof. The sides and 10 ends of the box are composed of the portions 3, 4, 5, and 6, and the margins of the cover are composed of the portions or strips 7, 8, 9, and 10. The side 3 of the body portion of the box is provided with the flaps or tongues II and I2 and 15 the opposite side is provided with the tongues 13 and 14. The ends of the box 4 and 6 are provided with additional flaps 15 and 16 and the outer edge of the part 5 is provided with a flap or strip 17 having tongues 18 and 19 carried  $_{20}$  thereby. The strip 17 is adapted to be folded over on the side 5 as indicated in dotted lines in Fig. 2 and glued or pasted thereto so that the said side is reinforced thereby. The marginal strip 9 of the cover 2 is connected with a similar strip 20 which in turn is connected with the side 3. Both of these strips are similar in shape and are provided with tongues 21, 22, and 23, 24, respectively, the use of which will be more fully explained hereafter. The marginal strip 7 of the cover 2 is provided with a strip 25 which is adapted to be folded upon the portion 1 and glued or pasted thereto, as indicated in dotted lines in Fig. 2. The ends of these portions are provided with the tongues 26, 27 and 28, 29, respectively. 35 The strips 8 and 10 are connected with the outer marginal strips 8' and 10'.

Fig. 1 indicates the manner in which the blank shown in Fig. 2 is bent or assembled into its final form. The cover of the box is formed by first folding the strip 25 over onto the strip 7 and gluing, pasting or otherwise fastening the former in position. The tongues 23, 26 and 24, 27 are then bent inward at right angles to the respective parts to which they are attached and then the strips 10, 10' and 8, 8' are bent at right angles to the top 2, after which the strip 10' and the strip 8' are bent inward over the tongues 23, 26 and 24, 27, respectively, the tongues or strips just referred to being secured in position by paste, glue or other  $_{50}$ suitable fastening means. This substantially completes the cover of the box. The body portion will now be described.

The tongues 21 and 22 at the ends of the strip 20 are bent downward at right angles and the 55

tongues 11 and 12 are bent upward. The strip 20 is folded back on the side 27. The flaps or tongues 13 and 14 are also bent upward at right angles (that is, folded toward the observer) and к then the parts 3, 5, 4, and 6 are bent upward at right angles in the same direction. Thereafter the tongues II and I3 are glued or pasted to the end \$, the tongue 21 being inserted between the tongue 11 and the side \$ and the tongues 12 and 10 14 are pasted or glued to the end 4, the tongue 22 being inserted between the tongue 12 and the end 4. The next step consists in folding the transverse strip 15 and the transverse strip 16 inwardly over the flaps or tongues 11, 13 and 12, 14 15 respectively. These strips are then glued or pasted in position. This forms the complete body portion of the box.

From the above description, it will be seen that the cover is hinged to one side of the box along 20 the line 26' between the strips 9 and 20, the latter part being double along the sides of the box forming a downwardly extending pocket as indicated at 26' in Fig. 1 and is held in position by reason of the fact that the tongues 21 and 22 have been 25 inserted beneath the flaps II and I2 and lie between the ends of said box and said flaps, by reason of the fact that the bend along the line 27 is a reverse bend, as indicated in Fig. 1. When the blank as indicated in Fig. 2 is stamped out  $^{30}$  or formed, it is preferable simultaneously or at any other suitable time to form indentations or creases which follow the lines locating the bends on the various portions of the blank. This will insure the bending of the flaps and tongues along  $^{35}$  the desired lines when the box is formed on suitable machines.

It will be appreciated that when these blanks are punched out the margins or waste portions of the original sheet are permitted to be attached 40 to the cut out portions at various points so that the waste portions do not immediately separate from the useful portions. When a sufficient stack of this semi-formed or cut or stamped sheets has accumulated from the stamping machine all of 45 the waste portions may be stripped off from the four sides of the stack without handling each sheet separately. This constitutes an added advantage in the design of the blanks, and eliminates "punching out." Obviously the parts which re-50 main attached may be at the ends of the very narrow strips between the various flaps and tongues. Two or three of such points of attachment on each side of the blank will be found to be sufficient to hold the waste portions and the useful portions in position until the stripping is done.

This method of stamping and forming the blanks results in a considerable saving of time and effort in handling the blanks prior to their preparation for use.

With the exception of paste or glue, which is applied between the side 5 and the strip 17 and between the side 7 and the strip 25, adhesive materials are not applied to the tongues or flaps, this 65 being done at the time that the boxes are as-

sembled in machines provided for that purpose or otherwise.

With the above description it will now be seen that the box has been formed into substantially the shape indicated in Fig. 2, and is thus complete.  $\,$  §

As stated in connection with the form of the box shown in Fig. 1, the glue or paste, or other fastening means, is supplied at any particular point, but preferably at the time that the box is being assembled or bent into form by means of 10 automatic machines which may be provided for this purpose.

Other advantages than those above pointed out will be apparent to persons skilled in the art of designing and making paper or cardboard boxes, 15 but it will also be appreciated that the boxes may be made completely telescopic by having the hinged portion nearer or at the bottom of the box, so that the body portion of the box and the cover are of substantially the same depth. The 20 latter form is particularly useful where thin articles are to be contained therein or transported;—for example, handkerchiefs, ties, gloves, and similar haberdashery, as well as other articles, such as cigars, cigarettes, and bottles or cakes of various toilet articles.

Having thus described one form of my invention, what I claim and desire to protect by Letters Patent is:

1. In a blank for a box made of fibrous or other suitable sheet material, constituting an integral sheet of such material providing top and bottom members and side and end portions for said box and the cover thereof, the improvement which comprises a side portion for the body of the box comprises a side portion for the body of the box comprises a side portion for the body of the box comprises a side portion for the body of the box comprises a side portion for the body of the box comprises a side portion for the cover, and said first mentioned strip being attached to said box at its ends and adapted to form a double wall providing a downwardly extending pocket on said side of the box and to constitute a hinge for the cover.

2. A blank for a box made of fibrous or other suitable sheet material and having a telescoping 4,5 cover united to the box by an integral hinge located below the upper margin of the latter, the improvements which comprise two main portions forming the top and bottom of the box respectively, three substantially parallel transverse 50 strips therebetween forming respectively sides of the box and cover and an intermediate strip to provide a hinge and downward extension between the first mentioned strips, said intermediate strip having a tongue at each end, the bottom 55of the box having lateral strips carried thereby and the outer edges of which have strips carried thereon that are adapted to be doubled on said lateral strips and also over tongues on the before mentioned side of the box and the tongues of 60 the intermediate strip, when the box is assembled in final form, whereby the corresponding corners are strengthened and the side of the box reinforced and a pocket formed thereon.

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