

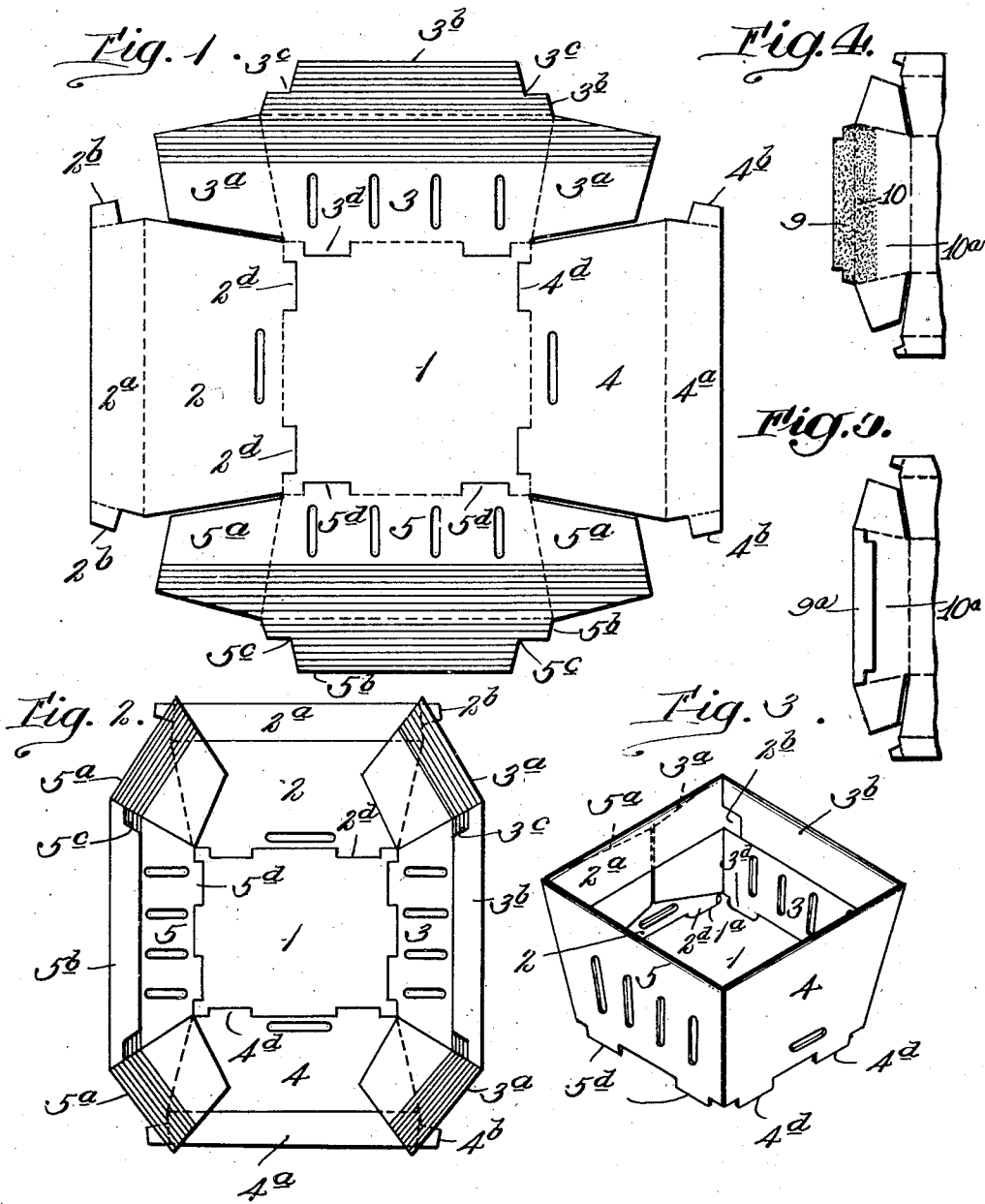
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E. W. LABOMBARDE

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PROCESS OF MAKING A BOX

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Inventor.  
E. W. Labombarde  
by George Rockwell,  
Atty.

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## PROCESS OF MAKING A BOX

Elie W. Labombarde, Nashua, N. H.; Frank B. Clancy, Nashua, N. H., administrator of said Elie W. Labombarde, deceased

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### 1 Claim. (Cl. 93—36)

The principal objects of my invention are to improve boxes of the type which are folded from blanks into box form and especially when the blanks are made of cardboard or similar material and may be used for holding berries or other fruit, although my boxes may be used for any desired purpose.

A feature of my invention is the process of applying adhesive to two portions, one of which is then folded into adhesive connection with the other portion and thereafter the whole blank is waxed at all exposed portions.

Other features will be pointed out below.

Figure 1 is a plan of a blank to be folded to form a box embodying my invention;

Figure 2 is a plan showing the blank of Figure 1 partially folded;

Figure 3 is a perspective view of a box made from the blank shown in Figure 1;

Figure 4 is a partial plan of a blank illustrating my new process for making a box; and

Figure 5 is similar to Figure 4 but showing a flap folded.

In Figures 1, 2 and 3 I show a blank made of cardboard or similar material and having a bottom portion 1, and side walls 2, 3, 4 and 5 provided with suitable ventilating openings. The side wall 3 is provided with flaps 3<sup>a</sup> and with a portion 3<sup>b</sup> to be folded inwardly. Side wall 5 is provided with similar flaps 5<sup>a</sup> and a similar portion 5<sup>b</sup> to be folded inwardly.

On that face of the blank which appears in Figure 1 I stripe with wax or similar waterproof material the portions 3<sup>b</sup> and 5<sup>b</sup> and also as much of the walls 3 and 5 and of the flaps 3<sup>a</sup> and 5<sup>a</sup> as is indicated by the striping. The striping with wax may be done with suitable corrugated rollers. The rest of said face of the blank is waxed all over and the opposite face may be waxed, if desired, to make waterproof and moisture-proof the box made from the blank. Glue or other adhesive is applied to the portions 3<sup>b</sup> and 5<sup>b</sup> and to the striped portions of walls 3 and 5 and then each portion 3<sup>b</sup> or 5<sup>b</sup> is folded inwardly and connected by adhesion to its adjacent wall 3 or 5 respectively, as shown in Figures 2 and 3. Glue will not adhere effectively to a fully waxed surface and so, by striping certain portions with wax, I make those portions sufficiently waterproof but not having so much wax as to prevent adhesion by glue.

Wall 2 has a portion 2<sup>a</sup> to be folded inwardly, portion 2<sup>a</sup> having locking tabs 2<sup>b</sup> at the extreme

outer corners of portion 2<sup>a</sup>. Wall 4 has a similar portion 4<sup>a</sup> and similar locking tabs 4<sup>b</sup>.

The portions 3<sup>b</sup> and 5<sup>b</sup> have, respectively, recesses 3<sup>c</sup> and 5<sup>c</sup> to cooperate with the locking tabs, as described below.

The bottom 1 of the blank is slit out to form portions such as 2<sup>d</sup> which are integral with wall 2 and become vertical legs when wall 2 is in its vertical position. These legs keep the bottom of the set-up box raised from its support and provide ventilation by permitting air to enter at the portions 1<sup>a</sup> of the bottom 1 where the leg portions were slit out. Similar legs are provided at 3<sup>d</sup>, 4<sup>d</sup> and 5<sup>d</sup>.

To set up the box the portions 3<sup>b</sup> and 5<sup>b</sup> are folded inwardly and held by glue, as shown in Figure 2. Then the walls are bent up, as shown in Figure 2, two of the portions 3<sup>a</sup> and 5<sup>a</sup>, for example, being placed, as shown in Figure 3, between wall 2 and portion 2<sup>a</sup>, the locking tabs 2<sup>b</sup> entering, with a distinct spring effect, the recesses 3<sup>c</sup> and 5<sup>c</sup>. The walls of recess 3<sup>c</sup>, as shown in Figure 3, prevent movement of the tabs 2<sup>b</sup> in the direction of walls 3 and 5 and also prevent upward movement of the tabs so that the portion 2<sup>a</sup> is locked in place and holds portions 3<sup>a</sup> and 5<sup>a</sup> in place in set-up position. The tabs 4<sup>b</sup> are similarly sprung into position into cooperating recesses in portions 3<sup>b</sup> and 5<sup>b</sup>.

When the box is set up the walls flare upwardly and outwardly to permit nesting.

In Figures 4 and 5 I illustrate a process of setting up a box and in this form I apply glue to portions 9 and 10 (in Figure 4), portion 9 corresponding with portion 3<sup>b</sup> of Figure 1 and portions 10 and 10<sup>a</sup> corresponding with wall 3 of Figure 1. Portion 9 is then folded over onto portion 10, as indicated in Figure 5, and adheres thereto, and thereafter the whole blank is thoroughly waxed throughout the exposed portions of both faces, including the reverse face 9<sup>a</sup> of portion 9 and including portion 10<sup>a</sup> but excluding the adhering face 9 and the adhering portion 10.

What I claim is:

The process of making a set-up box from a blank consisting in applying adhesive to one of two adjacent portions of the blank; then folding said portions with relation to each other to permit adhesion between them; then waxing the entire blank in flat condition at all exposed portions; and then folding the blank to set-up box form.

ELIE W. LABOMBARDE