

UNITED STATES PATENT OFFICE.

BENSON HARVEY SHEARER AND WILLIAM ORVILLE LEWIS, OF WEST CLARKSVILLE, NEW YORK.

EGG-PRESERVING CRATE.

SPECIFICATION forming part of Letters Patent No. 621,162, dated March 14, 1899.

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To all whom it may concern:

Be it known that we, BENSON HARVEY SHEARER and WILLIAM ORVILLE LEWIS, of West Clarksville, in the county of Allegany and State of New York, have invented a new and Improved Egg-Preserving Crate, of which the following is a full, clear, and exact description.

The object of our invention is to provide a crate especially adapted for eggs and so constructed that the body of the crate containing the eggs will be surrounded by air and moisture proof chambers, the air contained in the chambers or passage-ways serving to prevent the eggs from taking up moisture, thus maintaining the shells clear and bright.

A further object of the invention is to construct the box and its lid so that they will be air-tight and whereby when the lid is placed upon the body of the box the eggs will be prevented from becoming tainted.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a partial perspective view of the inner shell of the improved crate. Fig. 2 is perspective view of the crate laid upon its side, one portion of the crate being in vertical section on the line 2 2 in Fig. 1; and Fig. 3 is a vertical transverse section through the body of the crate and the lid adapted to fit upon the body.

Primarily the body of the crate consists of an inner shell A and an outer shell B, a space intervening the two shells, and the outer shell extends beyond the inner shell at the top or upper portion of the crate. The inner shell A is usually divided into two compartments by a partition 10. The inner face of the outer shell A is provided with a covering 10^a of an air and moisture proof material, which may be either fabric or paper. At the edges of the inner shell A a series of angular spacing-blocks 11 is placed in contact with the outer face of the said shell or the non-conducting material therefor, as shown in Fig. 1, and at the cen-

tral portion of the sides and bottom of the inner shell series of spacing-blocks 12 are secured, corresponding in thickness to the angular edge spacing-blocks 11, the spacing-blocks 12 consisting, preferably, of a single member. Each spacing-block is provided with a covering of non-conducting material, paper or fabric, and said covering is designated as 13. This same reference-numeral applies to the covering of all the spacing-blocks or their equivalents for the body, hereinafter mentioned.

The angular spacing-blocks 11 and intermediate spacing-blocks 12 are omitted at the open or mouth portion of the inner shell and instead strips *b* are employed, extending along each side of the shell from end to end and along the ends of the shell from side to side, the strips being also provided with a covering of non-conducting material. One or more sheets 14, of a material which is a non-conductor of moisture and air, are passed entirely around the body of the box in engagement with the outer faces of the spacing-blocks 11 and 12 and spacing-strips *b*, forming a continuous chamber 15 at the sides, ends, and bottom of the body of the box, as shown in Fig. 2. Edge spacing-blocks 11^a, corresponding to the blocks 11, are placed over said blocks 11 in engagement with the outer face of the non-conducting partition 14. Plain spacing-blocks 12^a are located over the blocks 12, as shown in Fig. 2, and strips *b'* are placed over the strips *b*, as shown in Fig. 3. A second partition 16, of a material which is a non-conductor of air and moisture, is passed around the body of the box over the blocks 11^a and 12^a and the strips *b'*, forming a second continuous or connected chamber 17. A third series of spacing-blocks 11^b and 12^b and strips *b*² is placed over the spacing-blocks 11^a and 12^a and the strips *b'*, and the outer shell B of the body of the box rests upon the third series of blocks and strips. The inner face of the outer shell is covered with a sheet 18, which is a non-conductor of air and moisture. The upper edges of the strips *b* and *b'* are flush with the upper edge of the inner shell, while the upper edge of the strip *b*² is flush with the corresponding portion of the outer shell. Thus it will be observed that the up-

per portion of the outer strip b^2 and the upper portion of the outer shell B extend beyond the upper edges of the intermediate strips and the inner shell, as shown in Fig. 3.

5 The space between the partition 16 and the outer shell constitutes a third chamber 19, extending around the sides, ends, and bottom portion of the intermediate chamber 17. A strip 19^a, preferably of cold-storage felt, is

10 laid upon and secured to the upper edges of the intermediate spacing-strips b and b' and the upper edge of the inner shell A, as is also shown in Fig. 3.

The cover C (shown in Fig. 3) consists of

15 an outer or upper board 20 of sufficient dimensions to extend over the outer shell B, flush with the outer faces of the same. The under face of the top board 20 of the cover is provided with a facing material 21, which

20 is a non-conductor of air and moisture. A spacing-strip 22 is secured upon the under face of the upper or outer board 20 of the cover, flush with the outer edges thereof, the spacing-strip 22 extending along both sides

25 and both ends of the said upper board. A partition 23 is secured to the under face of the spacing-strip 22, and the said partition is of a material which is a non-conductor of air and moisture. A second spacing-strip 24 is

30 secured to the partition 23 below the spacing-strip 22; but the spacing-strip 24 is narrower than the spacing-strip 22 and is flush with the inner face of the spacing-strip 22. A second partition 25, of the same material as the

35 partition 23, is secured to the under face of the spacing-strip 24. A third spacing-strip 26, of like dimensions to the intermediate spacing-strip 24, is secured beneath the said intermediate spacing-strip to the under face

40 of the second partition 25, and a bottom board 27, having its inner face prepared similarly to the inner face of the upper board 20, is secured to the lowermost spacing-strip 26.

It is evident that as the spacing-strips 24

45 and 26 are of less width than the spacing-strip 22 and the bottom board is secured to the narrower spacing-strips a marginal flange is provided for the cover, and upon the under face of this flange a packing 28, preferably

50 of cold-storage felt, is attached in any suitable or approved manner. When the cover is placed in position on the body of the box, the bottom board of the cover will rest upon the packing or cushion 19^a of the body and

55 the packing or cushion 28 on the flange of the cover will rest upon the upper edges of the outer spacing-strip b^2 of the box-body and the upper edge of the outer shell B, enabling the cover to be secured on the body of the box in

60 an air-tight and weatherproof manner.

It will be observed, further, that there are three separate chambers 15, 17, and 19 in the body between the inner and outer shells and that there are a corresponding number of

65 chambers (designated as c , c' , and c^2) between the top and bottom boards of the cover of the crate. The spacing-strips of the cover are in-

closed in a material of the same character as that applied to the spacing-strips and blocks of the body of the crate.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

1. An egg-preserving crate, consisting of an outer shell, an inner shell spaced from the outer shell, angular spacing-blocks provided with a covering of non-conducting material, and located between the outer and inner shells at the corners, spacing-blocks located at the central portion of the bottom and sides of the shells, partitions of a non-conducting material, passed around the said body between the said spacing-blocks, forming a series of independent and continuous chambers or passage-ways at the sides, ends and bottom of the body of the box, and means for closing the said chambers at the mouth or open portion of the said crate, for the purpose set forth.

2. An egg-preserving crate, consisting of an inner shell, an outer shell spaced from the inner shell, angular spacing-blocks provided with a covering of non-conducting material, and located between the inner and outer shells at the corners, spacing-blocks located at the central portion of the bottom and sides of the shells, partitions of a non-conducting material, passed around the said body between the said spacing-blocks, forming a series of independent and continuous chambers or passage-ways at the sides, ends, and bottom of the body of the box, means for closing the chambers at the mouth or open portion of the said crate, and a cover fitted to the body, which cover is provided with chambers or passage-ways between its top and its bottom surfaces, as and for the purpose specified.

3. An egg-preserving crate, comprising an inner shell, an outer shell spaced from the inner shell, the outer face of the inner shell and the inner face of the outer shell being provided with a non-conducting material, and the outer shell extending beyond the upper edge of the inner shell, spacing-strips arranged one over the other between the two shells at their upper portions, the uppermost spacing-strip extending to the upper edge of the outer shell, the inner spacing-strips extending flush with the upper edge of the inner shell, angular spacing-blocks located one over the other at the corner portions of the inner shell between the inner and outer shells, and corresponding in number and position to the spacing-strips, spacing-blocks located one over the other at the central portion of the sides and bottom of the shells, and partitions of a non-conducting material, secured between the spacing-strips and spacing-blocks and extending around the ends, sides and bottom of the inner shell, forming between the two shells a series of independent and continuous chambers, as specified.

4. In an egg-preserving crate, the combination with a body comprising an inner shell, and an outer shell spaced from the inner shell,

the outer face of the inner shell and the inner face of the outer shell being provided with a non-conducting material, and the outer shell extending beyond the upper edge of the inner shell, spacing-strips arranged one over the other between the two shells at their upper portions, the uppermost spacing-strip extending to the upper edge of the outer shell, the inner spacing-strips extending flush with the upper edge of the inner shell, angular spacing-blocks located one over the other at the corner portions of the inner shell between the inner and outer shells and corresponding in number and position to the spacing-strips, spacing-blocks located one over the other at the central portion of the sides and bottom of the shells, and partitions of a non-conducting material, secured between the spacing-strips

and spacing-blocks and extending around the ends, sides and bottom of the inner shell, forming between the two shells a series of independent and continuous chambers, of a cover fitted to the body in an air-tight manner, said cover comprising a top and a bottom board, spacing-strips placed one under the other between the top and the bottom boards, and partitions of a non-conducting material secured between the spacing-strips, and extending from end to end and from side to side of the inner portion of the cover, for the purpose set forth.

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