Feb. 24, 1959 J. E. T. RUDY 2,874,866

EGG CRATE

Filed March 27, 1956

FIG. 1

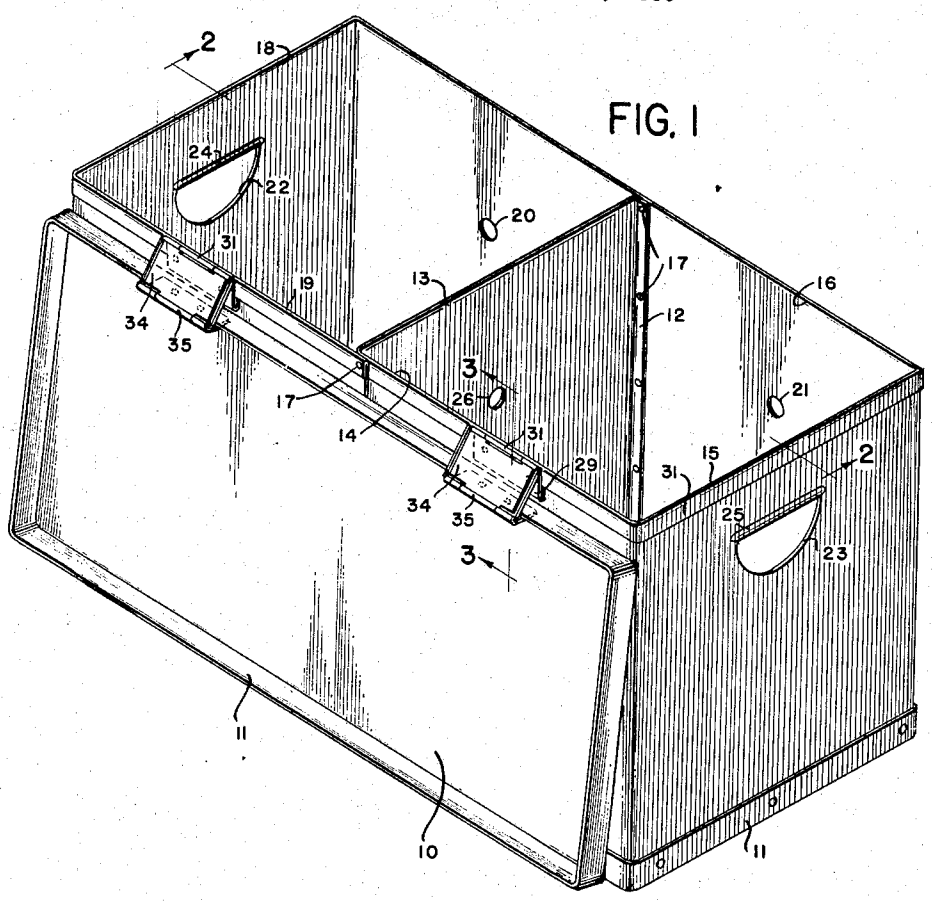


FIG. 2

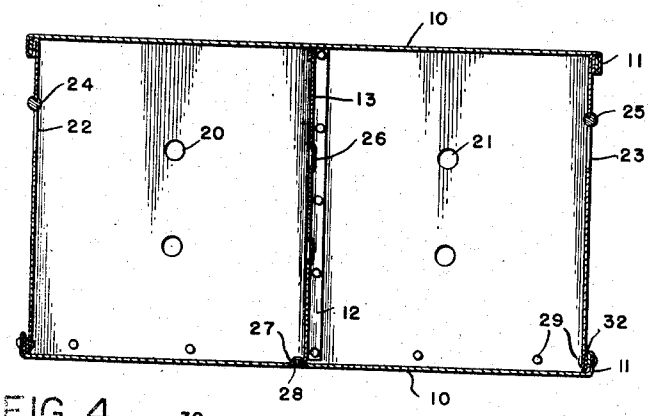


FIG. 3

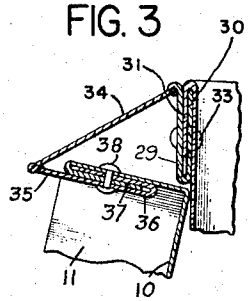
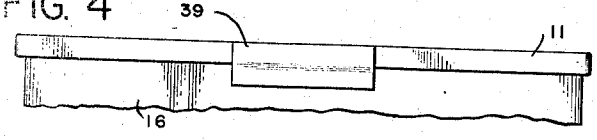


FIG. 4



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EGG CRATE

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3 Claims. (Cl. 220—20)

This invention relates to holders or containers for articles of various kinds including those which are perishable and fragile or easily broken as well, and more particularly to an egg crate which can be used for the handling, shipment and storage of eggs.

Egg crates heretofore in use have been fabricated of wood, cardboard and like materials, and, consequently, have bad rough edges or sharp corners, have been fragile, weak, incapable of withstanding rough handling and the forces to which they have been subjected either while immobile or in transit, and have afforded no particular protection against changes in temperature, and, therefore, the crates previously in use have lacked in desirability due to the above and the cost of handling the product accordingly has been excessive.

It is an object of the invention to overcome the objections above enumerated and to provide an egg crate which is relatively strong and durable, devoid of sharp angles or corners, which will improve the degree and character of ventilation and heat exchange, which is made of metal and can be used indefinitely thereby reducing the cost of the crate for the number of eggs handled, as well as a crate in which the top and bottom are identical and in which the top is hinged in a manner to assist in holding the top in closed position covering the crate or permitting it to be supported flat against the side of the same.

Other objects and advantages of the invention will be apparent from the following description taken in conjunction with the accompanying drawing wherein:

Fig. 1 is a perspective illustrating one application of the invention;

Fig. 2, a section on the line 2—2 of Fig. 1;

Fig. 3, a detail section of the hinge taken on the line 3—3 of Fig. 1; and

Fig. 4 is a fragmentary elevation of the side of the box opposite the hinges.

Briefly stated, the egg crate of the present invention comprises a pair of identical top and bottom members and a single partition and side wall forming sheet providing two compartments with the extremities of such sheet disposed at opposite sides of the crate and slightly overlapping the same and being riveted or otherwise secured to the adjacent walls, the bottom of the partition or transverse wall extended horizontally and riveted to the bottom thereby providing a unitary structure. Hinges serve to assist in retaining the cover on the body with such cover being adapted to be secured in closed position by means of an adhesive strip or tape. The crate is provided with handle openings with wooden portions or facings forming handles of a thickness which will avoid the metal cutting the hands when the crate is lifted, such wooden members being fastened in place in any desired manner as, for example, by cement. In addition to the end walls, the partition and side and end walls are provided with spaced ventilated openings.

With continued reference to the drawing, the egg crate of the present invention includes a pair of thin substantially rectangular sheet members 10 which form the top and bottom of the crate, such members being fabricated of lightweight metal, such as, for example, aluminum or magnesium, and in a manner to provide an annular reinforcing flange 11, the edge of which is reversely bent for reinforcement. The flange 11, may be produced by stamping, by bending the metal by hand or in any desired manner.

The upright walls of the egg crate preferably are of a single sheet of similar lightweight metal including an upright attaching flange 12 on one end of the partition 13, the opposite end of which is extended to form a side wall 14, then an end wall 15, then an integral side wall 16 to which the flange 12 is secured by means of rivets 17 or fastened in other desired manner. The side wall 16 is prolonged to form the side of the second half or compartment of the crate, the wall 16 being integral with the end wall 18 which is integral with a side wall 19 which overlaps the side wall 14 and is secured thereto in any desired manner as, for example, by additional rivets 17 to provide two conventional compartments as in the conventional egg crate.

The walls 13, 14, 16, 18 and 19 are provided with ventilating openings, such as, for example, openings 20 and 21, in the walls 16 and 18, or, in other words, the upright walls except the end walls have such ventilating openings.

The end walls 15 and 18 are provided with hand hold openings 22 and 23, the total area of which with the other ventilating openings provides for the necessary ventilation of eggs within the crate. At the top of the openings 22 and 23 are disposed handles 24 and 25 in the form of circular members cemented in place and providing an area of increased thickness to be gripped when the crate is raised and rendering such operation relatively simple.

The partition 13 is provided with ventilating openings 26 and at its lower edge is provided with a flange 27 which extends in the opposite direction from the flange 12, the flange 27 being connected by rivets 28 with the bottom 10, and such bottom being secured by rivets 29 to the respective side and end walls of the crate.

The top is secured to the side walls by means of a pair of spaced hinges having mounting portions 29 underlying reinforcing flange portions 30 (Fig. 3) disposed beneath an external reinforcing flange 31 along the entire upper edge of the side wall structure, the lower edge of said side wall structure having a corresponding edge 32. The mounting portion 29 is secured in place by rivets 33 and has pivoted thereto an integral or spacing portion 34 of the three-part hinge to the outer extremity of which is pivoted the top engaging portion 35 which has a reverse return flange 36 disposed beneath a reinforcing flange 37 of the flange 11 of the top 10, the parts being secured in similar relation by means of rivets or other fastening means 38.

It will be obvious to those skilled in the art that various changes may be made in the invention without departing from the spirit and scope thereof and therefore the invention is not limited by that which is illustrated in the drawing and described in the specification, but only as indicated in the accompanying claims.

What is claimed is:

1. An egg crate produced from relatively light weight sheet metal providing side and end walls, the upper edges of said walls being bent outwardly and downwardly to provide a peripheral flange, a sheet metal bottom and a sheet metal top for said crate, said top including a depending peripheral rim, the lower portion of said rim being bent inwardly and upwardly to provide a reinforcing flange adapted to overlap the reinforcing flange on the crate when the top is in closed position, three-part hinge means connecting said top to said crate whereby the top

may be swung from a closed position to an open position in close proximity to the wall to which attached, said hinge means comprising a spacer plate and outer legs pivoted to opposite sides of said plate, the outer legs of said hinge means being U-shaped and embracing and snugly engaging beneath the reinforcing flange on the crate and beneath the reinforcing flange on the top respectively.

2. A multiple compartment egg crate comprising a single sheet of relatively light weight metal providing side and end walls, the upper edges of said side and end walls being bent outwardly and downwardly to provide a peripheral reinforcing flange, a one piece sheet metal bottom and a one piece sheet metal top for said crate, said top including a depending peripheral rim, the lower portion of said rim being bent inwardly and upwardly to provide a reinforcing flange adapted to overlap the reinforcing flange of the crate when the top is in closed position, spaced three-part hinges connecting said top to a side wall of said crate whereby the top may be swung from a closed position to an open position in close proximity to the side wall to which attached, each of said hinges comprising a spacer plate and outer legs pivoted to opposite sides of said plate, the outer legs of said hinges being U-shaped and embracing and snugly engaging beneath the reinforcing flange on the side wall of the crate and beneath the reinforcing flange on the top respectively.

3. In an egg crate as set forth in claim 2, a substantially centrally located and vertically disposed partition wall having a right angular flange along its free vertical edge attached to the adjacent side wall of the crate and an oppositely directed right angular flange along its free bottom edge attached to the bottom of the crate.

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