No. 664,471. Patented Dec. 25, 1900.

H. J. ERKENSWICK.

CONSTRUCTION FOR FANCY BOXES.

(Application filed Mar. 2, 1898.)

(No Model.) 2 Sheets—Sheet 1.

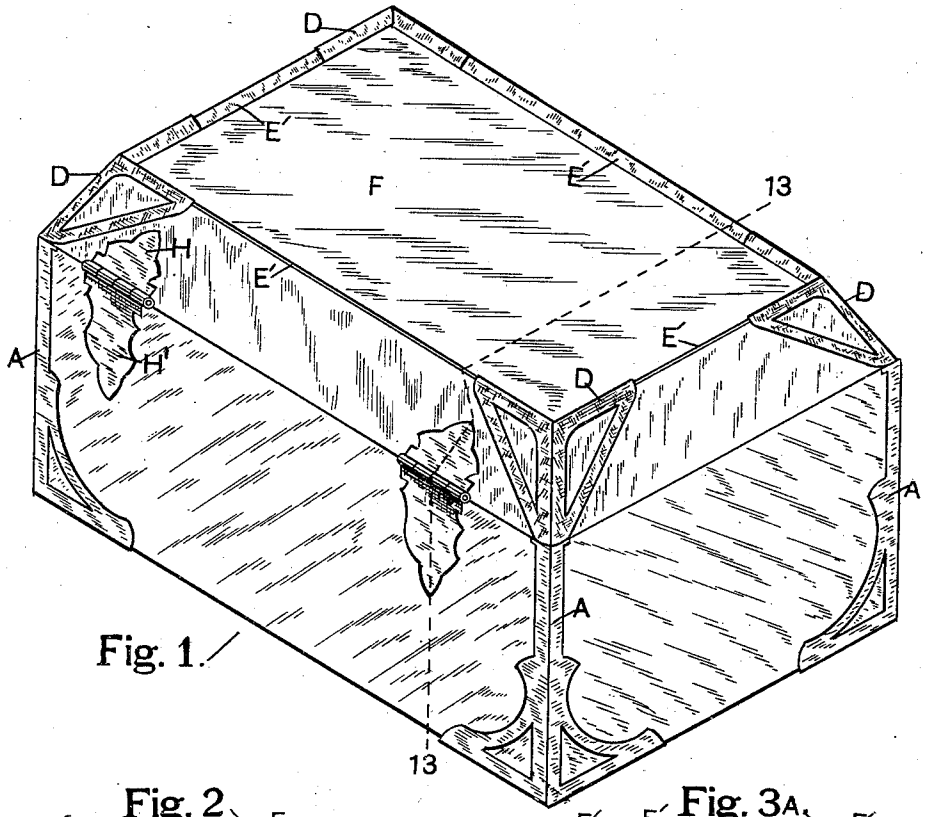


Fig. 1.

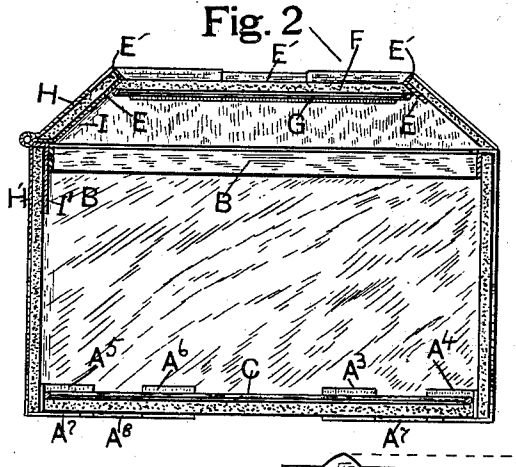


Fig. 2

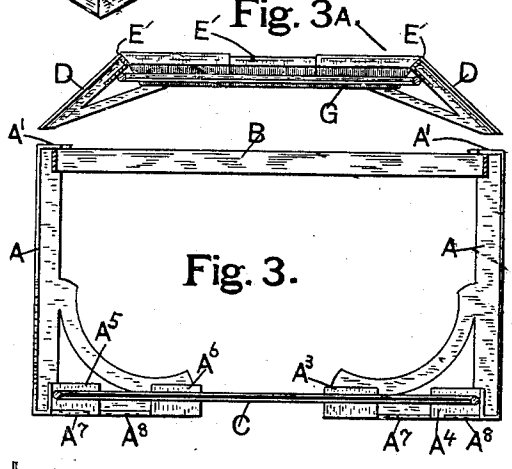


Fig. 3A.

Fig. 3.

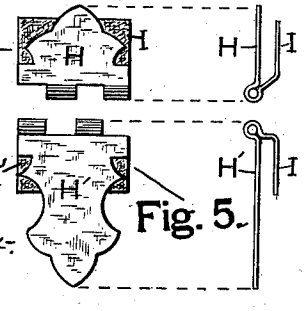


Fig. 4.

Fig. 5.

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His ATTORNEY.

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No. 664,471. Patented Dec. 25, 1900.

H. J. ERKENSWICK.

CONSTRUCTION FOR FANCY BOXES.

(Application filed Mar. 2, 1898.)

(No Model.) 2 Sheets—Sheet 2.

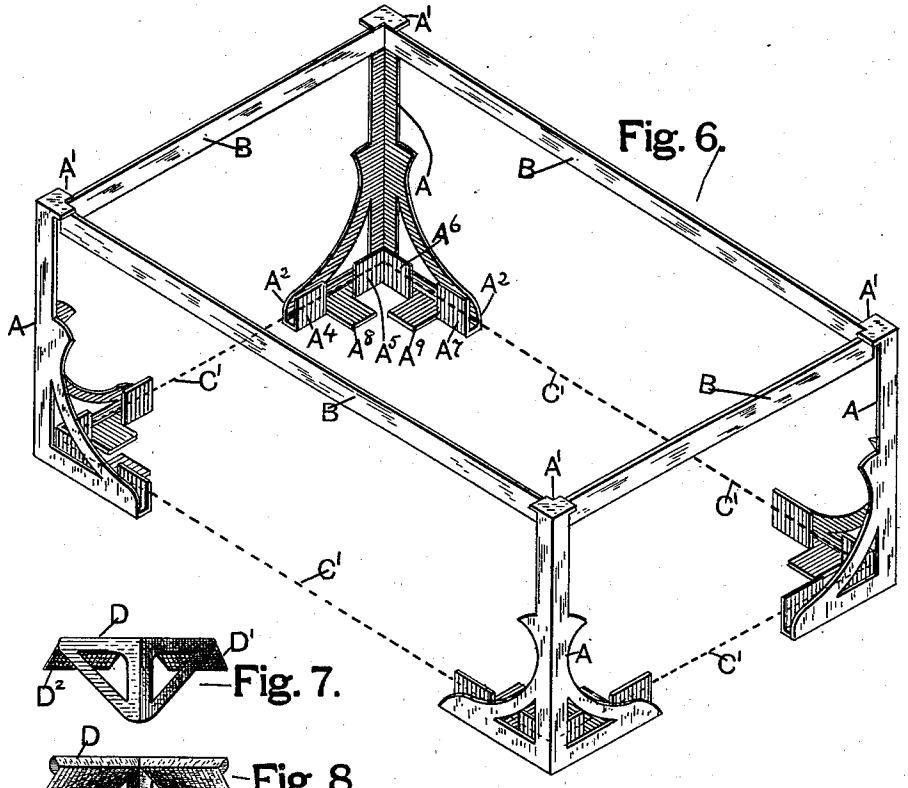


Fig. 6.

Fig. 7.

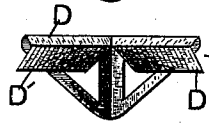


Fig. 8.

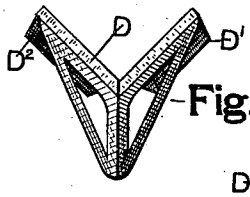


Fig. 9.

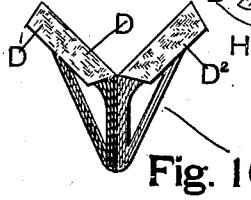


Fig. 10.

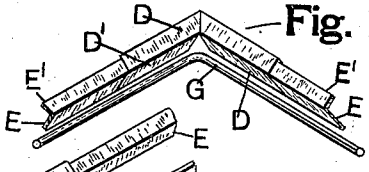


Fig. 12.

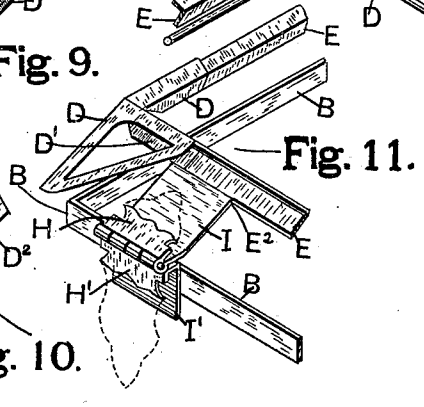


Fig. 11.

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UNITED STATES PATENT OFFICE.

HUBERT J. ERKENSWICK, OF CHICAGO, ILLINOIS.

CONSTRUCTION FOR FANCY BOXES.

SPECIFICATION forming part of Letters Patent No. 664,471, dated December 25, 1900.

Application filed March 2, 1898. Serial No. 672,239. (No model.)

To all whom it may concern:

Be it known that I, HUBERT J. ERKENSWICK, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Construction for Fancy Boxes, of which the following is a specification.

My invention relates particularly to the construction of fancy boxes, but may also be applied to boxes for many ordinary purposes.

My object is to so form and combine the parts of the frame of the box that almost any friable material may be used—such as glass, stone, &c.—for the sides, ends, bottom and top panels without the necessity of drilling holes therethrough for screws or rivets in making the attachments of the frame or hinges, lock, or such ornaments as may be necessary, as is fully described hereinafter and illustrated in the accompanying drawings, in which—

Figure 1 is an isometric perspective view of a fancy box in which is contained my improvements, in which we will suppose the sides, ends, and top and bottom panels are of plates of glass. Fig. 2 is a transverse section on broken line 13, Fig. 1, showing the frame of the body of the box and the lid thereof with the glass plates in position. Figs. 3 and 3^A show, respectively, the frame of the body of the box and of the lid on the same section as in Fig. 2, but with the plates of glass removed to illustrate the parts of the frame adapted to hold the glass plates securely in position. Figs. 4 and 5 show, respectively, front and edge elevations of the top and bottom members or halves of a clasp-hinge adapted to form one of a pair of hinges for connecting the lid with the body of the box without the use of rivets or screws. Fig. 6 is an isometric perspective view of the four corner-pieces of the main body of a rectangular box such as shown in Fig. 1, and there is also shown a rectangular frame connecting the tops of the corner-pieces and a broken line joining the bases thereof, which line indicates the position of a rectangular frame similar to the one connecting the tops of the corner-pieces, but not shown, because it would obscure the view of the retaining-lugs which project at the bottom portion of each corner-piece, which are more particularly described hereinafter. Figs. 7 and 8 are respectively a front and an inside or rear elevation of one of the corner-pieces of the lid of the box, which is plainly shown in position in Fig. 1 in perspective. Figs. 9 and 10 are respectively top and bottom plans of the corner-pieces shown in Figs. 7 and 8. Fig. 11 shows in isometric perspective the several parts comprising the extreme left-hand corner of the frame of the lid illustrated in Fig. 1, and also shows a corner of the rectangular frame which connects the tops of the four corner-pieces of the body of the box, and one of the hinges illustrating manner of connecting the top member thereof with the frame of the lid and the lower member with the rectangular frame at the top of the body of the box. Fig. 12 shows in isometric perspective a portion of the farther corner of the frame of the lid, as illustrated in Fig. 1, with the top glass panel removed to show the corner of a rectangular frame, usually of wire, which is adapted when in proper position and secured to hold the extreme top plate of glass of the lid in position.

The principal features of this invention are illustrated in Figs. 6 and 11, where the parts of the corners of the frame of both the body of the box and the lid thereof are plainly shown as they would appear with the glass plates removed. The other figures, however, are necessary to fully illustrate the complete construction.

All four of the corner-pieces A are usually stamped out of sheet metal to the form shown of an L cross-section and terminate at the top in a cap A′, which usually projects inwardly beyond the upper portions of the corner-piece. The lower end position of each corner-piece is projected in the direction of each member of the L shape into a bracket form, such as A^3 and A^2, and the base portion of each of these brackets is bent inwardly at a right angle, and then at a distance equal to the thickness of the glass panels, Figs. 2 and 3, lugs A^4, A^5, A^6, and A^7 are bent up at a right angle to the last bent portion, one lug, such as A^8 or A^9, being left projecting inwardly in the same plane as the first bent portion to receive the bottom panel. The top or head A′ of each corner-piece projects inwardly sufficiently to receive in con-

tact therewith and soldered thereto a corner of the rectangular frame B, whose outside faces are disposed inwardly from the inside faces of each of the corner-pieces at a distance about equal to the thickness of the glass panels, as shown in Fig. 3.

The broken line C′, Fig. 6, indicates the position of a rectangular frame C, Figs. 2 and 3, like frame B, or of wire C, as shown in Fig. 3, which rectangular frame C is usually soldered to the vertical lugs A^4, A^5, A^6, and A^7 of each of the corner-pieces at a distance above the horizontal lugs A^8 or A^9 about equal to the thickness of the bottom panel.

In assembling the parts of the body of this box the side and end panels are first slid in the space between the vertical lugs A^4, A^5, A^6, and A^7 until the ends of the panels at the top part pass in under the caps A′, the ends of the side panels usually being brought into contact with the inside faces of the corner-pieces A, when the ends of the end panels are placed in contact with the inside faces of the side panels and a suitable form thrown around the box temporarily to hold the parts in position and in close contact. The bottom panel may now be lowered into position with its bottom face at the corner portion resting upon the horizontal lugs A^8 and A^9 and the side edges in contact with the vertical lugs A^4 A^5, &c. The rectangular metal frame C, Figs. 2 and 3, usually of wire, is now lowered into the box and is of a size so that it will contact the vertical lugs of each corner-piece down close to the bottom panels, where it is soldered to the lugs and serves the double purpose of holding the bottom panel down in position in contact with horizontal lugs A^8 and A^9 and also preventing the outward movement of the lower ends of the corner-pieces. The tops of the corner-pieces may now be spread outwardly to a short distance, when the rectangular frame B may be placed in position in contact with the inside faces of the panels of the sides and ends of the box and the corners of the frame in under the cap A′ of the corner-pieces, which latter are now forced inward into close contact with the ends of the panels, when the frame B is soldered at the corners to caps A′ to effectually hold all the corner-pieces and side and end panels from outward movement, which completes the body of the box.

In the construction of the lid of the box the corner-pieces D are so formed that instead of producing a rectangular shape in all the dimensions, as in the body of the box, the side and end panels are disposed at an angle to a vertical line, so as to produce a chamfered top margin.

The vertical lugs of the corner-pieces A are represented in corner-pieces D by the two lugs D′ and D^2, which are adapted, in combination with the body of the corner-pieces, to yieldingly clasp the upper corner portions of the side and end panels.

All the corner-pieces of the lid are joined together by soldering to form a rectangular frame by means of connecting-bars E, having an L-shaped cross-section, Figs. 2, 3, 11, and 12.

The panels of glass forming the sides and ends of the chamfered part of the lid are slid into positions under the corner-pieces until the inside edges contact with the outwardly-projecting member E′ of the L-bars E, which serve as stops.

All the L-bars E and the corner-pieces D when soldered together form a frame which flares outwardly at the inside surface, and the top panel of glass F, Figs. 1 and 2, is ground at the edges to fit this flaring surface and of a size to rest with its outside surface even with the corner at the beginning of the flaring surface, so that a sunken panel is formed.

A rectangular wire G, in close contact with the inside surface of top panel F, is soldered to the corner-pieces D and also to the L-bars E for holding the top glass panel in position and to add strength to the frame formed of the L-bars and corner-pieces.

The manner of securing the members of the hinges to both the body of the box and the lid thereof will illustrate also how the parts of a lock may be attached or of any ornamental parts which may be necessary to add beauty to the design and at the same time serve to hold the several panels of glass in position which form the sides and ends of the lid. The separated members of one of these hinges are shown in Figs. 4 and 5. The outward portion H or H′ of each member is of a length to cover about the same proportionate amount of the top and bottom side panels. The inside portion I or I′ of each member is integral with the outside portion, the eye for the pivotal pin being formed between the two portions, which latter are separated about the amount of the thickness of the glass panels, so as to clasp them closely. When the hinges are placed and secured in position, usually the lower member of each hinge is slid down into contact and astraddle the top edge portion of the side panel of the box, the inside portion I′ being disposed between the rectangular frame B and the inside surface of the panel, when it is firmly soldered to the frame B, Fig. 11. After the lower members of a set of hinges are secured in position the top members may be slid astraddle the side panel of the lid until into contact with the lower edge portion, when the upper end of the inside portion I of the hinge will be in contact with the L-bar E, Fig. 11, at E^2, when it is secured by soldering. It is obvious that any desired number of hinges may be attached in this manner and that each hinge serves the double purpose of a pivotal center for the lid and a stop to hold the side panel from sliding out. It is also obvious that the parts shown as a hinge by the removal of the pivotal pin may also serve for the attachment of a padlock, or the lower outside member of the hinge

may be formed into a box for lock mechanism, whose catch is attached to the upper member, or the upper member alone may serve when soldered to the L-bar E to hold the front panels in position when no lock is used. It has been found in practice, however, in boxes of ordinary small sizes that the end panels and the front panel when no lock is attached may be held in position by the pressure of the corner-pieces D alone upon the lugs thereof and upon the L-bars without additional expedients. It is obvious that should any of the panels of a box of this kind be broken they may be easily replaced without much expense, and in the construction shown in the drawings the front end panels of the lid, if broken, may be easily withdrawn and replaced with new panels by a person of ordinary skill.

I claim as my invention—

1. In a construction for fancy boxes a means for securing the sides, ends and bottom panels of the body of the box in position, consisting of corner-pieces contacting the outside surface of the box and covering the corner-joints between the ends of the panels thereof, the upper ends of the corner-pieces connected by means inside the box and in contact with the inner surface of the panels thereof, each corner-piece projecting inwardly at the lower end and adapted to support the bottom panel of the box, and means inside the box for connecting the ends of all the corner-pieces, which means also serves to hold the bottom panel in position, substantially as hereinbefore shown and described.

2. In a construction for fancy boxes, the lid thereof comprising a series of panels held in position by means of a series of corner-pieces adapted to clasp the ends of the panels thereof and cover the joints between the panels at the corners of the lid, pieces connecting the upper terminal ends of the corner-pieces and forming therewith a frame adapted to receive the top panel of the lid, means inside the lid also connecting all the corner-pieces and serving to hold the top panel thereof in position, in the manner substantially as and for the purpose stated.

3. In a construction for fancy boxes, the combination, with the corner-posts, each of which is L-shaped in cross-section and has each side projected into a bracket, the base of each bracket being bent inwardly and having portions thereof bent upwardly, a frame secured to the upwardly-projecting portions of said bases, and means for connecting the tops of the posts together.

4. In a construction for fancy boxes, the combination, with the corner-posts, each of which is L-shaped in cross-section and has the top and bottom portions thereof bent inwardly, the lower portion of each member of the L being extended into the form of a bracket, of a frame secured to said inwardly-projecting portions at the top and bottom for securing the walls and the bottom in place, said frames being at a distance from the L-shaped portions equal to the thickness of the walls.

5. A fancy box, the frame of which comprises angular posts and angular frames secured to the tops and bottoms thereof, the tops of the posts being bent inwardly and the bottoms being bent inwardly and a portion thereof bent upwardly, the walls of the box being secured between the bent portions of the tops and bottoms and the bottom being secured between the bottoms of the posts and the frame secured to the bent portions thereof.

In testimony that I claim the foregoing I have hereunto set my hand, this 21st day of December, 1897, in the presence of witnesses.

HUBERT J. ERKENSWICK.

Witnesses:
H. L. BROWN,
OSCAR SNELL.