No. 618,160. Patented Jan. 24, 1899.

C. I. J. BARKER.

DISPLAY CASE.

(Application filed Nov. 30, 1897.)

(No Model.)

Fig. 1.

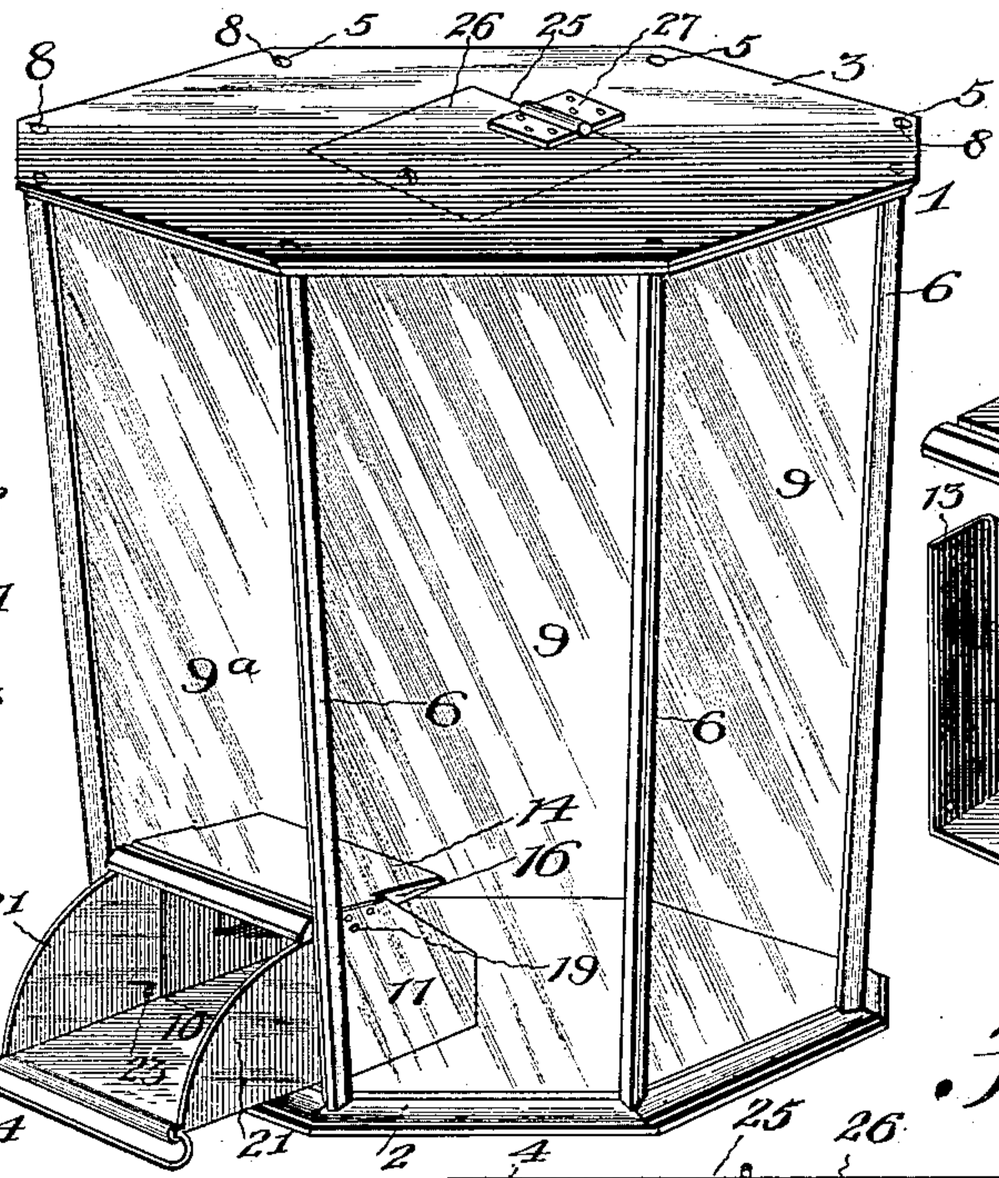


Fig. 4.

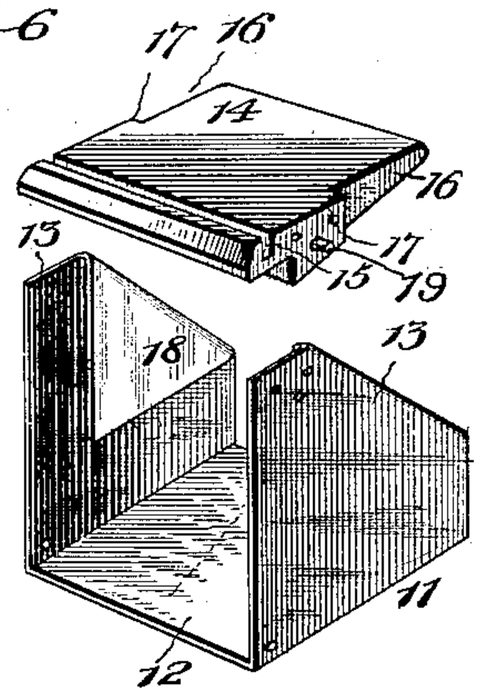


Fig. 5.

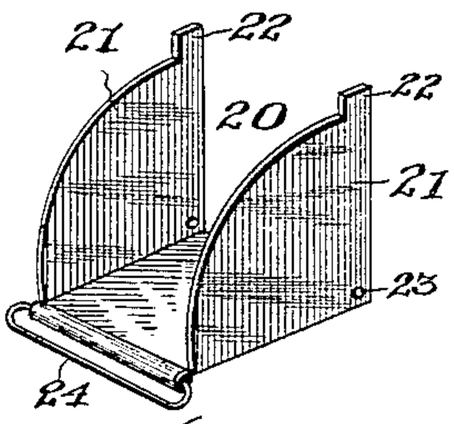


Fig. 3.

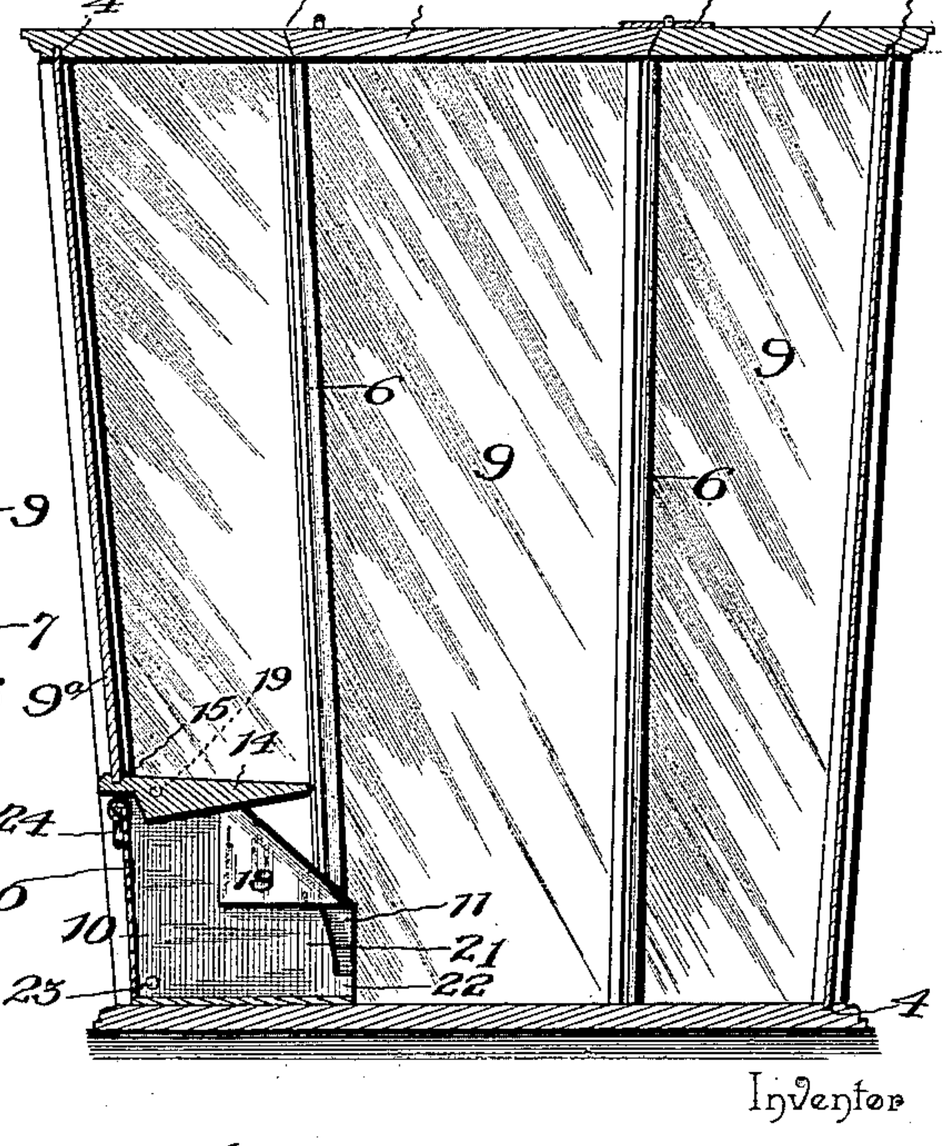
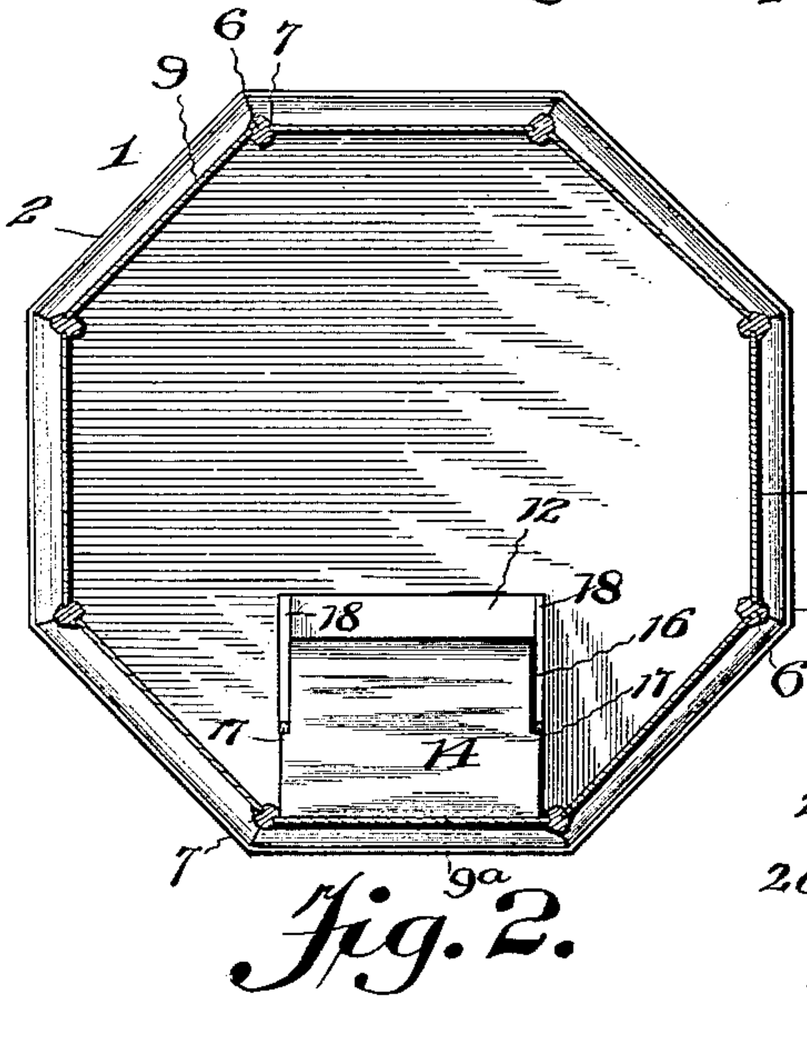


Fig. 2.



Inventor

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UNITED STATES PATENT OFFICE.

CLARENCE IRVIN JOHN BARKER, OF DAVID CITY, NEBRASKA.

DISPLAY-CASE.

SPECIFICATION forming part of Letters Patent No. 618,160, dated January 24, 1899.

Application filed November 30, 1897. Serial No. 660,281. (No model.)

To all whom it may concern:

Be it known that I, CLARENCE IRVIN JOHN BARKER, a citizen of the United States, residing at David City, in the county of Butler and State of Nebraska, have invented a new and useful Display-Case, of which the following is a specification.

This invention relates to improvements in display and vending cases, especially adapted for use by grocers and others in dispensing various kinds of merchandise, candies, &c.; and the object that I have in view is to provide a simple and inexpensive construction adapted to display the contents of the case and to enable the same to be removed by an ordinary scoop.

A further object of the invention is to provide the case with improved means for permitting easy and ready removal of the contents of the lower part of the case, and such delivery means embodies a novel construction and arrangement of parts adapted to check and prevent the free exit of the merchandise and at the same time hold the delivery-gate in the position to which it may be adjusted and also obviate the liability of the delivery-gate to become clogged by the accumulation of the merchandise in the guides for said delivery-gate.

With these ends in view the invention consists in the novel construction and arrangement of parts, which will be hereinafter fully described and claimed.

To enable others to understand my invention, I have illustrated the same in the accompanying drawings, forming a part of this specification, and in which—

Figure 1 is a perspective view of a display-case constructed in accordance with my invention. Fig. 2 is a horizontal sectional view on the plane indicated by the dotted line 2 2 of Fig. 3. Fig. 3 is a vertical transverse sectional view through the case, its delivery-spout, and the delivery-gate on the plane indicated by the dotted line 3 3, Fig. 2. Fig. 4 is a detail perspective view of the delivery-spout and its top or roof removed from the display-case. Fig. 5 is a detail view of the delivery-gate.

Like numerals of reference denote like and corresponding parts in each of the several figures of the drawings.

1 designates the display-case in its entirety. Said case is of octagonal form in plan or cross-section and of tapering form in vertical section, substantially as shown by the drawings; but I do not strictly confine myself to this particular shape of the case, as I am aware that its form and dimensions may be modified without departing from the spirit of the invention.

The case consists of a bottom 2, a top 3, the vertical posts 6, and the walls 9 9ª. The bottom and the top are each preferably of octagonal form; but the top is of somewhat larger size than the bottom to give to the posts and the walls a vertical inclination outwardly from the bottom toward the top. The top and bottom are provided in their opposing faces with the grooves 4, and the top and bottom are each provided with vertical sockets or openings 5, which are produced at the angles formed by the meeting inclined edges of said top and bottom. Each post 6 is provided at its extremities with the tenons 8 and in its opposite side edges with longitudinal grooves 7. The tenons 8 of the vertical posts are fitted in the sockets or openings 5 in the top and bottom of the case, and said tenons are secured in place by any suitable form of fastener. The posts incline upwardly and outwardly from the bottom toward the top, and said posts are spaced at suitable intervals from each other at the angles of the top and bottom.

The walls 9 9ª of the case are preferably made of glass, so that the contents of the case may be exposed and displayed to view, and each wall, except the wall 9ª, is fitted at its upper and lower edges in the grooves 4 of the top and bottom, while the side edges of the glass walls occupy the longitudinal grooves 7 in the opposite edges of the upright posts 6.

The described construction of the case enables the several parts thereof to be readily assembled together in a manner to bind or confine the transparent walls securely in position without the necessity of fastening them in place, thus simplifying and cheapening the construction and producing a simple structure in which all the parts are bound firmly together. The wall 9ª of the case is somewhat shorter than either of the other walls 9 and it terminates above the bottom 2 for a

suitable distance to provide a delivery-opening 10. In this delivery-opening is adjusted a delivery-spout 11, which is situated within the case and is arranged in such relation thereto and to the delivery-gate 20 that the latter is adapted to occupy a position when closed substantially flush with the transparent short wall 9^a of the case. This delivery-spout 11 is constructed, preferably, from a single piece of sheet metal of suitable form and bent to provide the bottom 12 and the walls 13, arranged, preferably, at right angles to the bottom. The delivery-spout is adjusted in the case 1 coincident with the delivery-opening 10 therein, and it is secured in place by nails, brads, or other fasteners, which are forced through the metal forming said delivery-spout and into the bottom and adjacent vertical posts 6 of said case. The upper side of the delivery-spout when constructed of sheet metal is open, and to prevent the contents from passing too freely into the delivery-spout and interfering with the proper adjustment of the delivery-gate 20 I provide an overhanging board or plate 14. This board or plate may be constructed of wood or metal; but, as shown by the drawings, I have illustrated it constructed of wood in a manner to form a seat for the lower edge of the short wall 9^a of the case. This board or plate 14 serves the purpose of a deflector, because it is situated above the delivery-spout 11 and is inclined inwardly toward the center of the case from the wall 9^a thereof. This deflector plate or board is provided near its front edge with a transverse groove 15, produced in the upper face of said deflector plate or board, and the inner projecting part of said deflector plate or board has longitudinal recesses 16 formed in its side edges, such recesses terminating at about the middle of the deflector plate or board and forming the shoulders or ledges 17. The upright walls 13 of the metallic delivery-spout are bent or turned inwardly to form the guides 18. The deflector plate or board is assembled in such relation to the delivery-spout and the wall 9^a of the case that the groove 15 thereof receives the lower edge of the wall 9^a, and thus constitutes a seat therefor, while the inturned flanges or guides 18 of the metallic spout occupy the longitudinal recesses 16 at the sides of said deflector-plate, the front edges of said flanges or guides 18 abutting against the shoulders 17 of the deflector plate or board.

The deflector plate or board is fastened rigidly in place by suitable nails or screws 19, which unite the deflector plate or board and the walls 13 of the delivery-spout rigidly together, and two of these screws 19 are situated close to the front edge of the deflector-plate in position to form stops for the delivery-gate 20, as will presently appear. This delivery-gate 20 is constructed, preferably, from a single piece of sheet metal, which is stamped in suitable blank form and bent to form the wings 21. Said delivery-gate is hung or pivoted, as at 23, at its lower inner corner or angle formed by the junction of the wings 21 with the gate 20, and the pivots for said delivery-gate pass through the wings 21 in the walls 13 of the delivery-spout and into adjacent posts 6 of the case 1. The wings 21 of the delivery-gate have segmental edges adapted to play in the guides or flanges 18 of the delivery-spout for the purpose of holding the delivery-gate in proper position within the spout and of preventing accumulation of the merchandise between the gate and said spout. At their inner free edges the wings of the delivery-gate are formed with the lugs 22, which project beyond the segmental edges of said wings and are adapted to abut against the stop-pins 19 when the gate is turned downwardly, thus arresting the opening movement of the gate.

The delivery-gate, constructed as described and limited in its opening movement by the coacting lugs and stops, is adapted to be projected beyond the plane of the wall 9^a of the gate, and the opening movement of the delivery-gate is limited so that the gate will come to a stop when it assumes an inclined position with relation to the bottom 12 of the delivery-spout. When the gate is opened, as described, its wings 21 are extended or projected with said gate beyond the case, and the described construction of the delivery-spout, the deflector plate or board, and the gate prevents the contents of the case from escaping through the delivery-opening when the gate is opened. A scoop may readily be thrust through the delivery-gate and the spout to be loaded with the contents of the case, and in this connection it is to be observed that the gate and the bottom of the delivery-spout provide a continuous metallic surface for the scoop to ride against in the act of inserting or withdrawing it from the case.

The delivery-gate is provided, preferably, with a bail or handle 24, by which the gate may be opened or closed, and when the gate is raised to its closed position it lies below the projecting front edge of the deflector plate or board 14.

The deflector plate or board in my improved case serves an important purpose in that it sustains the weight of the contents of the case above the delivery-opening therein, and the construction of the spout in connection with this deflector plate or board prevents the contents of the case from pressing against the gate when it is in its closed position.

The top 3 of the case is provided with a central supply-opening 25, through which the merchandise may be readily placed in the case, and said opening is designed to be closed by a cover 26, which is hinged, as at 27, to the top. To make the cover fit tightly in the opening 25 of the case and to lie flush therewith when closed, I prefer to bevel the edges of the opening 25 and to give the edges of the

cover a like bevel or inclination in order to secure the desired tight fitting of the cover in the opening of the case.

I prefer to construct the bottom 2 and top 3 of wood, and in this connection it is to be observed that the top is assembled in such relation to the bottom that the grain of the wood in the top lies at right angles to the grain of the wood of the bottom. The posts 6 join the top and bottom rigidly together, and by arranging the top and bottom to have the grain of the wood therein run at right angles the warpage and shrinkage of the case when constructed of wood is reduced to a minimun.

I am aware that slight changes in the form and proportion of parts may be made without departing from the spirit or sacrificing the advantages of the invention.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A display-case provided with a short wall forming a delivery-opening between its lower edge and the bottom, a delivery-spout situated within the case and having its walls provided with guide-flanges, a deflector-plate fixed to the walls of the delivery-spout and having a groove in which is seated the short wall of the case, a delivery-gate pivoted to the delivery-spout and provided with the side wings and the stop-lugs, and stops in the path of the lugs of said gate to limit its upward movement, substantially as and for the purposes described.

2. A display and vending cabinet provided with the delivery-spout having its side walls bent inwardly at the inner corners to form the flanged guides, a deflector secured between the upper front unflanged edges of the spout and having the longitudinal recesses, 16, in the side edges thereof, the flanged delivery-gate pivoted within the spout and provided at its inner end with the projecting lugs, 22, arranged to play in the flanged guides and the recesses of the deflector, and the stop-pins secured to the deflector in the paths of the lugs, 22, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

CLARENCE IRVIN JOHN BARKER.

Witnesses:

G. W. GATES,

N. F. MOTT.