

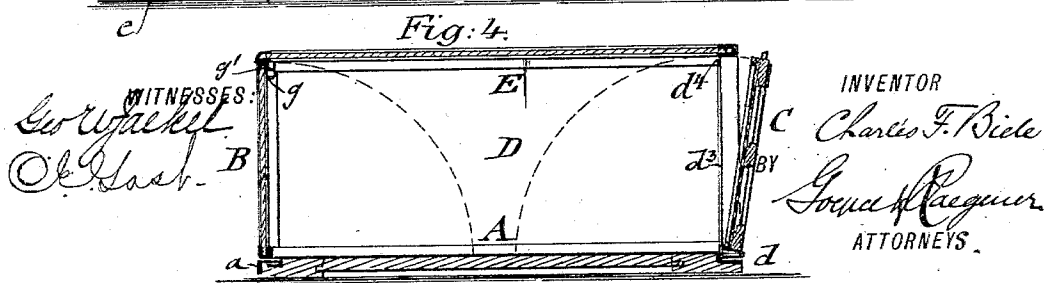
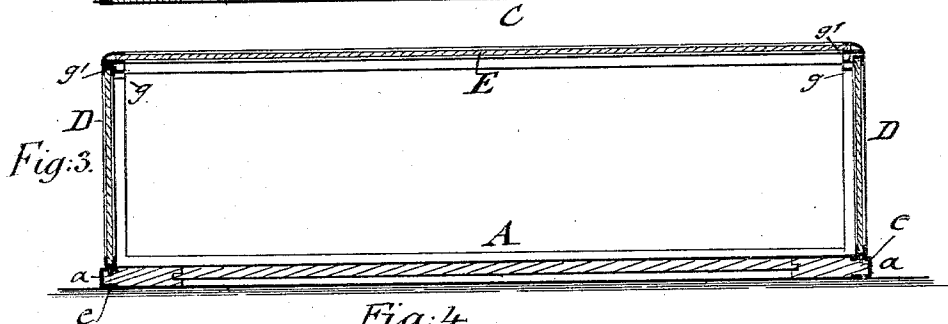
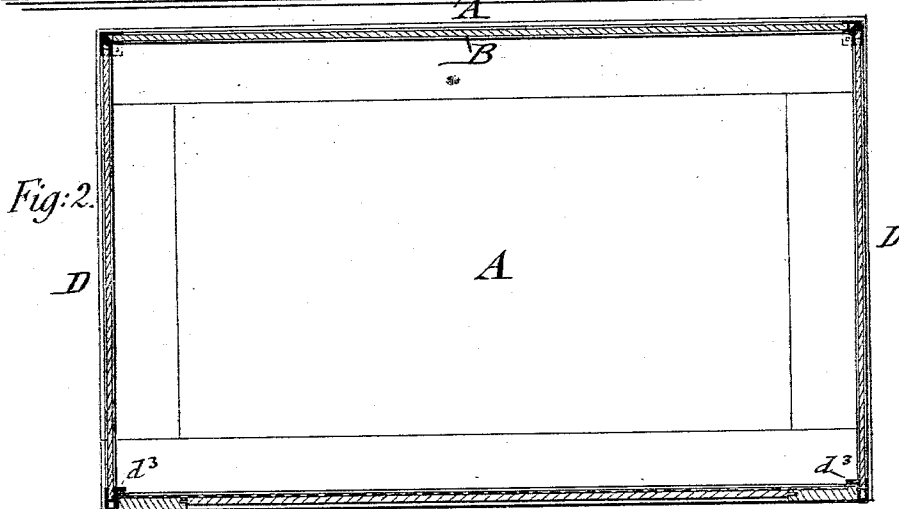
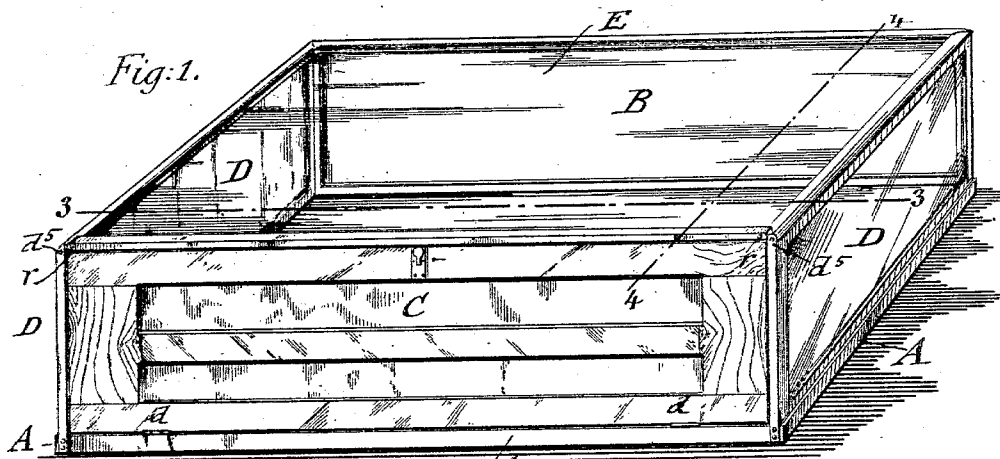
(No Model.)

2 Sheets—Sheet 1.

C. F. BIELE.
SHOW CASE.

No. 562,701.

Patented June 23, 1896.



WITNESSES:
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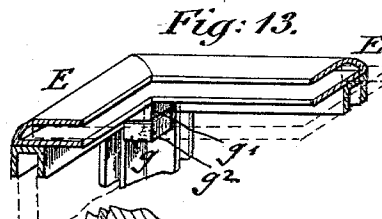
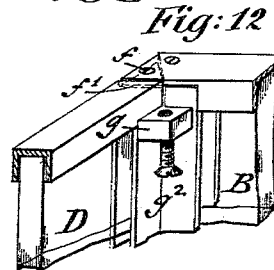
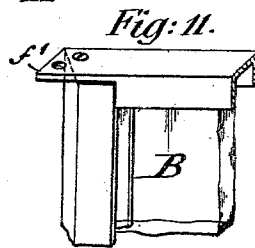
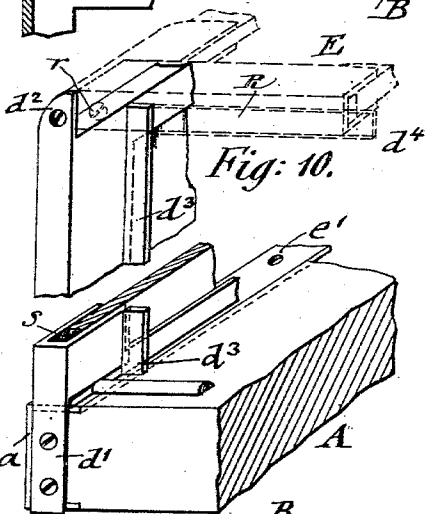
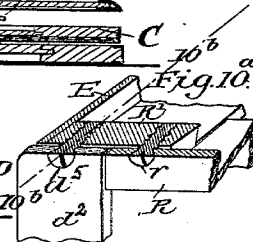
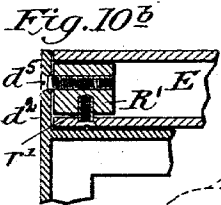
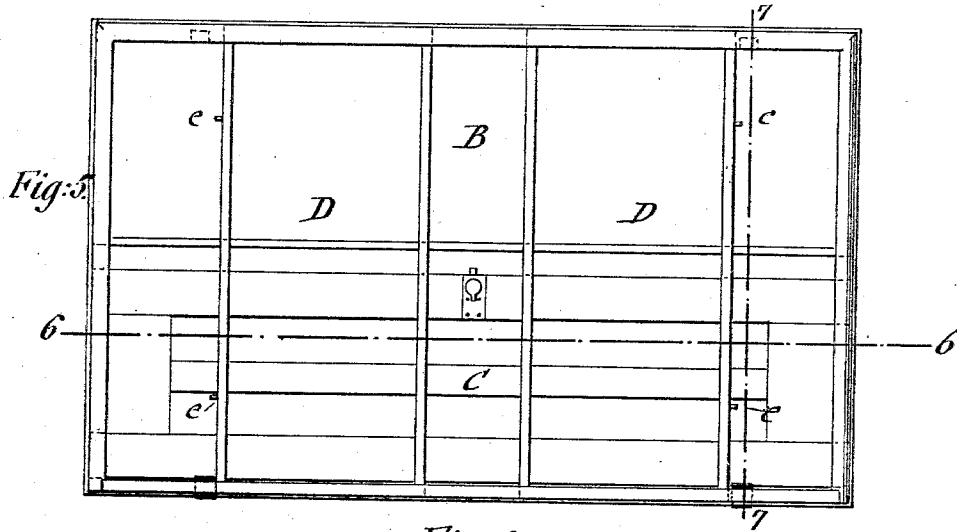
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2 Sheets—Sheet 2.

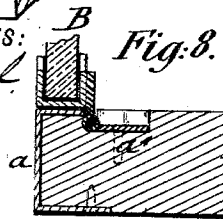
C. F. BIELE.
SHOW CASE.

No. 562,701.

Patented June 23, 1896.



WITNESSES:
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UNITED STATES PATENT OFFICE.

CHARLES F. BIELE, OF NEW YORK, N. Y.

SHOW-CASE.

SPECIFICATION forming part of Letters Patent No. 562,701, dated June 23, 1896.

Application filed October 15, 1895. Serial No. 565,708. (No model.)

To all whom it may concern:

Be it known that I, CHARLES F. BIELE, a citizen of the United States, residing in the city, county, and State of New York, have invented certain new and useful Improvements in Show-Cases, of which the following is a specification.

This invention has reference to certain improvements in show-cases, whereby they can be folded up so that they can be conveniently packed for shipping, while they can be put up for use with great facility, forming a very neat and attractive show-case; and the invention consists of a show-case which comprises a bottom, hinged front and rear panels, detachable end panels, and a detachable top panel, means for locking the frames of the end panels to the bottom, and means for locking the top panel to the end and front panels. The invention consists, further, of certain details of construction which will be fully described hereinafter and finally pointed out in the claims.

In the accompanying drawings, Figure 1 represents a perspective view of my improved folding show-case. Fig. 2 is a horizontal section of the same. Figs. 3 and 4 are a vertical longitudinal section and a vertical transverse section, respectively, on lines 3-3 and 4-4, Fig. 1, Fig. 1, 2, 3, and 4 showing the show-case as put up and ready for use. Fig. 5 is a top view of the case, showing the panels folded up and placed on the bottom in position for shipment. Figs. 6 and 7 are a vertical longitudinal section and a vertical transverse section, respectively, on lines 6-6 and 7-7, Fig. 5. Figs. 8 and 9 are detail sections showing, respectively, the connection of the front and rear panels with the bottom of the show-case. Fig. 10 is a detail perspective view showing the connection of the end panels with the bottom. Fig. 10^a is a detail horizontal section through the parts shown in dotted and full lines in Fig. 10. Fig. 10^b is a vertical section on line 10^b-10^b, Fig. 10^a. Fig. 11 is a detail perspective view of an upper corner of the front panel. Fig. 12 is a perspective view showing the connections of the upper corners of the front and end panels, and Fig. 13 is a perspective view showing the corner connection of the top panel with the front and end panels.

Similar letters of reference indicate corresponding parts.

Referring to the drawings, A represents the bottom of my improved show-case which is preferably made of wood and provided with a brass or other molding *a* at the front and ends.

To the front and rear edges of the bottom A are hinged, respectively, the front panel B and the rear panel C. The front panel B is made of a glass plate supported in a metallic frame and hinged in such a manner to the bottom that the front panel can be folded inwardly onto the bottom A, as shown in Fig. 8.

For permitting the inward and downward folding of the front panel B the bottom A is provided adjacent to each hinge *b* with a recess *a'*, into which the swinging leaf of the hinge is placed, so that the front panel B can be placed on top of the bottom A when the show-case is to be folded up for shipment.

The rear panel C is made preferably of wood and connected with the bottom A by double hinges *d*, so as to permit not only the inward and downward folding of the rear panel when the case is to be shipped, but also the outward and downward swinging of the rear panel when the show-case is in use, and whenever the same has to be opened for removing or replacing some of the articles in the same. The rear panel C is also provided with a locking device at its upper part that engages the top panel in the usual manner.

The end panels D D are made detachable from the bottom and from the front panel, so as to be readily placed on top of the inwardly-folded front and rear panels, as shown in Figs. 6 and 7, when the show-case is to be packed for shipment. The end panels D D are also made of glass plates and of metallic frames extending around the same, the rear portions of the frames being provided with lugs *d'* *d'*, respectively, at their upper and lower end, by which they are screwed to the bottom A and to the top panel E, as shown in Fig. 10. The connecting-screws pass through tapped openings of the lugs *d'* *d'*, so as to bind the panels firmly together. The rear portions of the frames of the end panels D D are preferably of rectangular cross-section, so as to fit snugly to the glass plates, a

fitting of felt or other suitable material being interposed between the ends of the glass plates and the vertical portions of the frames, so as to protect the latter against strains, as shown in Fig. 10. At the inner edges of the vertical portions of the frames of the end panels are arranged bent-up flanges d^3 , which serve in connection with a similar flange d^4 at the rear portion of the frame of the top panel as stops or abutments for the rear panel C when the same is in closed position. The bottom portion of the frame of the end panels D D is provided with pins e , that "take" into holes e' of the molding a of the bottom A. This connection of the end panels D with the bottom A is clearly shown in Figs. 3 and 10. The frames of the end panels D D are mitered at their front portions, the side portions of the front panel B being likewise mitered, as shown in Figs. 11 and 12, so that the front and side portions of the end and front panels abut snugly and can then be connected by means of screws f , that pass through tapped holes of the over and under lapping lugs f' , arranged at the upper corners of the end and front panels, as shown in Fig. 12.

To each frame of the end panels and slightly below the upper front corner of the same is applied a boss g , which registers with a corresponding boss g' , formed at the under side of the corner of the top panel E and permits the connection of the bosses g g' by a screw g^2 , which engages screw-threaded holes of both bosses, as shown in Figs. 12 and 13. The screw g^2 has to be introduced from the under side of the boss g and through the same into the upper boss g' , so that the connection cannot be seen from the outside when the show-case is put up for use.

The top panel E is entirely surrounded by a metallic molding which is rounded off at the front and ends, but rectangular at the rear, as shown in Fig. 4 and in dotted lines in Fig. 10. The top panel E is connected at the front corners by the screw connection g^2 of the bosses g g' with the end panels, while the connection with the rear corners of the end panels is formed by screws d^5 , which are passed through tapped holes of the lugs d^2 , as shown in Figs. 1 and 10. The top panel E also rests at its rear corners on the stop flanges or abutments d^3 , arranged on the rear portion of the frames of the end panels D, so that thereby a strong and reliable connection of the top panel with the front and end panels is obtained.

The frames of the front, end, and top panels are all made of two pieces, namely, a three-sided main portion and a closing end piece or rail R. This rail R carries in its ends projecting blocks R' , which are secured thereto by means of screws r , the projecting ends of said blocks being inserted into the ends of the three-sided main portion, where to it is secured by means of small screws r' , while the rear portions of the end panels D D are secured to

said blocks and to the other parts by means of screws d^5 , which pass through them and into the blocks R' . By this construction it will be seen that the glass pane may be inserted into the three-sided main portion before said parts are fastened, as stated.

To prevent the strain and breaking of the glass plates of the panels, a suitable elastic packing or cushion o is interposed between one or more edges of the glass plates and the frames of the same, as shown in Fig. 10.

The closing-rail of the frame of the front panel is preferably arranged at the top of the panel, the closing-rail of the frames of the end panels at the bottom, and the closing-rail of the top panel at the rear end of the same, as by this arrangement the construction of the frames cannot be seen when the panels are in position. This construction of the frames has the advantage that a glass plate which is broken while the show-case is in transit, or while it is in use, can be easily replaced without returning the panel to the show-case maker for repairs.

When the show-case is to be shipped, the top panel is first detached from the front and end panels, and the end panels from the bottom. The front and rear panels are then folded downward on the bottom. The end panels are then placed across the folded front and rear panels and the top panel placed over the intermediate end panels, as shown in Figs. 6 and 7, in which position the show-case can be conveniently packed and shipped, care being taken that proper packing material is carefully placed between the different panels.

When the show-case is to be put up, the front panel is first placed into vertical position, the rear panel being then swung on its hinges into downwardly-pending position, as shown in dotted lines in Fig. 9. The side panels are next placed in position by inserting their bottom pins into the holes of the edge molding of the bottom and connecting their mitered front corners with the mitered front portions of the front panel by passing the screws through the overlapping lugs at the upper corners of the frames of the front and end panels. The top panel is then placed in position on the side and front panels and connected thereto by inserting the screws from the under side through the bosses of the end and top panels, as well as through the upper end lugs of the rear portions of the end panels. The rear panel is then moved on its hinges from its downward position into its normal position and locked to the rear portion of the top panel in the usual manner, the show-case being then ready for use.

My improved show-case has the advantage that it can be readily packed and shipped, so that the large and expensive boxes required for shipping show-cases can be dispensed with, while at the same time the show-case can be shipped with greater safety against breakage, the reduction in bulk yielding a

considerable saving in freight. When the show-case is desired to be put up for use, the panels of the same can be connected with little difficulty by any one by following the instructions shipped with the case.

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

1. A folding show-case, consisting of a bottom, a front panel hinged to the bottom panel, a rear panel connected by a double hinge with the bottom panel, detachable end panels, means for connecting the end panels with the bottom panel, means for connecting the frames of the front and end panels with each other, a detachable top panel, and means for connecting the top panel with the front and rear ends of the end panels, substantially as set forth.

2. In a folding show-case, the combination of a front panel, the frame of which is provided with mitered corner portions, end panels, the frames of which are provided with correspondingly-mitered front portions, overlapping lugs at the upper corners of the front

and end panels, and screw connections between said lugs, substantially as set forth.

3. In a folding show-case, the combination of the front and end panels, the frames of which are provided with mitered corner portions, bosses applied to the frames of the end panels, registering bosses applied to the under side of the frame of the top panel, and connecting-screws passing through said bosses for connecting the end and top panels, substantially as set forth.

4. In a show-case, a glass plate, a metallic frame extending around the plate and formed of a three-sided main portion, a closing-rail, blocks carried at the ends of the closing-rail, and means for detachably securing said blocks to the three-sided main portion, substantially as set forth.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

CHARLES F. BIELE

Witnesses:

PAUL GOEPEL,
GEORGE W. JAEKEL.