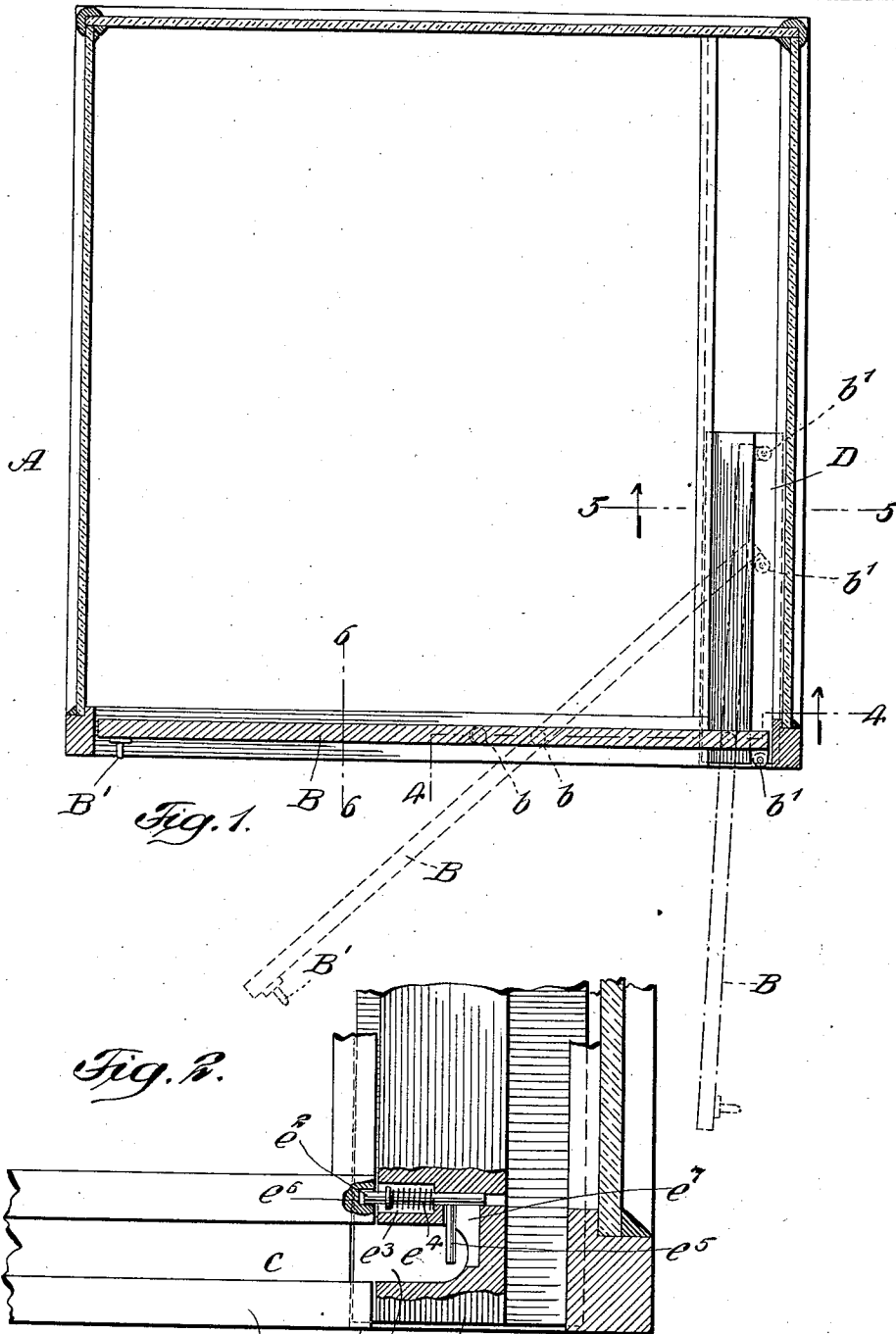


R. PITT.
 DOOR FOR SHOW CASES AND OTHER INCLOSURES.
 APPLICATION FILED JULY 24, 1911.

1,061,008.

Patented May 6, 1913.

2 SHEETS-SHEET 1.



Witnesses:
Julius H. Smith
Fredrick Randolph

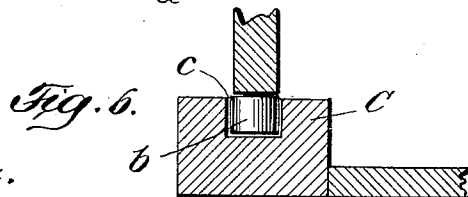
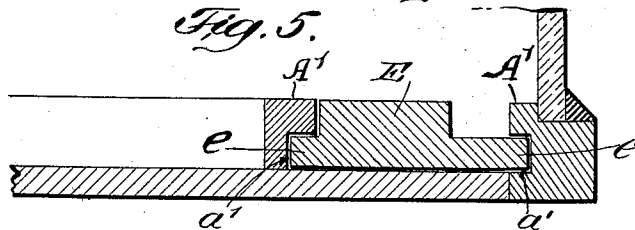
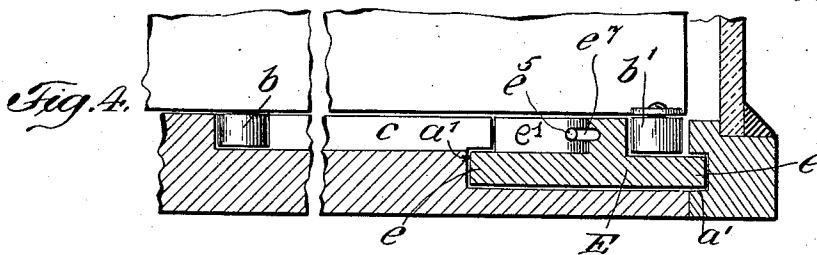
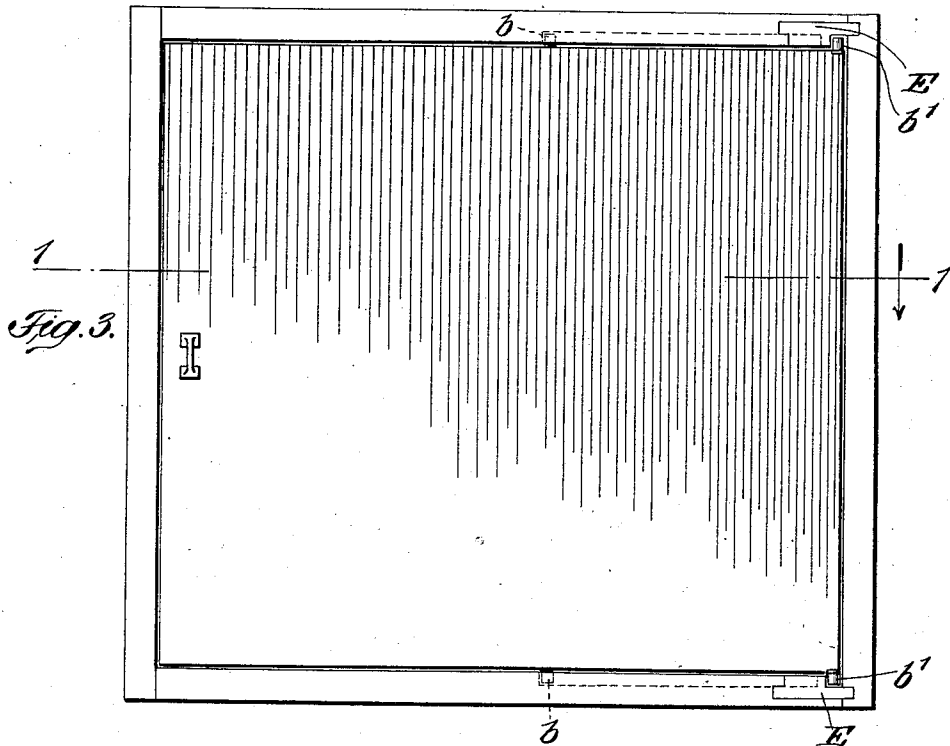
Rafford Pitt Inventor
By his Attorney Joseph P. Prier

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Witnesses:
Julius A. Smith
Fredrick P. Randolph

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Joseph A. Brien

UNITED STATES PATENT OFFICE.

RAFFORD PITT, OF NEW ROCHELLE, NEW YORK.

DOOR FOR SHOW-CASES AND OTHER INCLOSURES.

1,061,008.

Specification of Letters Patent.

Patented May 6, 1913.

Application filed July 24, 1911. Serial No. 640,111.

To all whom it may concern:

Be it known that I, RAFFORD PITT, a citizen of the United States, and a resident of New Rochelle, Westchester county, State of New York, have invented certain new and useful Improvements in Doors for Show-Cases and other Inclosures, of which the following is a specification.

This invention relates to improvements in doors for show cases and other inclosures and particularly to improved means for supporting and guiding such doors during the opening and closing movements thereof.

By the use of my invention, I provide extremely simple, efficient and inexpensive means whereby the door may be moved from its closed position to its open position and may be housed or inclosed within the case or other inclosure with great facility and rapidity, thus preventing the obstruction of the passageway and saving floor space contiguous to the case; and furthermore the usable space within the inclosure will be substantially undiminished and the floor of the casing or inclosure will be substantially unencumbered.

The preferred embodiment of my invention comprises in combination with a suitable inclosure, a door pivoted intermediate its vertical edges on vertical axes above and below the same, which axes are provided with suitable anti-friction devices and move in grooved tracks extending transverse the door way; means for guiding one vertical edge of the door parallel to the side of the case or other inclosure; carriers or slides movable forwardly and rearwardly for independently housing the door after it has reached its extreme open position, said carriers or slides being located above and below the door and moving in tracks extending parallel to the side of the case and intersecting the aforesaid transverse tracks at right angles; pockets in said carriers in alinement with the tracks for receiving the pivots of the door when it has reached its limit of lateral movement and means adapted to be released by engagement with the intermediate axial pivots for retaining such carrier in alinement with the tracks.

In the accompanying drawings in which similar reference characters designate corresponding parts throughout the several views, Figure 1 is a transverse section on the line 1—1 of Fig. 3, looking in the direction of the arrow; Fig. 2 is an enlarged view of the lower right hand corner of the front of a

case embodying my invention, the door being omitted; Fig. 3 is a front elevation of a case embodying my invention; Fig. 4 is an enlarged section on the line 4—4 of Fig. 1; Fig. 5 is an enlarged section on the line 5—5 of Fig. 1, looking in the direction of the arrow; and Fig. 6 is an enlarged section on the line 6—6 of Fig. 1, looking in the direction of the arrow.

Referring now to these drawings, A designates an inclosure which as shown is a glass display case having a door B at its front side. As illustrated, the door B is pivoted intermediate its vertical edges to the upper and lower front edges of the case A upon vertical pivots *b* which extend into grooves *c* in tracks C secured within the case A in any suitable manner at such upper and lower front edges, respectively, and the top and bottom of the rear edge of the door are also preferably provided with vertically-extending pivots *b'* which extend into grooves or tracks D extending parallel to the side wall of the case and at right angles to the aforesaid grooved track.

It will be obvious that when the handle B' is pulled upon by the user the door B will traverse a path and assume the position indicated in dotted lines in Fig. 1. In order to permit easy operation of the door, the intermediate pivots *b* should be located somewhat to the rear of the center of the door, so as to provide sufficient leverage to open the same readily. When a door so pivoted has reached its limit of lateral movement, it will assume substantially the position indicated at the right of Fig. 1 with its front edge extending a considerable distance beyond the edge of the case or inclosure, and this extending portion would form an obstruction in the passageway contiguous to the door and would subject the door as well as persons moving along such passageway to injury. In order to remove such obstruction, I provide means for completely housing the door within the case and I accomplish this result without diminishing in any substantial degree the usable space within the case. Such improved means permits the direct rearward movement of the door after it has reached its limit of lateral movement and preferably comprises a carrier or slide E at the top and bottom of the case respectively.

The slides E are preferably movable in a line intersecting the path traversed by the intermediate pivot *b* during the opening and

closing movement of the door B. As shown, each carrier or slide E is provided with laterally extending flanges *e e* which extend into oppositely-disposed grooves *a' a'* formed in suitable rails *A' A'* secured to or made integral with the casing, and such carrier or slide E is adapted to slide rearwardly and forwardly to intersect the grooves *c* in the tracks C at substantially right angles. Each slide E is provided with a pocket *e'* in the side thereof contiguous to the grooved track C, and this pocket *e'* registers with the groove *c* in contiguous tracks C, so that when the door is pulled from its closed position to its extreme open position, the intermediate pivot *b* of the door slides from the groove *c* in the track C into this pocket *e'*.

The tracks D for the rear pivots *b'* may be formed independently at the side of the case, but in the preferred embodiment of my invention illustrated, I form the aforesaid grooves or tracks D in the carriers E at the side thereof contiguous to the side of the case and these carriers are preferably made sufficiently long to support and retain both sets of pivots *b* and *b'* on either side of its longitudinal center-line. This arrangement affords an economical construction in which the major portion of the weight of the door will lie directly over the longitudinal center line of the carriers or slides E.

In order to retain the carriers or slides in a position in which the pockets *e'* will always register with the grooves *c* in the tracks C, I preferably provide a spring pressed detent *e²*, seated in an orifice or hole *e³* contiguous to the pocket *e'* and having a laterally-extending finger *e⁵* projecting into the pocket *e'* in the path of the pivot *b*, and adapted to be released thereby. The body *e²* of the detent is normally pressed forwardly into engagement with the sides of the rails A by means of a spiral spring *e⁴*, abutting between a collar on the detent and a portion of the wall of the orifice *e³* and when the slide is in a position in which the pocket *e'* registers with the groove *c*, the body portion *e²* of the detent will enter a hole *e⁶* in the rail *A'* and lock the slide in such position. The laterally-extending finger *e⁶* projects as shown through a slot *e'* communicating between the pocket *e'* and the rear reduced portion of the aperture *e³*. Now, when the door is moved from its closed position into its extreme open position, the pivots *b'* enter into pockets *e'* in the sides of the slides or carriers E and engages the laterally-extending finger *e⁵* so as to force the detent *e²* rearwardly against the action of the spring *e⁴* and out of engagement with the walls of the aperture *e'* to release the carriers or slides E. The door will then be in the position

shown at the right of Fig. 1 with its weight evenly distributed on the slides, and it may be pushed rearwardly without appreciable effort until it is completely housed with the casing.

Having described my invention, I claim:—

1. The combination with a suitable inclosure, of a door therefor pivoted intermediate its vertical edges, the said pivoted point of the door being guided to traverse a line transverse the doorway, and the rear edge of the door being guided to traverse a line parallel to the side of the inclosure; and a carrier movable to intersect the path of travel of the intermediate pivotal point and engaging and supporting the door at said point during the housing of the same after it has reached its open position.

2. The combination with a suitable inclosure of a door pivoted intermediate its vertical edges on vertical pivots moving in grooved tracks, extending transverse the doorway; means for guiding one vertical edge of the door parallel to the side of the inclosure; slides movable rearwardly and forwardly for independently housing the door after it has reached its extreme open position, and pockets in said slide registering with the grooves in the aforesaid tracks for receiving the intermediate pivots of the door, substantially as specified.

3. The combination with a suitable inclosure, of a door pivoted intermediate its vertical edges on vertical pivots above and below the same, which pivots are provided with suitable anti-friction devices and move in grooved tracks extending transverse the doorway; means for guiding one vertical edge of the door parallel to the side of the inclosure; slides movable forwardly and rearwardly for independently housing the door after it has reached its extreme open position, said slides being located above and below the door and moving in tracks extending parallel to the side of the case and intersecting the aforesaid transverse tracks at right angles; pockets in said slides in alinement with the tracks for receiving the pivots of the door when it has reached its limit of lateral movement and means adapted to be released by engagement with the intermediate axial pivots for retaining such slides in alinement with the tracks.

In witness whereof, I have hereunto set my hand to the foregoing specification in the presence of two subscribing witnesses.

RAFFORD PITT.

Witnesses:

H. U. DAMBMANN,
WILLIAM R. PITT.