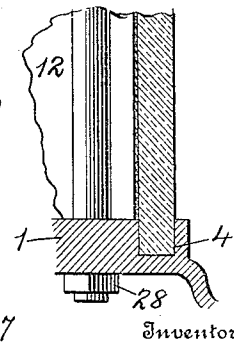
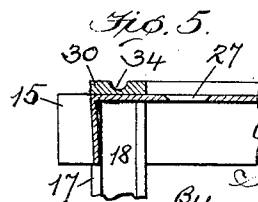
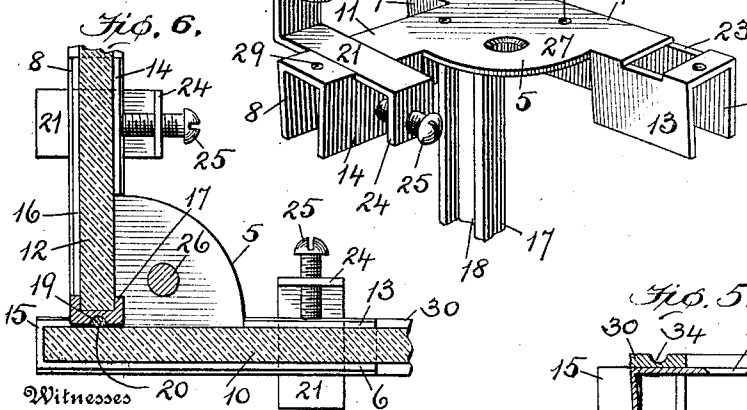
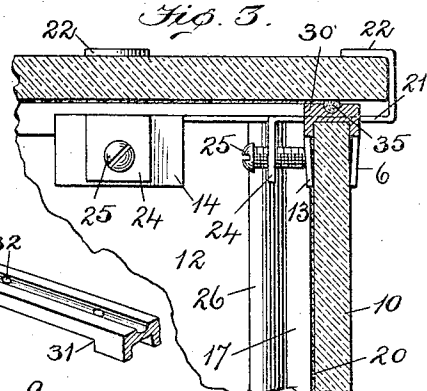
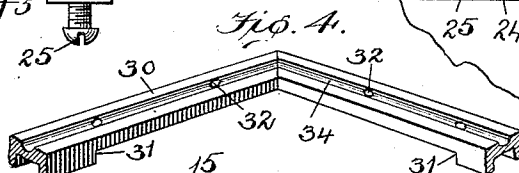
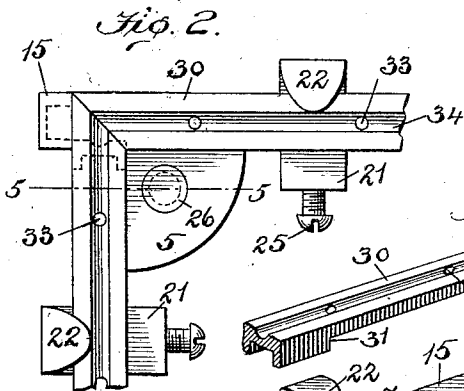
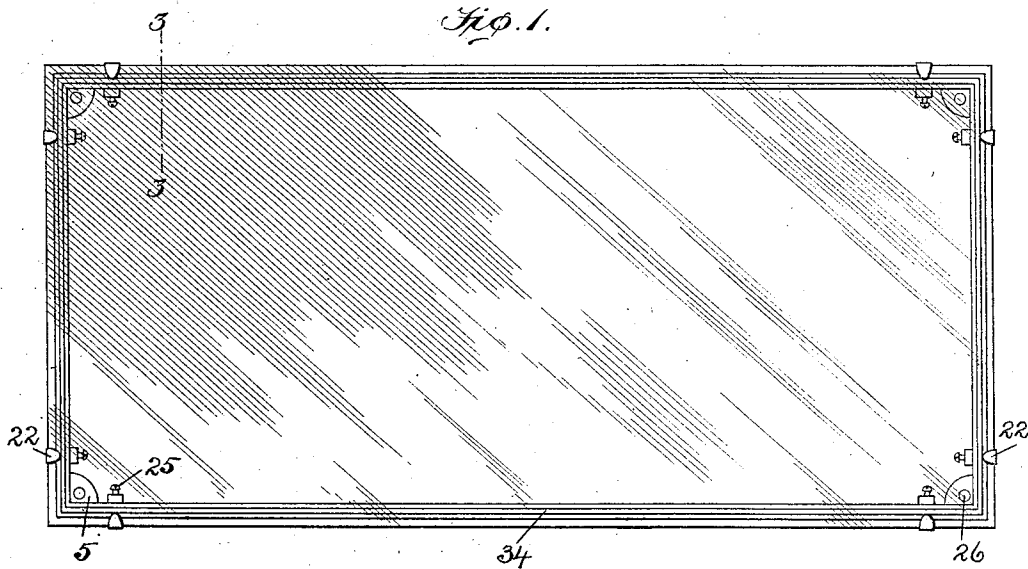


S. HIMMEL.
SHOW CASE.
APPLICATION FILED NOV. 6, 1908.

910,817.

Patented Jan. 26, 1909.



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UNITED STATES PATENT OFFICE.

SOLOMON HIMMEL, OF BALTIMORE, MARYLAND.

SHOW-CASE.

No. 910,817.

Specification of Letters Patent.

Patented Jan. 26, 1909.

Application filed November 6, 1908. Serial No. 461,263.

To all whom it may concern:

Be it known that I, SOLOMON HIMMEL, a citizen of the United States, residing at Baltimore, in the State of Maryland, have invented certain new and useful Improvements in Show-Cases, of which the following is a specification.

This invention relates to show cases and has reference to an improved construction of corner fastening for securing the side, end and top plates together.

Some of the difficulties heretofore encountered in securing together the plates of glass show cases is in the drilling of holes to receive bolts to hold the plates together and the consequent weakening of the plates by the drilling of the holes. Another objection heretofore present is the fact that the nuts or bolts to hold the plates together have been exposed on the outside of the case and in some instances are in direct contact with the glass. By my invention I avoid the drilling of holes; the exposure of nuts or bolts on the outside of the case and also the contact of the bolts or adjusting screws with the glass plates.

Another object of the invention is to provide an improved construction of metal corner frame for holding the glass plates together, while another object is to provide an improved construction of adjustable clip device for retaining the top plate so that the adjusting screws thereof may not be required to bind against glass in effecting their adjustment.

With these and other objects in view the invention is illustrated in the accompanying drawings, in which,

Figure 1 is a plan view of a show case constructed in accordance with the invention. Fig. 2, is a top plan view of one corner of the metal frame ready to receive the top plate. Fig. 3, is a vertical section through the secured horizontal and vertical plates and is taken approximately on the line 3—3 of Fig. 1. Fig. 4, is a perspective of the separated corner portions of the frame including the channel bar to receive the packing. Fig. 5, is a sectional detail through the frame, the section being taken on line 5—5 of Fig. 2, and Fig. 6, is a bottom plan view of the devices shown in Fig. 2.

Referring to the drawing the numeral, 1, designates the bottom or base of the show case on which the lower edges of the vertical front and end glass plates rest. The particular construction employed to secure or attach the lower edges of these plates is immaterial and may be varied, but in the present instance they are fitted into a channel, 4, that has been provided in the base to receive them.

By reference to Fig. 4 it will be seen that the corner fastening which in the present instance is employed at each corner of the case as shown in Fig. 1, comprises a horizontal metal plate, 5, having downwardly-projecting walls, 6, 7, and 8, which depend from its outer edge. The shape of this plate is similar to the letter, L in that it has a front portion, 9, that extends parallel with the front plate, 10, of the case, and a side portion, 11, that extends at right angles to said front portion and parallel with the end plate, 12, of the case. At the inner edge, the metal plate, 5, is provided with a downwardly-projecting flange, 13, which is spaced from the wall, 6, so as to form a channel at the front portion, 9, to receive the upper edge of the front plate while a similar flange, 14, is provided on the side portion, 11, to coact with the wall, 8, and thereby form a channel to receive the upper edge of the end plate, 12. The extreme corner of the plate, 5, is provided with an extension, 15, which projects beyond the side portion, 11, so as to lie in a plane beyond the outer side of the wall, 8, and also the outer surface, 16, of the end plate, 12, and thereby permit the front plate, 10, to lap over and project beyond the end plate, as clearly seen in the inverted view of the frame in Fig. 6.

A channel bar, 17, extends vertically beneath the metal plate, 5, and said bar is preferably formed with or attached to said plate so that its channeled side, 18, will confront and have position in the same vertical plane as the channel that is formed between the walls, 8, and flange, 14. The object and purpose of this vertical channel bar at this point is to provide a recess and a stop to receive the vertical edge of the end plate, 12. Opposite the channel side, the bar, 17, is provided with a vertical groove, 19, which may receive a

packing, 20, such as a cord or other material, against which the front plate, 10, may rest when set in its permanent position.

Each of the angle or front and side portions of the corner fastener is provided with a horizontally-movable clip plate, 21, the outer ends of which turn upwardly to form a hook, 22, to engage the top plate as will presently be described. The manner of securing these clip plates in place so as to permit them to slide may vary, but in the present instance I have provided notches, 23, in the upper side of the plate, 5, so that the clip plates may seat and slide in said notches and have their upper surfaces flush with the upper surface of the said plate, 5, as clearly seen in Fig. 4. The inner ends, 24, of the clip plates turn down at one side of the down-turned flanges, 13, and, 14, and said ends are provided with threaded perforations through which adjusting screws, 25, pass. The inner ends of these adjusting screws contact with the flanges, 13, or, 14, as the case may be, so that by turning the screws the clip plates may be made to move horizontally by traveling along the screws. It will thus be seen that the inner ends of these adjusting screws do not contact with the vertical glass plates but with the flanges, 13, or, 14.

In order to hold the corner plates down on the upper edges of the vertical plates I provide a long bolt or rod, 26, which passes through a perforation, 27, in the corner plate and which depends from said plate, through the case and also through the bottom, 1, beneath which latter it is secured by means of a nut, 28. After the side plate has been set up on the bottom of the case, the corner plates are fitted down over the upper edge thereof and the vertical channel bar with its packing, 19, is fitted close against the inner surface of said side plate to make a dust-tight joint. The end plates may then be set up with its upper edge projecting beneath the corner plate and between the wall, 8, and flange, 14, and with its vertical edge entered in the channel, 18, of the channel bar. The bolt, 26, may then be passed through the perforation, 27, in the corner plate and through the bottom, 1, of the case and secured in position by the nut, 28. Screw-threaded perforations, 29, are provided in the corner plates, 5, for a purpose now to be described.

Horizontal channel plates, 30, are fitted over the upper edges of the side and end plates and the ends of these plates are provided with bottom recesses, 31, which project over the upper surface of the corner plates and also over the clip plates. The recessed end portions of these channel plates are provided with perforations, 32, which register with the perforations, 29, in the plates, 5, so that screws, 33, may be passed through the two sets of perforations and thereby hold the ends of the horizontal chan-

nel plates down on top of the corner plates. The upper side of the horizontal channel plates, or that side that is to confront the bottom surface of the top glass plate, is provided with a longitudinal groove, 34, for the reception of a packing, 35, as shown in Fig. 3.

To secure the top glass on the case the same is laid on the packing, 35, in the horizontal channel plates which extend from one corner plate to another. The clip plates, 21, are then drawn inwardly by turning the screws, 25, on the inside of the case and when so drawn the hooks, 22, thereof take over the vertical edges of the top plate and hold the same down, as clearly shown in Figs. 1 and 3. It will thus be seen that the top, side and end plates are all held down to the base, 1, by the bolts, 26, without boring or drilling holes in any of said plates and also without exposing any of the adjusting screws on the outside of the case.

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

1. In a show case the combination with the base, of the top side and end plates; a corner plate connecting the side and end plates and interposed between the top plate and said side and end plates; a channel bar extending vertically from the corner plate and interposed between the side and end plates, and means for holding the top plate down with respect to the corner plate.

2. In a show case the combination with the base, of the top, side and end plate; a cover plate of the juncture of the side and end plates and interposed between said plates and the top plate; a channel bar extending vertically from the corner plate and interposed between the side and end plates and a rod extending from the corner plate to the base for holding said plate down on the side and end plates.

3. In a show case the combination with the base, of the top, side and end plates; a corner plate having channels extending at an angle with respect to each other to receive the edges of the side and end plates; means for holding the corner plate down on the said plates, and clip plates interposed between the top plate and said corner plate and means for sliding said clip plates between said corner plate and said top plate.

4. In a show case the combination with a base, of the top, side and end plates; a corner plate interposed between the upper edges of the side and end plates and the bottom side of the top plate; clip plates extending horizontally between the side and top plates and having a hook at one end, and means for adjusting the clip plates by moving the same horizontally.

5. In a show case the combination with a base, of the top, side and end plates; a corner plate having a depending wall at its outer

edge and depending flanges at its inner edge
whereby to engage the outer and inner sur-
faces of the side and end plates; clip plates
movable horizontally with respect to the
5 corner plate and having an upturned outer
end and a downturned inner end, and ad-
justing screws passing through the inner
ends of the clip plates and bearing against the

depending flanges of the corner plates for
moving the clip-plates horizontally.

In testimony whereof I affix my signature
in presence of two witnesses.

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SOLOMON HIMMEL.

Witnesses:

CHARLES B. MANN, Jr.,
G. FERDINAND VOGT.