J. HOFMAN.

DISPLAY WARDROBE CABINET.

APPLICATION FILED SEPT. 22, 1909.

1,115,820.

Patented Nov. 3, 1914.

2 SHEETS—SHEET 1.

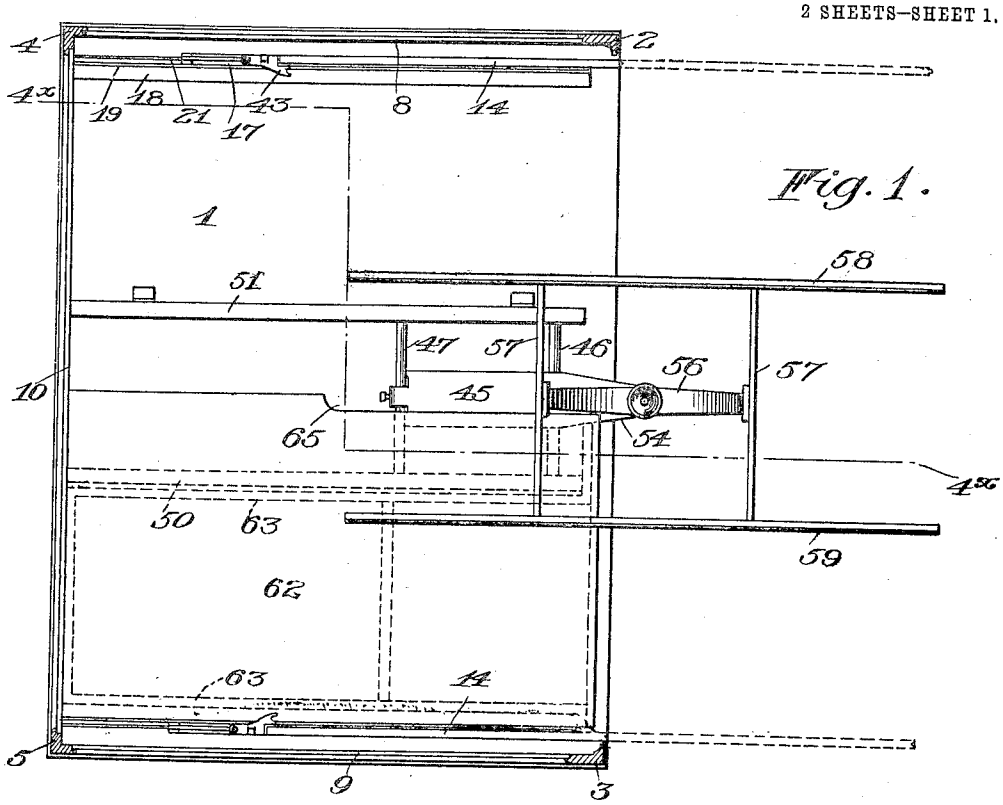


Fig. 1.

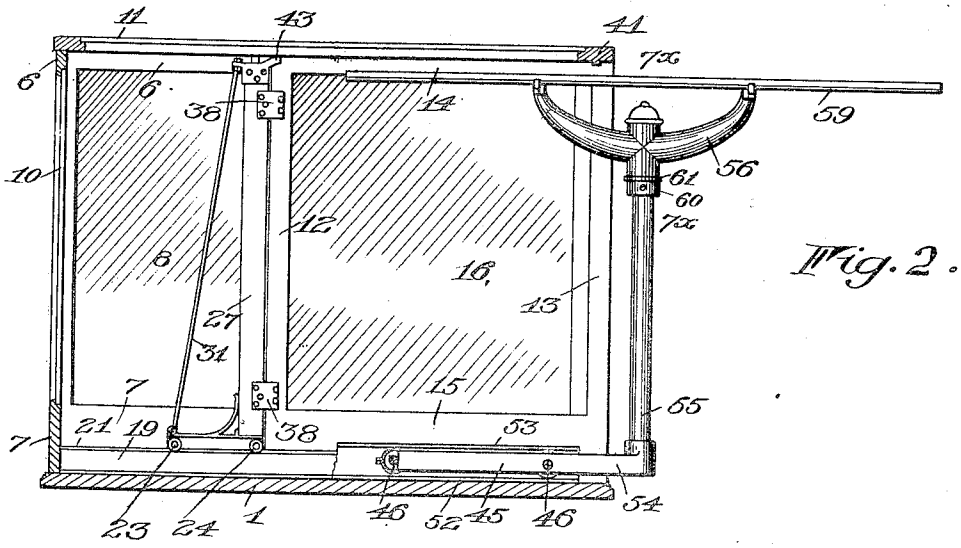


Fig. 2.

Witnesses

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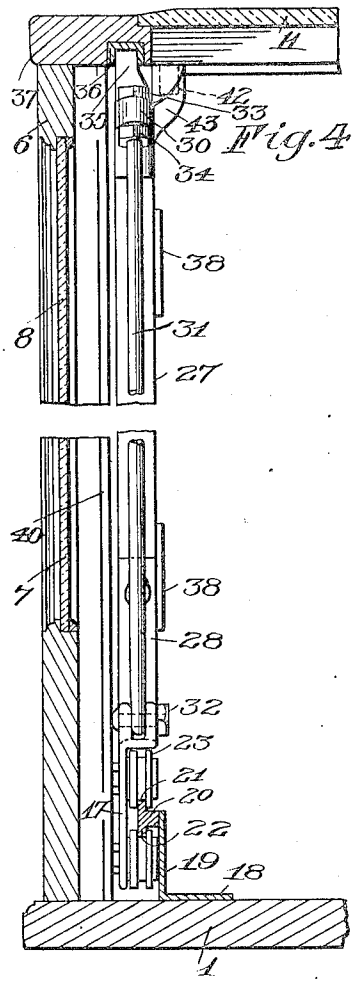


Fig. 4.

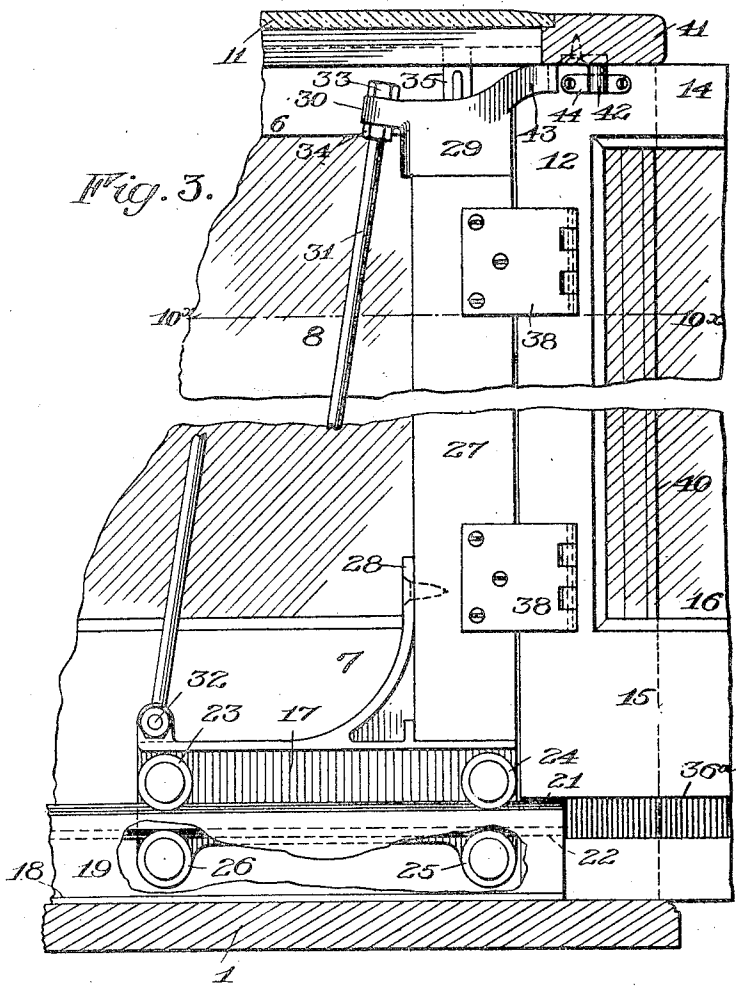


Fig. 3.

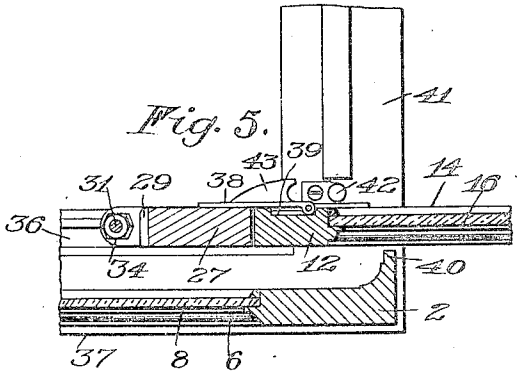


Fig. 5.

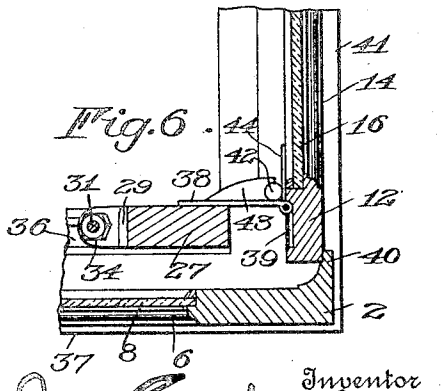


Fig. 6.

Witnesses

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UNITED STATES PATENT OFFICE.

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DISPLAY WARDROBE-CABINET.

1,115,820. Specification of Letters Patent. **Patented Nov. 3, 1914.**

Application filed September 22, 1909. Serial No. 519,089.

To all whom it may concern:

Be it known that I, JOHN HOFMAN, of Rochester, in the county of Monroe and State of New York, have invented certain new and useful Improvements in Display Wardrobe-Cabinets; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of the specification, and to the reference-numerals marked thereon.

My present invention relates to store fixtures and has for its object to provide an improved form of cabinet adapted for containing garments or other articles for display or storage which is equipped with a door, or doors, mounted upon carriages supported from the floor of the cabinet and so mounted that they may, when opened, be inserted therein, the parts thereof being arranged to occupy a minimum space in the cabinet and so designed as to adapt them particularly for use in glass show cases.

To these and other ends the invention consists in certain improvements and combinations of parts all as will be hereinafter more fully described, the novel features being pointed out in the claims at the end of the specification.

In the drawings: Figure 1 is a top plan view of a cabinet showing doors, constructed in accordance with my invention, applied thereto; Fig. 2 is a vertical sectional view of a cabinet, showing the door with its mounting in side elevation. Fig. 3 is an enlarged detail view illustrating the manner of mounting the doors in the cabinet. Fig. 4 is an end elevation of the parts shown in Fig. 3 looking toward the rear of the parts shown therein. Fig. 5 is a detail horizontal sectional view taken on the line 10ˣ—10ˣ of Fig. 3, the door being in open position. Fig. 6 is a similar view showing the position the parts assume when the door is closed.

Similar reference numerals in the several figures indicate similar parts.

A display cabinet containing devices constructed in accordance with my invention is preferably so constructed that its four sides and top may be fitted with glass plates or panels providing a clear view of the contents of the cabinet, one of its sides being provided with a door or doors opening outwardly and mounted upon carriages guided within the casing, whereby the doors may be moved rearwardly into the cabinet, thus obviating the occupying of floor space and facilitating access to the interior of the cabinet.

The display case or cabinet which I have illustrated to show the preferred arrangement of the various parts comprises a rectangular base or floor 1 provided at its four corners with upright posts or stiles 2, 3, 4 and 5, which are connected at their tops and bottoms by framing pieces or sash strips 6 and 7 which may be of any convenient width and are adapted to receive the glass plates forming the panels 8 and 9 for the end of the case and a similar plate 10 forming the rear panel or side of the cabinet. Overlying the tops of the posts or stiles and secured to the latter are the rails forming the sash for the top plate or panel 11. The forward side of the cabinet is preferably closed by two doors, the meeting edges of which are arranged centrally of the cabinet. Each door comprises a hanging stile 12, a lock stile 13 and top and bottom rails 14 and 15 respectively, said stiles and rails being rabbeted at their inner edges to receive the glass panels 16.

The carriages or supporting devices 17 on which the doors are mounted are movable longitudinally on tracks secured to the floor 1 extending transversely of the cabinet adjacent its ends. The tracks are composed of angle irons having the base portions 18 and the vertical sides 19 supporting the offset runways 20 on which the carriages 17 travel. The runways are made T-shape in cross section, as shown particularly in Figs. 3 and 4, providing at their upper edges flanges 21 and at the lower edges similar flanges 22. Each of the carriages 17 is provided with four rollers 23, 24, 25 and 26 which are grooved circumferentially, as shown, to embrace the flanges of the runway and serve to guide the carriage and prevent its lateral displacement. Extending upwardly from the forward end of the carriage is the door post 27, which is rigidly secured to the carriage at its lower end and braced by the corner bracket 28. The post is surmounted by a metal cap 29 provided at its rear side with a perforated projection or ear 30 which receives the upper end of a truss rod 31 extending therefrom to the rear end of the carriage where it is secured by a bolt 32

passing through an eye formed in its lower end. The length of the carriage is proportioned relatively to the height of the post and the weight of the door carried thereon and the truss rod 31 extending upwardly and forwardly from its rear end serves to prevent the post from sagging and any such tendency which the post may have in the event it shrinks, may be taken up by the tension nuts 33 and 34. The doors are suspended from their posts at points above the carriages 17, their weight consequently tending to overbalance the posts and tilt the carriages so that the rollers 24 and 26 are the ones which carry the load and sustain it by engaging opposite sides of the runway 20, and these are spaced sufficiently far apart to prevent any severe cramping action on the track which would tend to bind the carriage. Under ordinary circumstances the two rollers mentioned would be sufficient, but it sometimes happens that, when attempting to close the door, an inexperienced person may apply force acting as a leverage to raise its outer end and thus tilt the carriage, in which event the rollers 23 and 25 come into play as stops or guides and by engaging the top and bottom of the runway prevent the inner end of the carriage from being tipped downwardly and its outer end raised correspondingly. At such a time the tension rod 31 also acts as thrust rod to support the upper end of the post 27. The latter is guided in horizontal position by means of the upwardly extending finger 35, on the cap piece 29, traveling in a channel iron 36 fitted in a groove provided in the side rails 37 of the rectangular top frame of the cabinet, said rails being of sufficient width to extend inwardly at each end of the casing to accommodate said channel irons and support the latter in alinement above the runways 20.

In order to provide an arrangement of the parts whereby the doors when opened and inserted in the cabinet may occupy a small space and the supports on which they are mounted arranged in juxtaposition to the end walls of the cabinet, each door is secured to its respective post 27 by specially constructed hinges comprising the long and short leaves 38 and 39 respectively. These hinges are arranged as shown in Figs. 3, 4 and 5, the longer leaves being secured to the post 27 and projecting forwardly over the hanging stile 12 of the door so that the latter when opened will be in direct alinement with its post 27, as shown in Fig. 5, thus permitting the door when pushed into the cabinet to occupy the space provided for the accommodation of its supporting device. The bottom rail of the door, it will be noticed, is grooved, as indicated at 36ª, to accommodate the runway 20 when the door is moved inwardly. By arranging the hinges in the manner described, so that their pintles are located forwardly of the edge of the post 27 and are also removed from the edge of the door stile 12, the outer ends of the runways may be terminated within the casing in such position that they are hidden from view when the doors are closed without liability of the carriage rollers being disengaged therefrom. Further, the positioning of the hinge joints in this manner also permits the hanging stiles 12 of the doors to be made of sufficient width so that when the doors are closed the outer edges of said stiles will project laterally beyond the posts and swing into engagement with the edges 40 of the corner stiles 2 and 3 of the cabinet and thus form tight joints at these points.

In order to limit the outward movement of the door supporting devices I provide at the ends of the top rail 41 downwardly projecting pins 42 with which engage stops 43 on the post caps 29. The stops 43 are formed integrally with the caps and project forwardly therefrom, but are offset to position them at the inner sides of the doors, when the latter are open, as shown in Fig. 5, and by engagement with the pins 42 limit the outward movement of the door carriages. The pins 42 are accurately positioned to also engage the inner faces of the upper rails 14 of the doors, which latter are provided with wear plates 44, the action of the door thereon being such that as they are rotated on their hinges, they will draw the stops 43 into engagement with the inner sides of the pins, and thus firmly secure the door and prevent any movement thereof in the casing when closed. The pins 42 also perform another function in that they serve as guides for the doors themselves when the latter are moved lengthwise, necessitating the opening of the door to its proper position in alinement with its carriage before an attempt is made to move it into the cabinet.

The display devices on which the goods are supported may be of any desired construction and in the illustration I have shown them as comprising generally a reciprocating carriage 45, guided upon rails 50, 51, secured to the bottom of the cabinet, and carrying an upright post or standard 55 on the upper end of which is revolubly mounted a display rack comprising the head 56 and cross arms 58 and 59 adapted to receive garment hangers, as will be understood.

The cabinet constructed in accordance with my invention posesses the advantage of simplicity in construction and compactness of its parts and the various movable parts thereof being all mounted on carriages supported entirely by the floor of the cabinet, adapts them particularly for use in con-

nection with glass show cases as the manipulation of said parts produces no strain on other parts of the case.

I claim as my invention:

1. The combination with a casing and a door therefor, of a track extending upwardly from the bottom of the casing having an offset runway, a carriage engaging opposite sides of the runway and offset to extend above the track in the plane of the runway and a post surmounting the carriage, a cap on the top of the post, a truss rod connecting the cap and carriage and hinge connections between the door and the post.

2. The combination with a casing and a door therefor, of a track secured to the floor adjacent one end of the casing having a runway projecting laterally toward said end, and a carriage embracing the runway, and arranged with the upper portion overhanging the track, a post on the overhanging portion of the carriage, a hinge connecting the post and door having long and short leaves secured to said parts respectively, said door being provided in its inner face with a groove adapted to receive the runway.

3. The combination with a casing, a track therein having a laterally projecting T-shape runway, and a carriage extending over the top of the track and the side of the runway having grooved wheels mounted thereon, engaging opposite sides of the runway, of a post extending upwardly from the forward end of the carriage in vertical alinement with the track, a bracket connecting the carriage and lower portion of the post, a truss rod connecting the rear end of the carriage and the upper end of the post, a door for the casing located with its hanging stile in front of and spaced from the post, and a hinge connection between said stile and post adapted to permit the door to swing into alinement with the post when opened.

4. The combination with a casing, of a door fitted between the floor and the top thereof, adjacent the end of the casing, a track on the bottom of the casing having an offset runway, a carriage embracing the latter and extending over the track, a post thereon, a guiding groove in the lower face of the top of the casing, a cap secured to the top of the post having a projection guided in said groove, a hinged connection between the door and post, a stop projecting from said cap, and a pin extended from the casing and acting to prevent movement of the post and door into the casing until the door is properly opened and coacting with said cap stop to limit outward movement of the post.

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Witnesses:
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