No. 683,258. Patented Sept. 24, 1901.

A. R. DU BOISE.

HAT CASE.

(Application filed Apr. 8, 1901.)

(No Model.)

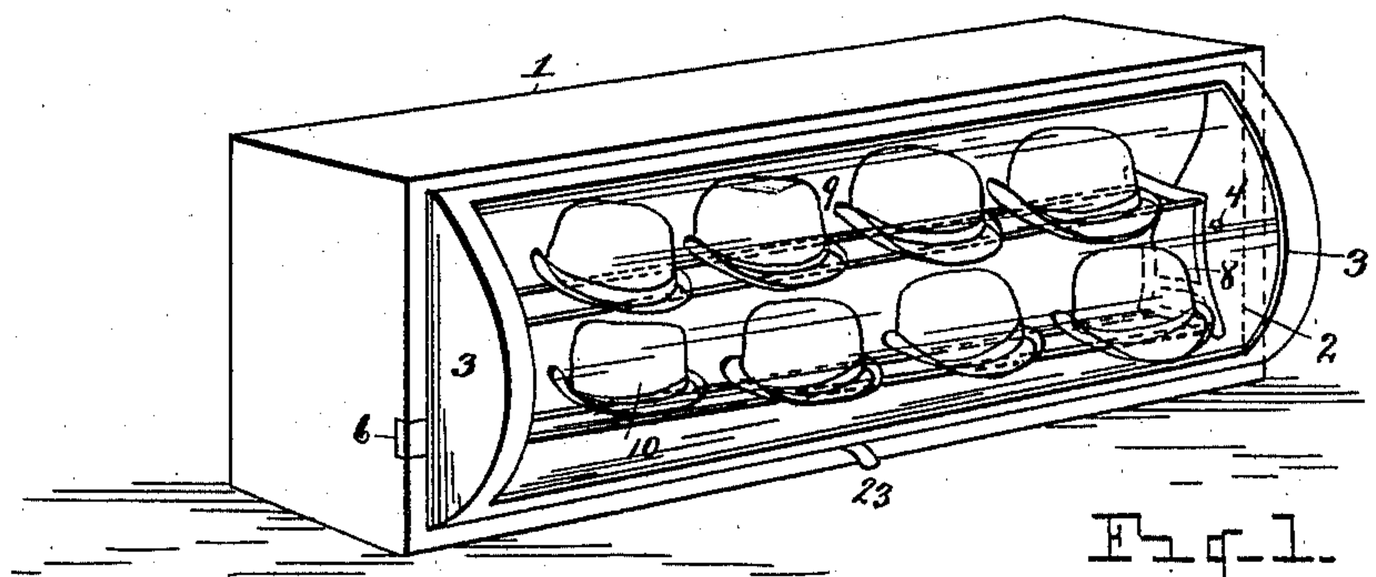

Fig. 1.

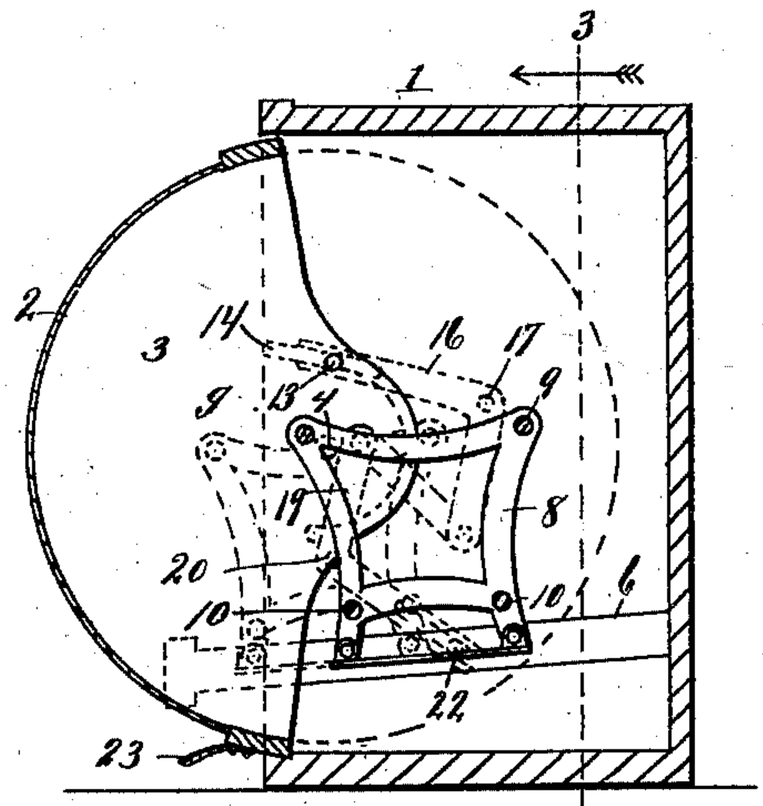

Fig. 2.

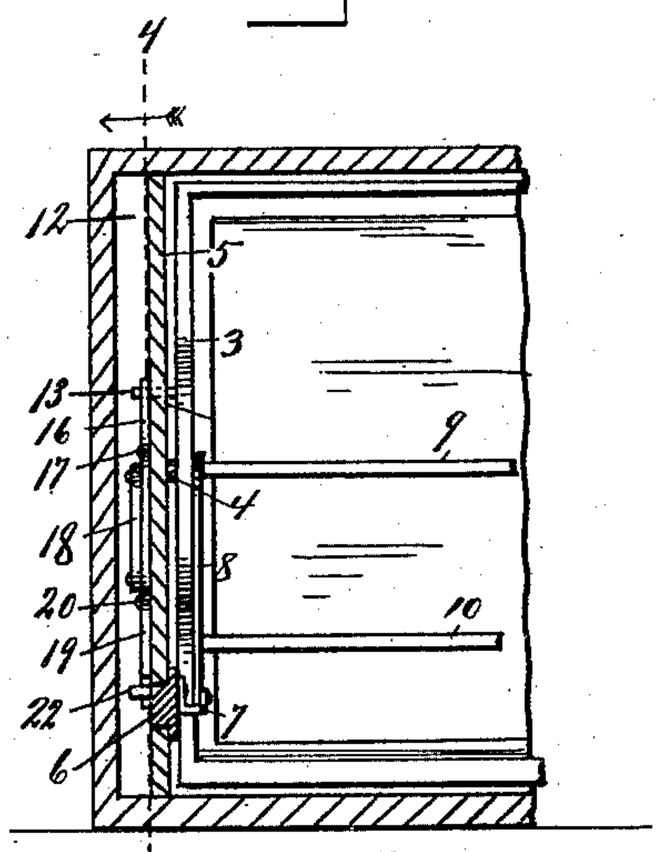

Fig. 3.

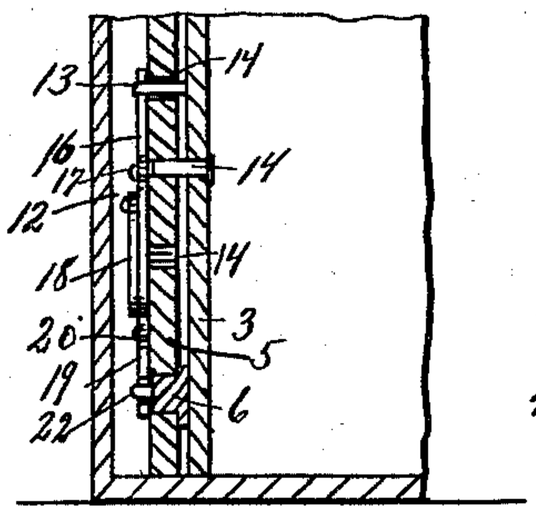

Fig. 6.

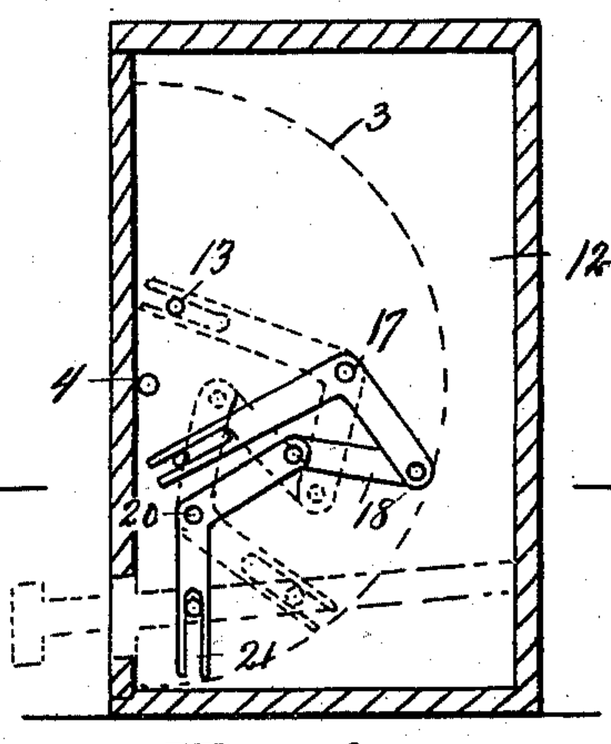

Fig. 4.

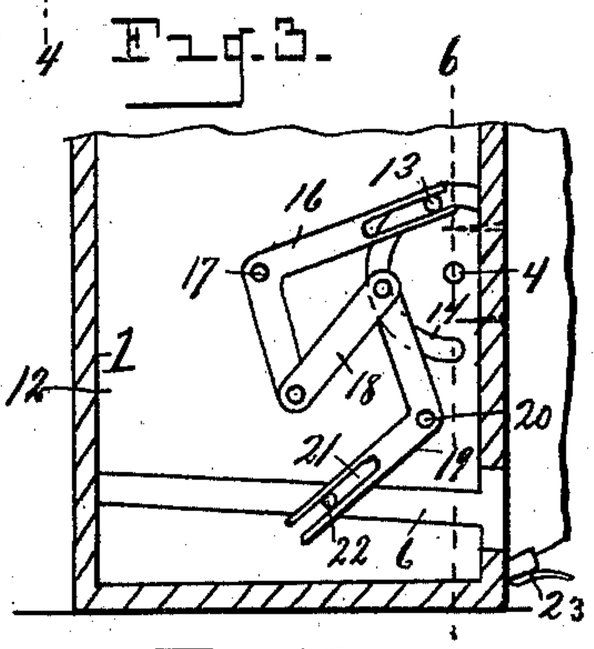

Fig. 5.

WITNESSES.

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UNITED STATES PATENT OFFICE.

ALFONSE R. DU BOISE, OF FLINT, MICHIGAN.

HAT-CASE.

SPECIFICATION forming part of Letters Patent No. 683,258, dated September 24, 1901.

Application filed April 8, 1901. Serial No. 54,770. (No model.)

To all whom it may concern:

Be it known that I, ALFONSE R. DU BOISE, a citizen of the United States, residing at Flint, in the county of Genesee, State of Michigan, have invented certain new and useful Improvements in Hat-Cases; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

This invention relates to new and useful improvements in hat-cases; and it consists in the construction and arrangement of parts hereinafter fully set forth, and pointed out particularly in the claims.

The object of the invention is to provide a hat-case for displaying hats in which the arrangement is such as to enable hats of all sizes to be placed upon one shelf and in a manner to effect economy in space; to automatically project the hats outwardly from the case upon the opening of the door, so as to render all of the hats in the case readily accessible; to enable the cases to be placed in tiers, one above the other, and to provide for excluding dust from the case when closed.

The above object is attained by the mechanism illustrated in the accompanying drawing, in which—

Figure 1 is a perspective view of a case embodying my invention. Fig. 2 is a transverse section through the case. Fig. 3 is a longitudinal section through one end thereof, as on line 3 3 of Fig. 2. Fig. 4 is a vertical section, as on line 4 4 of Fig. 3, showing the position of the operative levers when the case is open. Fig. 5 is a view similar to Fig. 4, showing the position of the operative levers when the case is closed. Fig. 6 is a vertical section, as on line 6 6 of Fig. 5.

Referring to the characters of reference, 1 designates the body of the case, which is oblong and preferably quadrangular in cross-section. The door 2 is of glass and is oval or semicircular in form, the segmental end pieces 3 thereof being pivoted at 4 concentric with the circular contour of the glass and equidistant between the top and bottom of the case. Located in the panels 5 in the ends of the case are the reciprocatory slides 6, whose outer ends project through the front edge of the ends of the case, as shown. Attached to the inner faces of said slides are the brackets 7, which project inwardly and to which are secured the metal frames 8, standing within the case parallel with the ends thereof. Crossing between said frames 8 are parallel rods 9 and 10, respectively forming the upper and lower shelves of the case, upon which the hats are placed, as shown in Fig. 1.

Between the end panels 5 and the outer ends 11 of the case is a space 12, in which the operative levers are located. Projecting from the outer face of the segmental end pieces 3 of the door is a pin 13, adapted to traverse a circular slot 14, formed in the end panel 5, and to engage in a slot 15 in one end of the bell-crank lever 16, pivoted at 17 and having pivotally attached to the opposite end thereof a link 18. Said link is also pivoted to a second bell-crank lever 19, fulcrumed at 20 and having a slot 21 in one end thereof, which receives the pin 22, projecting from the inner face of the slide 6. The central portion of the panel 5, cut out by the slot 14, is retained in place by the screws 5^a.

The door of the case is adapted to describe a half-circle upon its fulcrum 4. When said door is opened by rotating it upwardly through the medium of the handle 23, the pins 13, projecting from the ends thereof, are caused to engage the slots 15 of the bell-crank levers 16 and operate said levers to actuate the bell-crank levers 19 through the medium of the connecting-links 18 and cause the lower ends of said levers 19 to describe the arc of a circle and force outwardly the slides 6 through the engagement of the slotted openings in said levers with the pins 22, thereby carrying forward the frames which support the shelves upon which the hats are placed and projecting the hats forward in the case, so as to render them readily accessible. When the door of the case is closed, the pins 13 again actuate said series of levers to restore the parts to their former position, the slides 6 withdrawing within the case as the door is closed.

The rotating door is made to fit snugly

within the opening of the case, so that dust is excluded therefrom when the door is closed.

Because of the shape of the cases they are enabled to be placed one upon the other and end to end, enabling a number to be included within a comparatively small compass.

It will now be understood that in the operation of this device the hats are automatically projected outwardly when the door of the case is opened and automatically retracted upon the closing of the door of the case.

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

1. In a device for the purpose set forth, the combination of a case, a semicircular door pivoted to rotate in said case, a pin projecting from the end of said door and passing through a guide-slot in the end of the case, a movable shelf within the case adapted to slide transversely thereof, a pivoted bell-crank lever having a slotted end engaging said pin, a second bell-crank lever pivotally engaging said shelf, means pivotally connecting said levers to cause them to work in unison whereby said shelf is actuated upon the opening and closing of the door.

2. In a device for the purpose set forth, the combination of a case, a semicircular door pivoted to the case, slides mounted in the case and carrying brackets which support the shelves, a system of levers connecting said door with said slides whereby the slides are caused to reciprocate as the door is actuated.

3. In a device for the purpose set forth, the combination of a case, reciprocatory slides mounted therein, frames attached to said slides and carrying the hat-shelves, a pivoted door, pins carried by the ends of the door, slotted levers engaging said pins, slotted levers engaging said slides and links connecting said levers.

In testimony whereof I sign this specification in the presence of two witnesses.

ALFONSE R. DU BOISE.

Witnesses:
THOMAS SWAN,
G. V. CHAMBERLAIN.