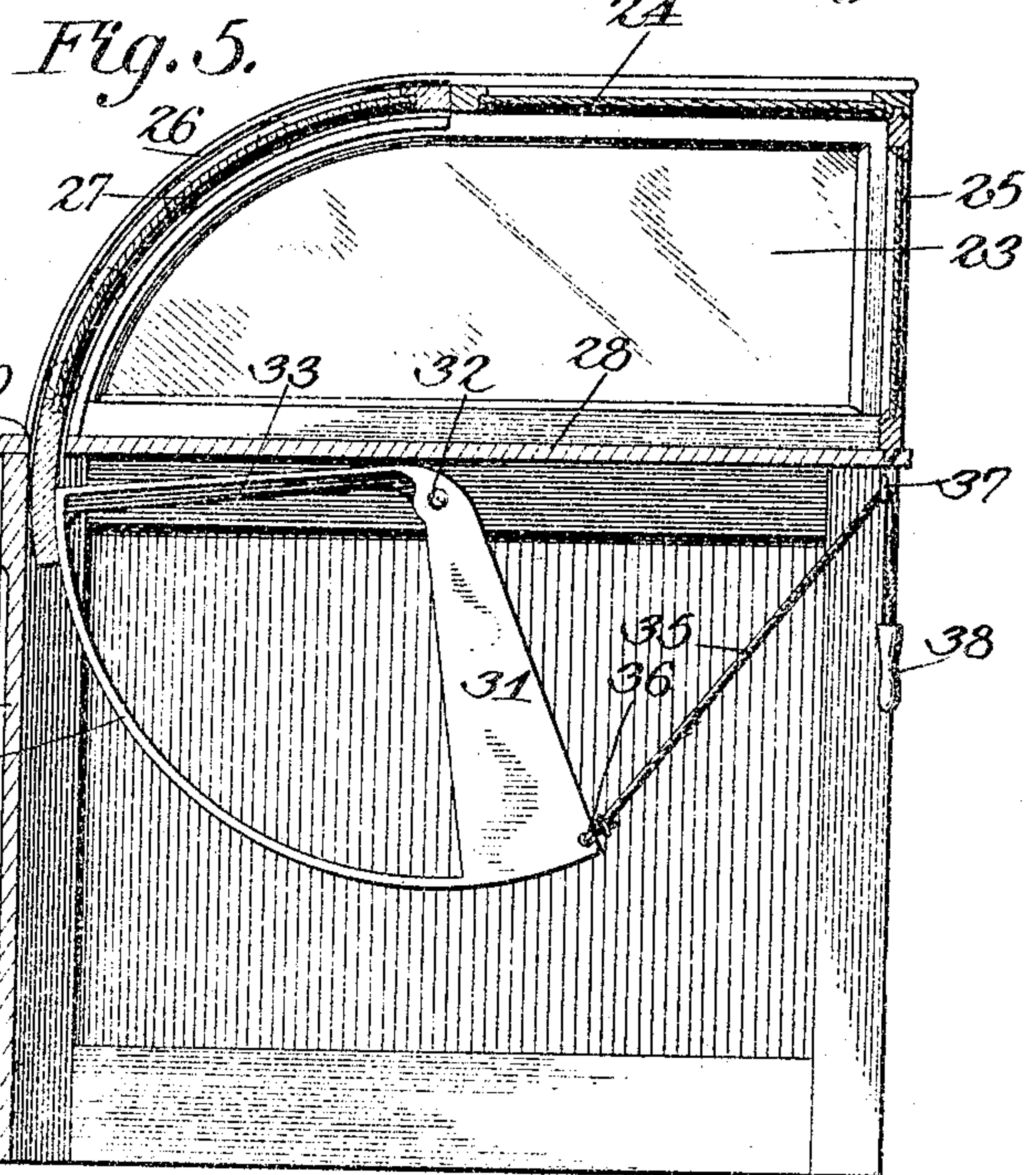
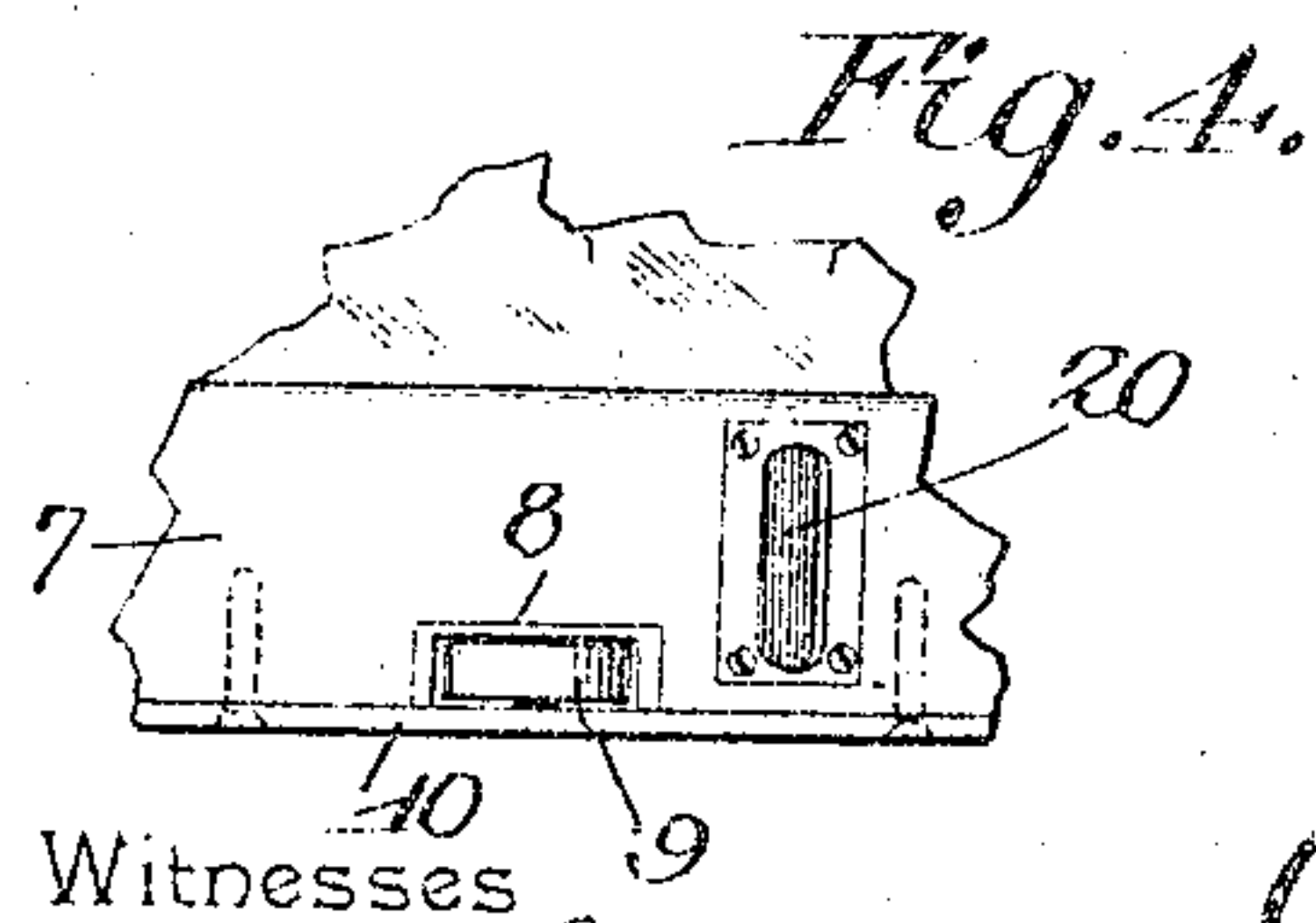
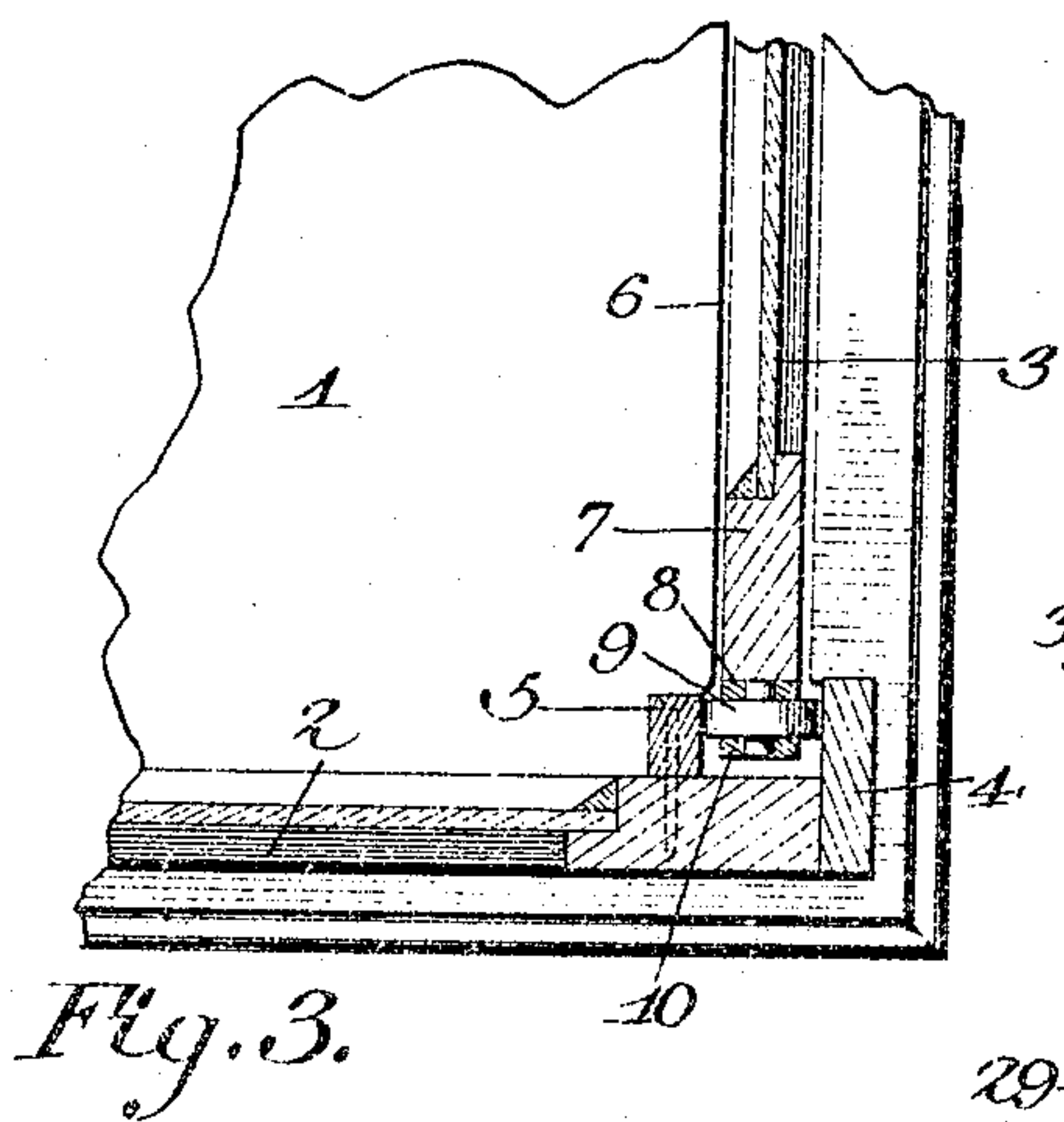
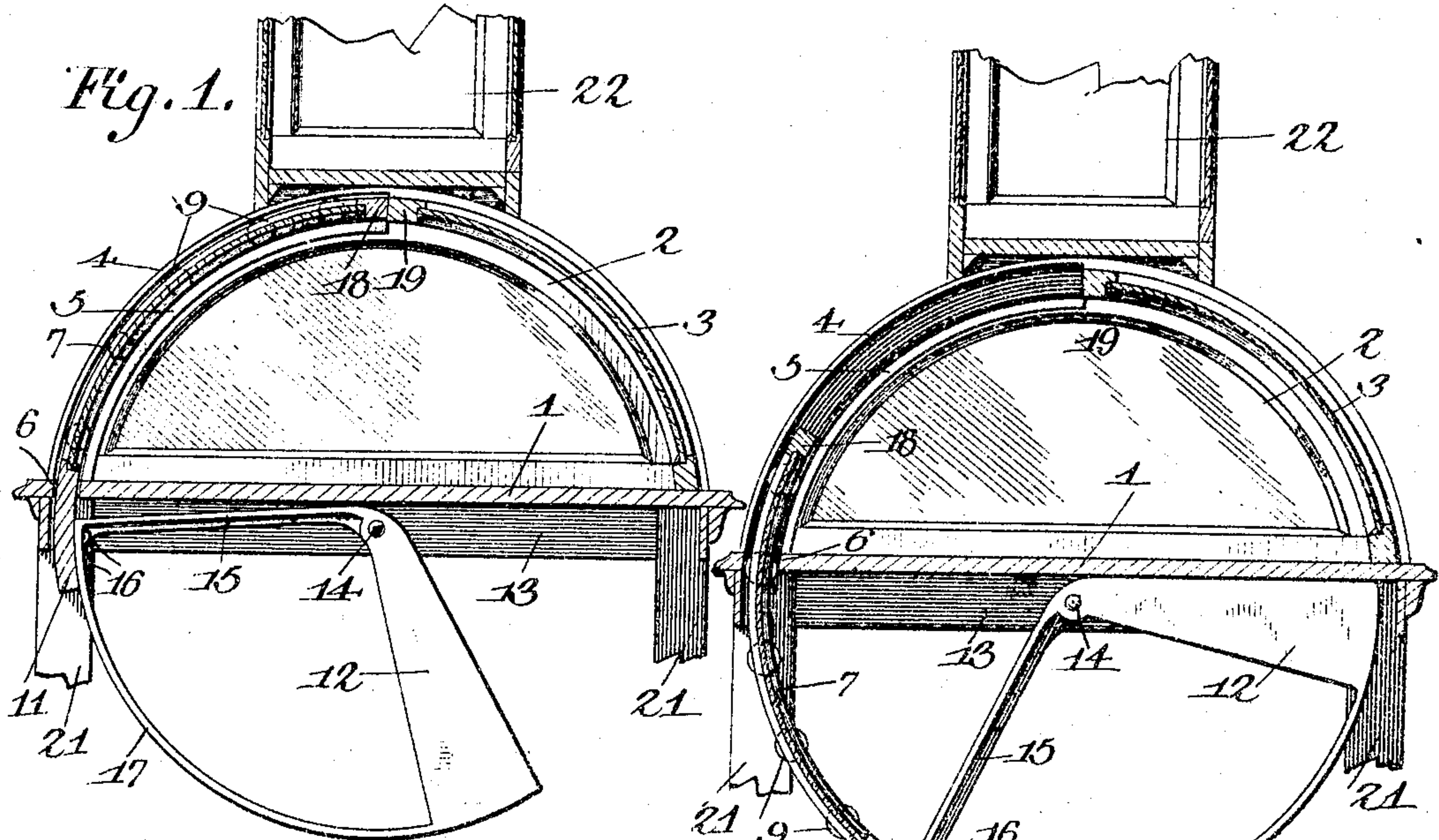


No. 794,646.

PATENTED JULY 11, 1905.

C. A. SULLIVAN.
SHOW CASE.

APPLICATION FILED NOV. 17, 1904.



Witnesses
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UNITED STATES PATENT OFFICE.

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SHOW-CASE.

SPECIFICATION forming part of Letters Patent No. 794,646, dated July 11, 1905.

Application filed November 17, 1904. Serial No. 233,133.

To all whom it may concern:

Be it known that I, CHARLES A. SULLIVAN, a citizen of the United States, residing at Florence, in the county of Lauderdale and State of Alabama, have invented a new and useful Show-Case, of which the following is a specification.

This invention relates to show-cases, and is designed to provide improvements in the manner of mounting the doors thereof, and it is proposed to have the door move to the under side of the case when open, so as not to obstruct the entrance into the show-case and also to obviate the necessity of the operator taking a position out of the path of the door when opening the same, as is necessary with ordinary hinged doors.

Another object of the invention is to insure the automatic closing of the door when released, in order that the case may always be closed when it is not desired to have access to the interior thereof.

With these and other objects in view the present invention consists in the combination and arrangement of parts, as will be hereinafter more fully described, shown in the accompanying drawings, and particularly pointed out in the appended claims, it being understood that changes in the form, proportion, size, and minor details may be made within the scope of the claims without departing from the spirit or sacrificing any of the advantages of the invention.

In the accompanying drawings, Figure 1 is a cross-sectional view of a show-case embodying the features of the present invention, the door being closed. Fig. 2 is a similar view with the door open. Fig. 3 is an enlarged horizontal detail sectional view taken through one corner of the case to show the guideway for the antifriction-rollers of the door. Fig. 4 is a fragmentary detail view illustrating the manner of mounting one of the antifriction-rollers upon the door. Fig. 5 is sectional view showing a special application of the invention.

Like characters of reference designate corresponding parts in each and every figure of the drawings.

The present case includes a base 1, which is

provided at each end with a glass cover and upstanding end frame 2, which may be segmental or substantially semicircular in form, as shown in Figs. 1 and 2 of the drawings. One longitudinal half of the case is covered by a bowed glass-covered frame 3, which is fixed in position, while the opposite longitudinal half of the case is normally closed by the sliding door of the present invention. Each cross-frame of the case is provided upon its inner face with a pair of spaced concentric flanges 4 and 5, which extend from the top of the frame down to the bottom or base 1 of the case, where they communicate with a longitudinal slot or opening 6, which is formed through the base.

The open side of the case is normally closed by means of a slidable door in the nature of a bowed glass-covered frame 7, which has its ends working in guideways produced by the flanges 4 and 5, with its lower edge in alignment with the slot 6, through which the door is designed to pass when being swung downward to open it. Each end edge of the frame of the door is provided with a series of sockets, one of which has been shown at 8 in Fig. 4 of the drawings, and is designed for the reception of an antifriction-roller 9, which has its peripheral edge projected at the inner and outer sides of the door and is retained in place by an arcuate metal strip 10, secured to the edge of the door, so as to close the series of notches and also constitute bearings for the outer journals of the rollers. As clearly indicated in Fig. 3 of the drawings, the rollers engage the flanges 4 and 5, so as to prevent lateral play of the door and at the same time insure an easy movement thereof in an upright direction through the guideway. The bottom rail 11 of the door normally projects downwardly through the slot or opening 6, and a counterweight 12 is connected thereto, so as to yieldably maintain the door closed. This counterweight is in the nature of an arm which is pivotally hung from one end of the boxing 13, which surrounds the base 1, said pivotal support being indicated at 14. An arm 15 extends laterally from the upper end of the counterweight and is connected to the rear side of the rail 11, as indicated at 16,

there being an arcuate brace 17 extending from the outer end of the arm 15 to the lower end of the counterweight 12.

The normally closed condition of the case is shown in Fig. 1, the counterweight being substantially in an upright position with the top rail 18 of the door in contact with the stationary top rail 19 of the fixed glass frame 3, whereby the upward movement of the door is limited. In opening the door a finger is engaged with a socket or seat 20, one in each upright frame portion of the door, and the door drawn downwardly to the position shown in Fig. 2, whereby the door is slid down beneath the bottom of the case, which may be supported upon a suitable counter or upon leg-standards 21. The downward movement of the door is limited by the counterweight 12 coming into contact with the bottom of the case. It is of course necessary to hold the door in its open position, as the weight thereof is overbalanced by the counterweight 12, so that when the door is released the counterweight automatically returns the door to its closed condition without manual manipulation thereof.

A very important feature of the present device resides in the fact that the door constitutes a part only of the top of the case and is movable downwardly across the bottom of the doorway instead of inwardly across the other side of the case, which would obstruct the view through said other side.

If desired, a supplemental glass-covered case 22 may be supported upon the top of the upright cross-frames of the lower case.

A particular application of the present invention has been shown in Fig. 5 of the drawings, wherein 23 designates a case having a flat glass-covered top 24 and a glass-covered back frame 25, which is preferably in the nature of a horizontally-slidable door having a tongue-and-groove connection with the top and bottom of the case, the front of the case being bowed, as at 26, and equipped with a bowed slidable glass top 27, mounted and arranged precisely as hereinbefore shown and described for the form illustrated in Figs. 1 to 4, inclusive. The bottom 28 of the case constitutes the top of the counter 29, upon which the case is supported, and the top of the counter or the base of the case is provided with a longitudinal slot 30, through which the slidable door 27 is designed to work. A counterweight-arm 31 is fulcrumed at its upper end upon one end of the counter, as at 32, and has a brace 33 extending from the upper end of the arm to the lower rail of the slidable door, there being an arcuate brace 34 extending between the outer end of the arm 33 and the lower end of the counterweight. It will here be explained that the slidable door is at the front of the counter, and this arrangement of case has been especially designed for containing and exhibiting cigars, tobacco, and

the like, whereby a customer may have access to the interior of the case for selecting whatever cigars or other articles he may prefer. In this connection it is proposed to provide for opening the door from the back of the counter, one embodiment of the invention consisting in a rope or other flexible connection 35, secured, as at 36, to the lower end of the counterweight and passed upwardly and rearwardly therefrom through a guide 37, carried by the back portion of the counter, from which the rope depends, and is provided with a suitable handle 38. Upon pulling rearwardly upon the handle 38 the slidable door will be drawn down beneath the bottom of the case, thereby opening the front thereof for the convenience of a purchaser in selecting any article from the interior of the case.

In selecting cigars it is customary for the salesman to pick up a handful of cigars out of the case and place the same upon the top thereof in order that the customer may select one or more cigars; but this method is objectionable in that the removing and replacing of the cigars injures the same to a certain extent and they frequently become misplaced in returning them to the case. These objections are fully overcome by the embodiment of the invention as shown in Fig. 5, as each customer is given direct access to the interior of the case for the selection of cigars or other articles therefrom without removing a quantity of the cigars and then returning those which are not purchased. Moreover, by having the door 27 move downwardly across the bottom of the doorway the opening of said door does not obstruct access to the case through the back thereof when the part 25 is a door, and neither does it obstruct the view through the back and top of the case when the door 27 is open.

Having fully described the invention, what is claimed is—

1. A show-case comprising a base having a longitudinal opening adjacent one edge thereof, upstanding cross-frames carried by the base and provided upon adjacent faces with corresponding substantially arcuate guideways, and a bowed door having its end portions working in the guideways with one side registering with the slot in the base and capable of movement downwardly therethrough when the cover is being opened.

2. A show-case comprising a base having a longitudinal opening adjacent one edge thereof, upstanding cross-frames carried by the base and provided upon adjacent faces with corresponding arcuate guideways, and a bowed door having its end portions working in the guideways with one side registering with the slot in the base and capable of movement downwardly therethrough when the door is being opened, and a counterweight connected to the door to automatically return the same to its normal closed position.

3. A show-case comprising a base having a longitudinal opening adjacent one edge thereof, upstanding cross-frames carried by the base and provided upon adjacent faces with corresponding arcuate guideways, and a bowed door having its end portions working in the guideways with one side registering with the slot in the base and capable of movement downwardly therethrough when the door is being opened, a substantially radial counterweight-arm connected to the door and fulcrumed independently thereof.

4. A show-case comprising a base having a longitudinal opening adjacent one edge thereof, upstanding cross-frames carried by the base and provided upon adjacent faces with corresponding bowed guideways, and a bowed door having its end portions working in the guideways with one side registering with the slot in the base and capable of movement downwardly therethrough when the door is being opened, a substantially radial counterweight-arm connected to and projected inwardly from the door and fulcrumed independently thereof, and a brace member pendant from the door and connected to the counterweight-arm.

5. A show-case comprising a base having a longitudinal slot adjacent one edge thereof, upstanding cross-frames carried by the base and provided upon adjacent faces with corresponding arcuate guideways, and a bowed door having its end portions working in the guideways with one side registering with the slot in the base and capable of movement downwardly therethrough when the door is being opened, and a stop member carried by the door for engagement with the base to limit the opening movement of said cover.

6. A show-case comprising a base, upright cross-frames carried by the base and provided upon their inner sides with corresponding arcuate guideways, the base being provided with a longitudinal slot at corresponding ends of the guideways, a bowed door having its ends working in the respective guideways, each end of the door being provided with a series of recesses, antifriction-rollers located in the recesses and projected at opposite sides of the door to run within the adjacent guideway, and arcuate bars secured to the ends of the door to close the recesses and constitute supports for the antifriction-rollers, one edge of the door working through the longitudinal slot in the base.

7. A show-case comprising a base having a longitudinal slot adjacent one edge thereof, upstanding cross-frames carried by the base and provided with corresponding arcuate guideways, a bowed door having its end portions working in the guideways with one side registering with the slot in the base and capable of movement downwardly therethrough, and a counterweight fulcrumed beneath the base of the case and connected to the door.

8. A show-case comprising a base having a longitudinal slot, upright cross-frames carried by the base and provided with corresponding arcuate guideways leading to the slot, a bowed door having its end portions working in the guideways and its lower edge projected through the slot in the base, and a counterweight pivotally hung beneath the base and connected to the lower projected edge of the door.

9. A show-case comprising a base, upstanding cross-frames carried by the base and provided with corresponding arcuate guideways, a bowed door having its end portions working in the guideways and movable downwardly below the base.

10. A show-case comprising a base, upstanding cross-frames carried by the base and provided with corresponding arcuate guideways, a bowed door having its end portions working in the guideways and movable downwardly beneath the base, and a counterweight hung below the base independently of the door and connected thereto to yieldably maintain the door in its closed position.

11. A show-case having an arched front which is provided with a doorway, an arched door normally closing the doorway and capable of being slid downwardly across the bottom of the doorway beneath the bottom of the case, and means for opening the door from the back of the case.

12. A show-case having doors at the front and the back thereof, the front door opening downwardly beneath the bottom of the case, and means at the back of the case for opening the front door.

13. A show-case having doorways in the front and the back thereof, a horizontal slidable door for the back doorway, a vertically-slidable door for the front doorway and capable of opening downwardly beneath the bottom of the case, and means at the back of the case for opening the front door.

14. A show-case having a doorway in the back thereof and also provided with an arched front having a doorway, a door for the back doorway, an arched door for the front doorway and capable of being slid downwardly across the bottom of the front doorway beneath the case, and means for opening the front door from the back of the case.

15. A show-case having corresponding upright arcuate guideways at the front thereof, a bowed door working in the guideways and capable of movement downwardly beneath the bottom of the case, a counterweight connected to the door and pivotally supported beneath the bottom of the case independently of the door, and means connected to the counterweight and accessible at the back of the case for opening the door.

16. A show-case having corresponding upright arcuate guideways at the front thereof, a bowed door having its end portions work-

ing in the guideways and capable of movement downwardly and beneath the case, a counterweight connected to the door and pivotally supported beneath the case, a guide located at the back of the case, and a flexible
5 controlling device connected to the counterweight and engaging the guide, whereby the door may be opened from the back of the case.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

CHARLES A. SULLIVAN.

Witnesses:

P. I. PRICE,

S. B. KEY.