

M. KUMP.
SHOW CASE DOOR.
APPLICATION FILED MAY 20, 1913.

1,091,670.

Patented Mar. 31, 1914.

FIG. 1.

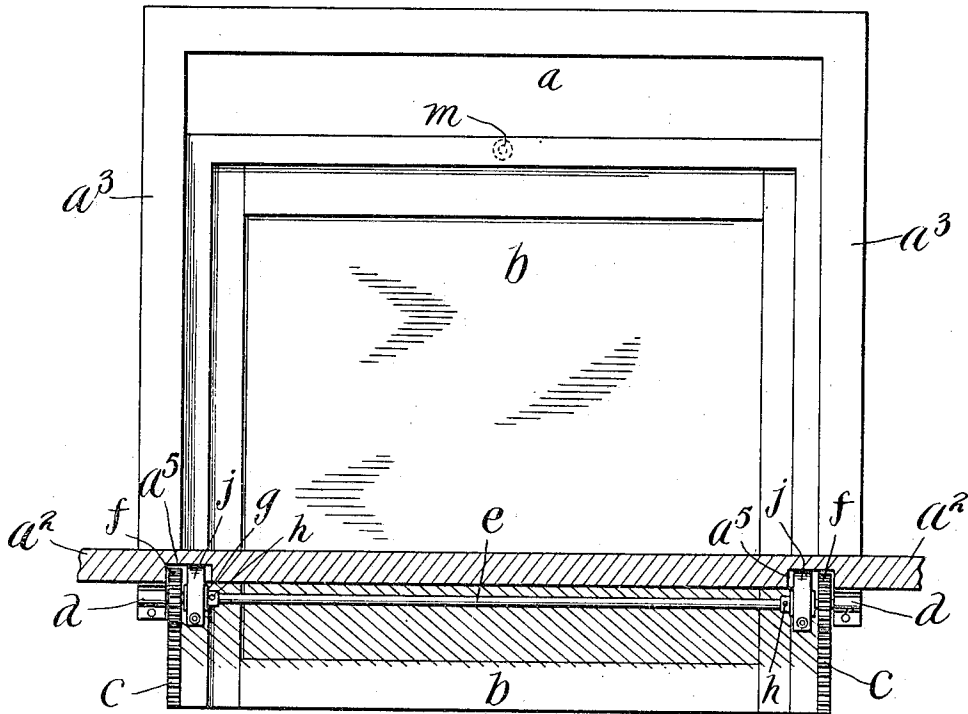


FIG. 2.

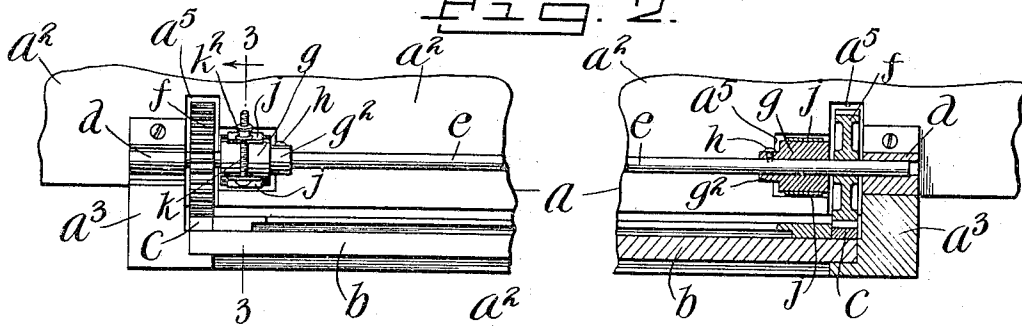
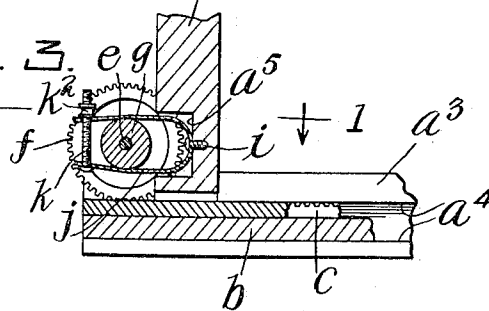


FIG. 3.



Witnesses:
A. C. Thompson.
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UNITED STATES PATENT OFFICE.

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SHOW-CASE DOOR.

1,091,670.

Specification of Letters Patent.

Patented Mar. 31, 1914.

Application filed May 20, 1913. Serial No. 768,732.

To all whom it may concern:

Be it known that I, MATHIAS KUMP, a citizen of the United States, and residing at Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Show-Case Doors, of which the following is a specification, such as will enable those skilled in the art to which it appertains to make and use the same.

This invention relates to show cases, and particularly to the doors thereof, and the object of the invention is to provide a show case with a vertically movable door which may be easily opened and closed and which will be held in the closed, or any other position, by friction, and with this and other objects in view the invention consists in the construction combination and arrangement of parts hereinafter described and claimed.

The invention is fully disclosed in the following specification of which the accompanying drawing forms a part, in which the separate parts of my invention are designated by suitable reference characters in each of the views, and in which;—

Figure 1 is an inside sectional view showing a show case provided with my improvement, the section being on the line 1—1 of Fig. 3; Fig. 2 a bottom view of the construction, as shown in Fig. 1, and partly in section, and; Fig. 3 a partial section on the line 3—3 of Fig. 2.

In the drawing forming part of this specification I have shown at *a* an ordinary show case having a bottom *a*² and sides *a*³ in which are formed grooves *a*⁴ in which a door *b* is vertically movable. The door *b* is provided on its opposite sides with rack or gear bars *c*, and the sides of the show cases are provided below the bottom *a*² with keepers *d* in which is mounted a horizontal shaft *e* having gears *f* which operate in connection with the rack or gear bars *c* and inwardly of which said shaft is provided with cylindrical friction blocks *g* having hub bars *g*² through which are passed set screws *h* whereby said friction blocks are secured to said shaft and may be adjusted longitudinally thereof if desired. The bottom *a*² of the show case is provided, in the form of construction shown, with recesses *a*⁵ in

which the gears *f* operate, and secured in the bottom of said recesses, as shown at *i*, are U-shaped springs *j*, the side arms of which inclose the friction blocks *g* and which are connected by screws *k* having thumb nuts *k*², and by turning the thumb nuts *k*² the friction of the said arms of the U-shaped springs *j* on the rollers *g* may be increased or decreased, as will be readily understood. The door *b* is provided at the top thereof and on the outer side thereof with a knob or handle *m*, and by grasping said knob or handle, the said door may be lowered, or opened, and closed, whenever desired, said door being moved downwardly to open it and upwardly to close it, and the friction of the springs *j* on the rollers *g* will be sufficient to hold said door in any desired position, and friction may be increased or decreased by turning the thumb nuts *k*², whenever desired. A show case made in this manner may be set on a counter in the usual way or provided with any other support, and, if desired, the show case may be built on a counter or support in which event the part *a*² of the construction herein shown and described would form the counter, as well as the bottom of the show case.

Although I have shown and described my invention as an improvement in show cases, it will be understood that the use thereof is not limited to show cases, and the said invention may be applied to horizontally movable drawers in bureaus, cabinets or the like, or to doors of various kinds of receptacles or cases, and changes in and modifications of the construction herein described may be made, within the scope of the appended claim, without departing from the spirit of my invention or sacrificing its advantages. Having fully described my invention what I claim as new and desire to secure by Letters Patent is;—

A case or receptacle of the class described provided with a vertically movable door mounted in front of the bottom of the case and the sides of which are provided with parallel rack gears, a shaft mounted in connection with the bottom of the case and below the same and adjacent to the front edge thereof, and provided with gears meshing

with said rack gears, said shaft being provided with stationary cylindrical friction blocks, U-shaped springs secured to the bottom of the case and the sides of which in-
5 close said blocks, and means for compressing the sides of said springs on said blocks.
In testimony that I claim the foregoing as

my invention I have signed my name in presence of the subscribing witnesses this 17th day of May 1913.

MATHIAS KUMP.

Witnesses:

C. MULREANY,
S. ANDREWS.
