

F. A. HOWELL.
Show-Case.

No. 198,982.

Patented Jan. 8, 1878.

Fig: 1.

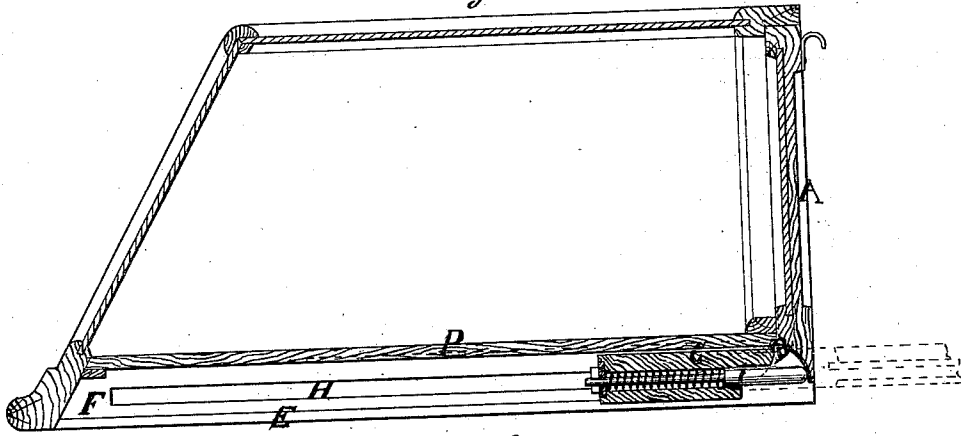


Fig: 2.

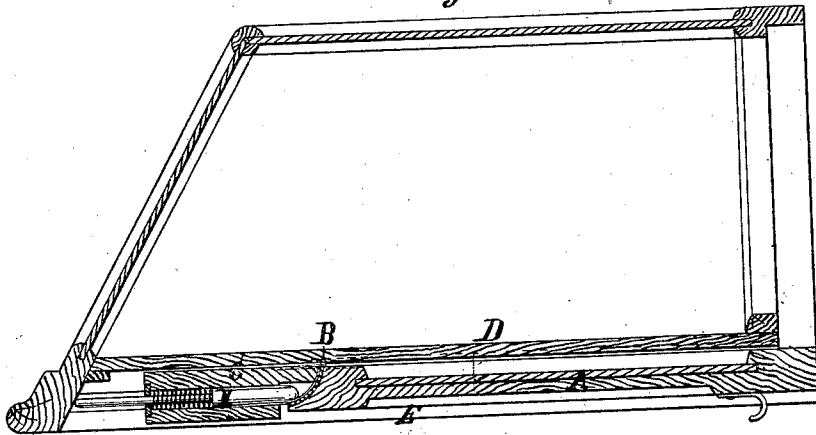
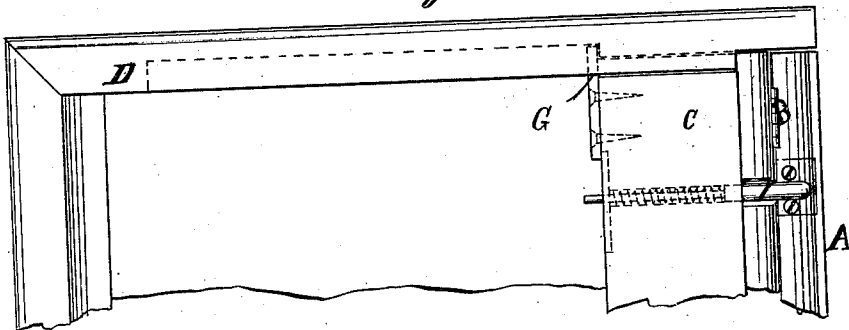


Fig: 3.



Witnesses:
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att'y

UNITED STATES PATENT OFFICE.

FRANCIS A. HOWELL, OF JERSEY CITY, NEW JERSEY, ASSIGNOR TO WM. F. REED, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN SHOW-CASES.

Specification forming part of Letters Patent No. **198,982**, dated January 8, 1878; application filed September 6, 1877.

To all whom it may concern:

Be it known that I, FRANCIS A. HOWELL, of Jersey City, Hudson county, and State of New Jersey, have invented new and useful Improvements in Show-Cases, of which the following is a specification:

My invention consists of spring-closing mechanism, in combination with the door or back of a show-case, which is also arranged to slide, when opened, under the bottom of the show-case instead of projecting horizontally, in the way of the attendant, or hanging vertically, in the way of access to drawers or closets under the counter.

Figure 1 is a transverse section of my improved show-case, showing the door closed. Fig. 2 is a transverse section, showing the door opened and slid under the show-case; and Fig. 3 is a plan of the show-case inverted.

A is the back or door of the show-case. It is hinged at B, in any suitable way, to the sliding plate C, which rests on the ways E, above the counter or other support of the show-case, and is fitted to slide forward and backward freely between the counter and the bottom D of the show-case, the ends being supported and guided by the ways E and the ends F of the show-case. At each end of the plate C is a stud, G, projecting into a groove, H, in the end F of the case, for stops to arrest the plate when moved forward to the right position for the door to close, and also to arrest it in the backward movement by contact with the end walls of the grooves.

This plate carries spring-pushers I, which,

at the outer end, bear against the lower edge of the door, which projects sufficiently beyond the axis of the hinges to afford leverage, whereby said pushers are enabled to shut the door and keep it shut whenever the sliding plate is pulled forward.

Thus I have both the sliding under and self-closing properties combined, whereby the show-case is made more convenient and preferable than with either alone.

It is highly desirable to have the door contrived to slide under, because it is out of the way of the attendant more than when projecting horizontally, and at the same time it does not obstruct access to the drawers and closets beneath the counter, as when it hangs down vertically. But in this sliding arrangement it is desirable not to let the door swing below the horizontal plane, and in such arrangement, without the spring-closing device to shut it as soon as it is drawn out sufficiently, it is very liable to be damaged in the hinges; hence the door having the two contrivances is more useful, durable, and perfect than without either one.

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

A show-case door having spring-closing mechanism, and being arranged to slide under the case when open, substantially as described.

FRANCIS A. HOWELL.

Witnesses:

F. A. THAYER,
WM. J. MORGAN.