F. C. CUTTING.
SHOW CASE.

No. 383,867. Patented June 5, 1888. Pil. 1. WILDESSES_ Herride May. By Albert M. Thoore. His Attorney.

United States Patent Office.

FRED C. CUTTING, OF LOWELL, MASSACHUSETTS.

SHOW-CASE.

SPECIFICATION forming part of Letters Patent No. 383,867, dated June 5, 1888.

Application filed April 8, 1887. Serial No. 234,114. (No model.)

To all whom it may concern:

Be it known that I, FRED C. CUTTING, a citizen of the United States, residing at Lowell, in the county of Middlesex and Common-5 wealth of Massachusetts, have invented a certain new and useful Improvement in Show-Cases, of which the following is a specification.

My invention relates to show-cases; and it consists in the devices and combinations here-10 inafter described and claimed, whereby a series of trays pivoted in a common frame and normally resting upon each other may be lifted and held out of contact with each other to allow the contents of the different trays to be

15 inspected.

In the accompanying drawings, Figure 1 is an isometric view of my improved show-case, with the trays lifted out of contact with each other; Fig. 2, a side elevation of the show-case 20 closed, a part of the frame and a part of one of the trays being broken away to show the construction of the hinge and of a part of a holding mechanism; Fig. 3, an elevation of the inside of one of the uprights of the frame; Fig. 25 4, a plan of the under side of one of the drawers and a horizontal section of the uprights of the frame and a plan of the under side of the top of the frame; Fig. 5, a vertical section of the front portion of a tray at the middle of the 30 same.

The frame A of the show-case consists of the bottom tray, T, which forms the base of the show-case, two uprights, a a', secured to the sides of the tray T, and a horizontal top, a^2 , 35 secured to the upper ends of the uprights a a'. All of the trays above the bottom tray, T, are hinged to the frame of the show-case, each movable tray, T', being provided on each side with a backwardly-extending strip, t, prefer-40 ably of metal, each of said strips being provided with a hole, t', near its rear end. Through the holes t' are placed horizontal pivot-rods t^2 , the ends of said rods being secured in the uprights a a' of the frame A, and on these 45 pivot-rods the trays T' may be turned by lifting the front ends of said trays. The pivot $rods t^2$ are arranged at such a distance apart as to allow each tray to rest when the case is closed upon the one immediately below it and 50 to serve as a cover for the same to exclude dust therefrom, and the strips t extend back |

of the trays, in order that each tray when raised may be entirely out of contact at its rear end with the tray immediately below it and may not interfere with the raising of the 55 last named tray. Each of the movable trays T' is provided with a suitable handle, t^3 .

To the inside of each of the uprights a a' are secured as many arc shaped racks R as there are movable trays, and for convenience all of 60 the racks on the same upright may be cast in a single piece, as shown at R' in Fig. 3, the piece R' being let into a recess, r r', in the upright and held in place by screws $r^2 r^3$, and the racks R being concentric with the pivots t^2 . To 65 each of the movable trays are secured two spring-pawls, PP', at the rear end of said pawls and at the rear ends of the sides of the trays, the front ends of said pawls being provided with lateral projections or teeth p p', adapted 70 to engage the teeth of the racks R, the pawls being forced outward by their own elasticity. (See Figs. 2 and 4.)

To the under side of each movable tray is pivoted a three armed lever, L, at l. One 75 arm, l', of the lever L is in front of the pivot or fulcrum l, another, l', is behind said fulcrum, and the third, l^3 , is at the side of said fulcrum. Another lever, L', is pivoted at the front of each tray upon a horizontal fulcrum, the 80 lower end of said lever L' being connected by a rod, lo, to the arm lo of the lever L, so that pushing the upper end of the lever L' backward turns the lever Lupon its fulcrum. The arms $l' l^2$ are connected by rods $l^6 l^7$ to the 85 pawls P P', respectively, near the front ends of said pawls, so that pushing backward the upper end of the lever L'draws the free ends of said pawls away from the uprights a a' and out of engagement with the racks. The upper end 90 of the lever L' may be conveniently pushed backward by the thumb at the same time that the handle of the tray is raised or lowered by the fingers of the same hand, the upper end of said lever L' projecting through the front of 95 the tray, as shown in Fig. 5. When the trays are raised, they are held at any desired height by the engagement of the pawls with the racks, and of course are readily restored to the position they occupy in Fig. 2 by disengaging the 100 pawls and racks, as above described.

It is intended to use the trays for the recep-

tion and display of small wares—such as buttons, gloves, hosiery, and other similar articles--instores, the show-case being placed upon the counter of the store or upon a suitable 5 table.

If the rod l⁵ is allowed to project in front of the movable tray, the lever L' may dispensed

with.

I claim as my invention--

10 1. The combination of the frame, a tray pivoted in said frame, arc shaped racks secured to said frame concentrically with the pivots of said tray, and pawls secured to said tray and engaging said racks to hold said tray in posi-15 tion when said tray is turned on its pivots, as

and for the purpose specified.

2. The combination of the frame, a tray pivoted in said frame, arc shaped racks secured to said frame concentrically with the pivots 20 of said tray, pawls secured to said tray and engaging said racks to hold said tray in position when said tray is turned on its pivots, a three-armed lever pivoted to said tray, rods connecting said pawls and said lever, and an-25 other rod connected to said lever and reaching to the front of said tray to enable said pawls to be withdrawn from said racks by pulling said last-named rod, as and for the purpose specified.

3. The combination of the frame, a tray pivoted in said frame, arc-shaped racks secured to said frame concentrically with the pivots of said tray, pawls secured to said tray and engaging said racks to hold said tray in position

35 when said tray is turned on its pivots, a threearmed lever pivoted to said tray, rods connecting said pawls and said lever, another rod connected to said lever and reaching to the front of said tray, another lever pivoted to the

front of said tray and connected at one end to 40 said last-named rod, whereby turning said last-named lever upon its pivot will draw said pawls out of engagement with said racks, as

and for the purpose specified.

4. The combination of the frame, a series of 45 trays arranged one above the other, each tray normally resting upon and covering the tray next below it, strips secured one to each side of each tray and extending back of said tray and provided with a hole back of said 50 tray, and pivot-rods each passing through the holes of the strips secured to one of said trays to enable each of said trays to be turned upon its pivot-rod without interfering with the tray next below the same, as and for the purpose 55 specified.

5. The combination of the frame consisting of a bottom tray, uprights secured to said bottom tray, and a horizontal top connecting said uprights, a series of trays arranged one above 60 the other and above said bottom tray, each tray of said series normally resting upon and covering the tray next below it, said lastnamed trays being pivoted in said frame and each being thereby adapted to be raised out 65 of contact with the tray next below it, and independent means, substantially as described, for holding each of said pivoted trays in a raised position, as and for the purpose specified.

In witness whereof I have signed this specification, before two attesting witnesses, this 5th

day of April, A. D. 1887.

FRED C. CUTTING.

Witnesses:

ALBERT M. MOORE, CHARLES E. FLOOD.