

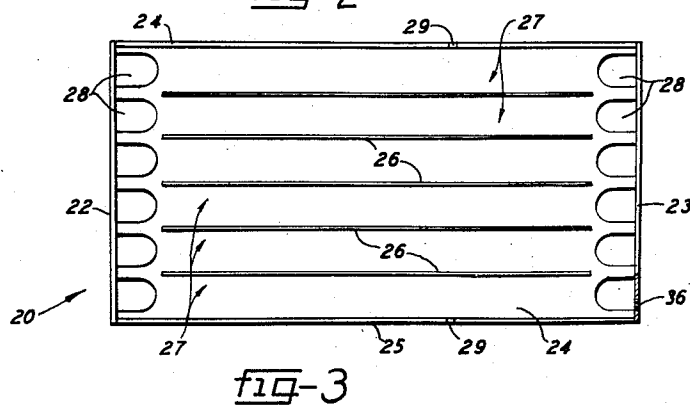
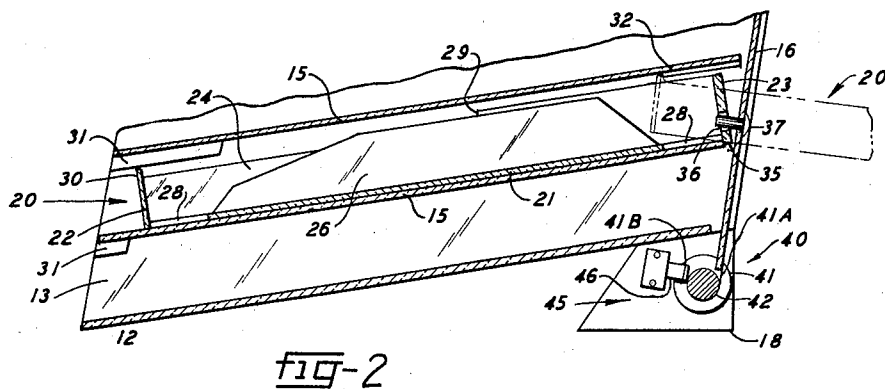
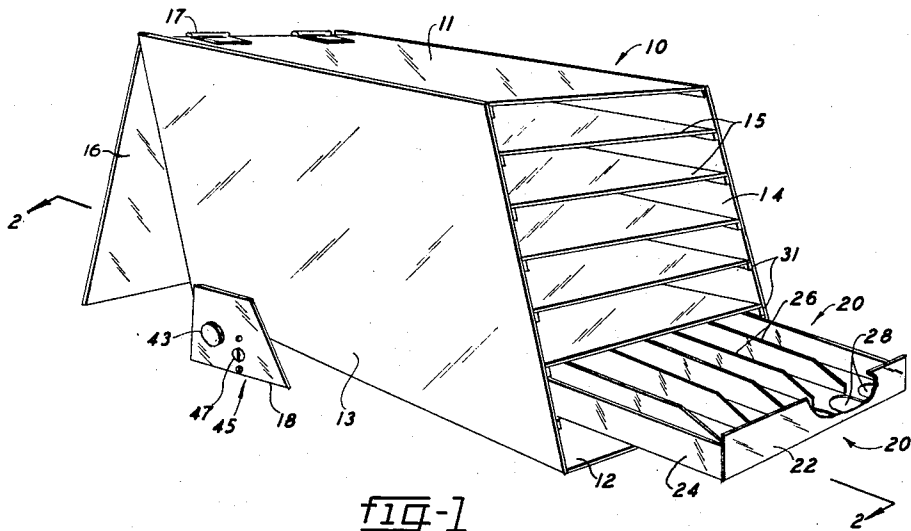
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DISPLAY CABINET

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DISPLAY CABINET

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3 Claims. (Cl. 312-126)

The present invention relates to display cabinets, and more particularly, to display cabinets for relatively small articles, such as the containers within which lipstick is packaged.

Small articles such as the lipstick containers mentioned above cannot be readily displayed on counters in retail stores without the danger of damage or actual loss through careless handling or intentional shoplifting. It will be noted that in any drug store, for example, a very large number of lipstick containers are displayed in one fashion or another together with numerous other small articles. However, the displays are not optimum, since some protection against the aforementioned difficulties must be provided.

It is a general object of the present invention to provide a display cabinet that is particularly adapted to provide ready visual accessibility to the articles therewithin while precluding undesired manual accessibility thereto so that the damage and losses mentioned hereinabove will be effectively eliminated.

More particularly, it is a feature of this invention to provide a display cabinet that includes a case, shelves, drawers and a door, all composed of transparent material so that complete visual inspection of the articles contained in the cabinet is allowed.

Another feature of the invention relates to the design of the cabinet so that the individual drawers therein are displaced in stepped relation with respect to one another so that the contents or a portion of the contents of each drawer is available for immediate visual inspection.

Additionally, it is a feature to provide a display cabinet including a case having an open front from which the drawers may be extended a predetermined amount after a single locking means has been opened by the store attendant, such locking means being operable to enable the opening of all of the drawers.

Another feature relates to the provision of stop means to preclude the complete withdrawal of a drawer through the open front of the case.

Still another feature of the invention relates to the drawer structure itself which provides for the aligned disposition of the articles therein and also enables an individual article to be withdrawn from the drawer with facility.

These as well as other objects and features of the invention will become more apparent from a perusal of the following description of the accompanying drawings, wherein:

Fig. 1 is a perspective view of a display cabinet constituting a preferred embodiment of the invention, one drawer being shown in a forwardly extended position and partially broken away to illustrate details thereof,

Fig. 2 is an enlarged, vertical, sectional view taken substantially along the line 2-2 of Fig. 1, and illustrating the drawer in its normal closed and locked disposition within the case, and

Fig. 3 is a top plan view of an individual drawer illustrating additional details of its construction.

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With initial reference to Fig. 1, the illustrated, preferred embodiment of the invention includes a case 10 that is of general box-like form. The top 11 and bottom 12 of the case 10 are composed of rectangular sheets of transparent, plastic material while the sides 13, 14 are also of transparent, plastic material, but are in the form of parallelograms. A plurality of shelves 15 are disposed within the case in parallelism to the top 11 and bottom 12, and because of the parallelogram structure of the sides 13, 14, are displaced in slightly stepped relation one from the other. Both the front and rear faces of the case 10 are left open, but a door 16 is arranged to swing into closing position over the rear face of the case, being hinged as indicated at 17, to the rear of the top 11. Like the main body of the case 10, the shelves 15 and the door 16 are also preferably composed of sheets of clear plastic material. Legs 18 support the rear of the case 10 in a slightly elevated position so that the shelves 15 slope downwardly toward the front of the unit.

Upon each shelf 15 is received a drawer, generally indicated at 20 (only one being illustrated), also formed of transparent plastic material. As shown, the drawer 20 includes a bottom 21, front and rear ends 22, 23, and two sides 24 and 25, rigidly attached in rectangular relationship. Additionally, within the drawer 20, a number of dividers 26 are disposed to project upwardly from the bottom 21 and form therebetween a plurality of troughs 27 which extend generally longitudinally of the drawer. As shown best in Figs. 2 and 3, these dividers 26 extend throughout a greater portion of the length of the drawer 20, but terminate somewhat short of the front and rear thereof. Beyond the termination of the dividers 26, a number of openings 28 are formed in the bottom 21 of the drawer 20, as best illustrated in Fig. 3. Each opening 28 is of generally semi-circular configuration and is aligned with the trough lying between two adjacent dividers 26; and the width of each opening is somewhat less than that of the article to be displayed, for example, a cylindrical lipstick container (not shown) positioned within the trough. Thus a portion of the container can enter such opening 28 so that the container may be pivoted upwardly from its normal, substantially prone disposition within the trough whereby removal therefrom is facilitated.

The sides 24, 25 of the drawer 20 are each cut away to form a shoulder, indicated at 29 in Fig. 2, at a point intermediate of the length of the drawer and to permit the front end 22 of the drawer to project above the cut-away sides, as indicated at 30. The shoulder 29 is arranged to engage a stop block 31 secured to the side 13 of the case 10 when the drawer 20 is moved forwardly from its normal position within the case, as shown in Fig. 2 to the extended position illustrated in Fig. 1. A second stop block 32 is also secured to the side 13 of the case 10, but adjacent the rear thereof so that when the drawer 20 is pulled through the rear face of the case 10 (after the door 16 has been swung to an open position) the upward projection 30 on the front end 22 of the drawer will contact this latter stop block 32. This latter stopping engagement will only occur if the drawer 20 is permitted to pivot downwardly into the position indicated in phantom lines in Fig. 2. If the drawer 20, on the other hand, is moved along the plane of the shelf 15 directly, it may be withdrawn fully from the rear portion of the case 10.

As also shown clearly in Fig. 2, the stop blocks 31 which limit the forward motion of the drawers 20 through the open front of the case 10 are preferably displaced whereby the lowermost drawer 20 can be withdrawn almost entirely from the case while each superposed drawer 20 can be withdrawn a somewhat lesser amount.

Since the shelves 15 slope downwardly toward the front of the case 10, the rear end 23 of the drawer 20

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is caused to project slightly below the bottom 21, as indicated at 35 in Fig. 2, and this downwardly projecting portion 35 is arranged to engage the rear edge of the supporting shelf 15 so as to restrain the drawer normally from sliding out the front of the case 10. In order to secure the drawer 20 in this position, as shown in full lines in Fig. 2, an opening 36 is provided in the rear end 23 of each drawer 20 for reception of a pin 37 so attached to the door 16 as to enter the opening 36 and preclude lifting of the rear end of the drawer 20 when the door 16 is moved to case-closing position, as illustrated in Fig. 2. While but one drawer 20 and pin 37 are illustrated in Fig. 2, it will be understood that a similar arrangement is provided for each of the other drawers placed into the case 10. When the door 16 is thus closed, it will be seen that since the drawer 20 cannot be lifted, the rear end 23 thereof remains in contact with the shelf 15 so that the drawer may not slide forwardly. Furthermore, the door 16, itself, prevents rearward withdrawal of the drawer 20 from the case 10.

With continued reference to Fig. 2, means are illustrated for latching and also locking the door 16 in its closed position, wherefore, ultimately, of course, the drawers 20 are also locked within the case 10. Preferably, as shown, the door latch 40 constitutes a segmented disc 41 that is mounted for rotation with a shaft 42 which extends between the supporting legs 18 in substantial parallelism to the lower edge of the door 16 when in its closed position. A quadrantal opening is formed in the segmented disc 41 so that one face 41a thereof can be brought against the door 16 to maintain it in its closed position by appropriate rotation of the shaft 42. Such rotation of the shaft 42 can be accomplished by manual turning of a knob 43 secured at the end of the shaft and projecting from the one leg 18, as shown in Fig. 1. The latch 40 is maintained in its door-closing position by means of a simple, bolt-type lock, generally indicated at 45, which is mounted on the leg 18 so that the movable bolt 46 thereof can be projected into engagement with the other face 41b of the quadrantal opening in the disc 41. When thus projected into locking position, it will be seen that the disc 41 can be turned in neither direction. To provide for actuation of the bolt-type lock 45, a key receptacle 47 is formed on the leg 18 adjacent the latch-rotating knob 43 for ready insertion of the key (not shown) thereinto. By the described arrangement, it will be seen that after all the drawers 20 have been positioned within the case 10, they may be secured therein quickly and easily by the mere rotation of the knob 43 to latch the door 16 in its closed position and subsequent actuation of the simple lock 45 by the appropriate key.

When the case 10 is in its locked position, since it, as well as the drawers 20 therein, are formed of transparent plastic, the articles contained are visible to a prospective purchaser. If it is desired that a particular article is to be purchased, the store attendant need merely unlock the lock 45, turn the knob 43, and then open the door 16 and then permit that particular drawer 20 to

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be slid forwardly through the open front of the case 10. The purchaser then may quickly remove the particular article which he is interested in purchasing from that drawer, such removal being facilitated by the ability to pivot the article within the drawer by pressing the forward end of the article into the previously described opening 28 in the drawer bottom 21. After the removal has been effected by the purchaser, the store attendant may merely withdraw the drawer 20 back into the case 10 and by reversing the described procedure, lock the same into position for visual inspection of the articles by subsequent purchasers, but without undesired handling thereof.

Various alterations and or modifications can obviously be made in the described structure without departing from the spirit of the invention. It will be understood that the foregoing description of a preferred embodiment is not to be considered as limiting, but purely in an exemplary fashion; and the actual scope of the invention is to be indicated by the appended claims.

What is claimed is:

1. An article display cabinet which comprises a case having open front and rear faces and a plurality of shelves therein, a plurality of drawers supported respectively on said shelves for sliding movement forwardly and rearwardly from said case, a door hinged for swinging movement into closing position over the rear face of said case, and means cooperatively arranged on said door and said drawers to hold the latter against forward and rearward sliding movement within said case when said door is swung into closing position.
2. An article display cabinet according to claim 1 which comprises means for locking said door in its face-closing position.
3. An article display cabinet which comprises a case having open front and rear faces and a plurality of parallel shelves therein, a plurality of drawers mounted for sliding movement on said shelves, each drawer having a rear portion projecting downwardly beside the rear edge of its mounting shelf when appropriately positioned thereon and also having a small opening therein, a door hinged on said case for movement into closing position over the rear face of said case, said door having a plurality of locking pins thereon arranged to enter the openings in said drawers when moving to its closing position.

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