Nov. 6, 1923. 1,473,215

W. P. DE WITT

DISPLAY CABINET

Filed June 15, 1922

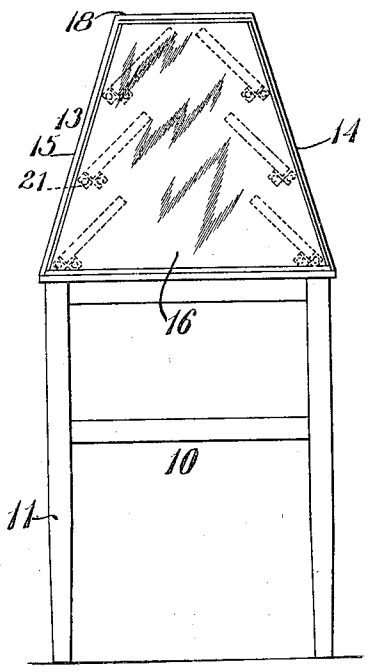

Fig. 2.

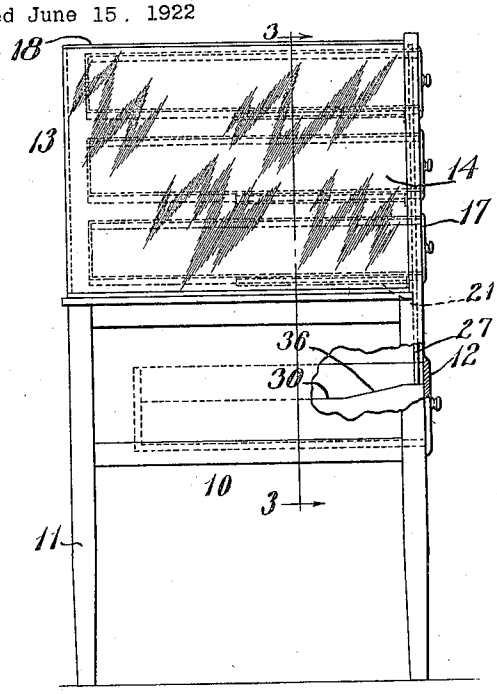

Fig. 1.

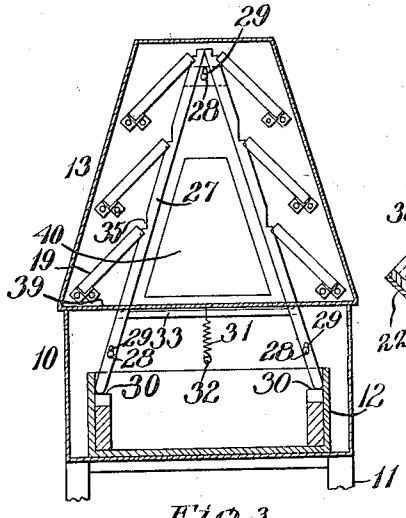

Fig. 3.

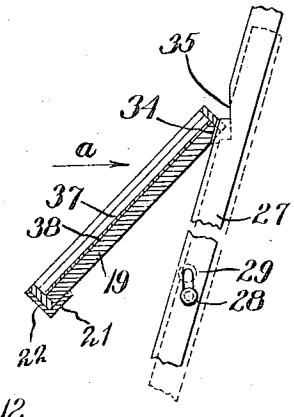

Fig. 4.

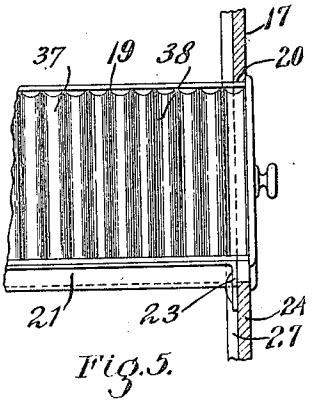

Fig. 5.

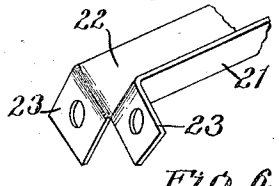

Fig. 6.

Inventor:
William P. DeWitt.
by his attorney,
Charles S. Gooding.

Patented Nov. 6, 1923. 1,473,215

UNITED STATES PATENT OFFICE.

WILLIAM P. DE WITT, OF SOMERVILLE, MASSACHUSETTS, ASSIGNOR TO DE WITT-LA FRANCE COMPANY, OF CAMBRIDGE, MASSACHUSETTS, A CORPORATION OF MASSACHUSETTS.

DISPLAY CABINET.

Application filed June 15, 1922. Serial No. 568,470.

To all whom it may concern:

Be it known that I, WILLIAM P. DE WITT, a citizen of the United States, residing at Somerville, in the county of Middlesex and State of Massachusetts, have invented new and useful Improvements in Display Cabinets, of which the following is a specification.

This invention relates to a display cabinet and has for its object to provide a cabinet of the character mentioned in which fountain pens, pencils and similar small articles offered for sale may be displayed in a conspicuous and attractive manner.

Another object of the invention is to provide a novel mechanism for simultaneously locking in their closed positions all the trays in which the articles are displayed, said mechanism embodying therein and utilizing a drawer provided for the reception of articles not upon display, said drawer being located in the base of the cabinet beneath the display trays.

Still another object of the invention is to arrange the various display trays in such a manner that a maximum amount of display surface will be provided within the cabinet, the arrangement of trays being such that the space at the rear of and beneath said trays may also be utilized for the display of goods, the latter resting upon the upper surface of the base of the cabinet and being visible through a transparent end wall of said cabinet.

The invention consists in the combination and arrangement of parts set forth in the following specification and particularly pointed out in the claims thereof.

Referring to the drawings:

Figure 1 represents a front elevation of a display cabinet embodying my invention.

Fig. 2 is an end elevation as viewed from the left of Fig. 1.

Fig. 3 is a vertical sectional elevation taken on the line 3—3 of Fig. 1, and looking in the direction of the arrows on said line.

Fig. 4 is an enlarged detail view illustrating a portion of the locking member and its relationship to one of the trays.

Fig. 5 is a vertical section through the non-transparent end wall of the casing and illustrating a portion of a tray and a portion of the locking member upon the end wall, said parts being viewed as looking in the direction of the arrow *a* in Fig. 4.

Fig. 6 is a perspective view of one of the V-shaped supporting members.

Like numerals refer to like parts throughout the several views of the drawings.

In the drawings, 10 represents a base constructed in the form of a cabinet and provided with legs 11 and a drawer 12. Located upon the base 10 is a casing 13 embodying therein oppositely disposed inclined plate glass walls 14 and 15, a plate glass end wall 16, a non-transparent end wall 17 and a plate glass top 18. The end wall 17 is utilized as a support for a plurality of shallow sliding trays 19 which project through inclined openings 20 provided in said end wall and said trays are located one above the other at the rear of the transparent walls 14 and 15 and are also disposed at an angle to said walls in such a position that the contents thereof are conspicuously displayed. Fast to the rear surface of the end wall 17 and projecting rearwardly therefrom to a point midway of the interior of the casing 13 are a plurality of supporting members 21 illustrated in detail in Fig. 6. The members 21 are constructed of sheet metal and are all V-shape in formation, thereby providing a groove 22, the surface of which aligns with the lower corner of the openings 20 in the end wall 17. At one end of the supporting members 21 flanges 23 are bent downwardly therefrom and said flanges are utilized in securing said supporting members to said end wall. The supporting members 21 co-operate with the end wall 17 in supporting the trays 19 upon said end wall, and said supporting members hold said trays from sagging within the casing 13.

The trays 19 are all locked simultaneously when closed by mechanism which is controlled by the drawer 12 as follows: Located upon the inner surface of the end wall 17 is a V-shaped locking member 27 which is mounted to slide upon a plurality of guide pins 28 which project from said wall 17 through slots 29 provided in said locking member. The lower extremities of the locking member 27 rest upon cam surfaces 30 provided upon the sides of the drawer 12 and a spring 31, one extremity of which is

attached to a pin 32 and the other extremity is attached to a cross bar 33 of the locking member 27, acts to always pull said locking member downwardly and hold the lower end thereof in contact with said cam surfaces. Located in the corner of each tray 19 adjacent to the locking member 27 and in alignment with the locking member 27 when said trays are located in their innermost or closed position is a groove 34, see Fig. 4, and located in the outer edge of the locking member 27 adjacent to each tray 19 are notches 35. When the drawer 12 is located in its innermost or closed position, the lower extremity of the locking member is located upon the highest portion of the cam surface 30 and the portions of the locking member adjacent to the notches 35 thereof are located in the grooves 34 of the trays 19, in which position it is impossible to pull said trays outwardly and they are, therefore, locked closed. When, however, the drawer 12 is pulled outwardly, the locking member influenced by gravity and the spring 31 drops and slides down an inclined portion 36 of the cam surface 30 and said locking member moves from the position illustrated in full lines in Fig. 4 to the dotted line position also illustrated in said Fig. 4, at which time the notches 35 align with the corner of the trays adjacent thereto and the locking member is disengaged therefrom thereby unlocking said trays.

The trays 19 are preferably provided with parallel grooves 37 in which the articles are located and through the medium of which they are uniformly spaced. The grooves 37 and portions of the tray adjacent thereto are covered with a layer of velvet 38 or other suitable soft fabric for the purpose of protecting the articles displayed and also for improving the appearance of the device.

The portion of the casing 13 beneath and at the rear of the trays 19 is utilized for the reception of articles if it is so desired in which event said articles rest upon a top surface 39 of the base 10 and said articles are exposed to view through the transparent end portion 16 of the casing 13. Access is had to the interior of the casing 13 through a door 40 provided in the end wall 17.

To lock the trays 19, it is necessary to first push all of said trays to their innermost positions, at which time the grooves 34 therein will all be in alignment with the locking member 27. The drawer 12 is then pushed inwardly to its innermost position and during the inward movement thereof the cam surfaces 30 upon the sides of said drawer will force the locking member 27 upwardly and into the groove 34 of each of the trays, thereby simultaneously locking all of said trays. The drawer 12 may then be fastened by a lock and key in the usual well known manner if it is so desired. When it is desired to open any of the trays, it is necessary to first pull the drawer 12 outwardly a sufficient distance to allow the locking member 27 to drop sufficiently to become disengaged from the trays after which one, or all, of the latter may be opened as desired.

The drawer 12 may be used as a receptacle for a surplus supply of articles from which the trays may be replenished and also for the reception of boxes in which the articles are generally placed when sold.

By arranging the display trays 19 in an inclined position at the rear of the inclined transparent walls 14 and 15 of the casing 13, a much greater amount of display surface is provided than is possible in other cabinets of an equal size, of which I have acknowledge, and the articles within the trays are displayed nearer to the observer and may, therefore, be more closely inspected without being removed from the cabinet.

I claim:

1. A display cabinet having, in combination, a base, a casing mounted upon said base and embodying therein an end wall, a tray slidably mounted within said casing and entirely supported upon said end wall and means to lock said tray in its closed position to said end wall.

2. A display cabinet having, in combination, a base, a casing mounted upon said base and embodying therein an end wall, a tray slidably mounted within said casing and entirely supported upon said end wall, a locking member mounted upon said end wall and means to force said locking member into engagement with said tray to lock the latter in its closed position.

3. A display cabinet having, in combination, a base, a casing mounted upon said base and embodying therein an end wall, and a plurality of tiers of oppositely inclined trays slidably mounted in said end wall and entirely supported thereby.

4. A display cabinet having, in combination, a base, a casing mounted upon said base and embodying therein an end wall and a plurality of tiers of oppositely inclined trays slidably mounted in said end wall and supported thereby and means to lock said trays in their closed positions.

5. A display cabinet having, in combination, a base, a casing mounted upon said base and embodying therein an end wall, a plurality of trays located within said casing and entirely supported upon said end wall, a locking member slidably mounted upon said end wall and means to force said locking member into engagement with said trays to simultaneously lock the latter in their closed positions.

6. A display cabinet having, in combina-

tion, a base, a casing mounted upon said base and embodying therein an end wall, a plurality of oppositely disposed trays arranged in tiers and slidably mounted in said end wall, a locking member slidably mounted upon said end wall and means to force said locking member into engagement with said trays to simultaneously lock the latter in their closed positions.

7. A display cabinet having, in combination, a base, a casing mounted upon said base and embodying therein an end wall and a plurality of tiers of oppositely inclined trays slidably mounted in said end wall and supported thereby, said casing also being provided with a display space at the rear of and beneath said trays.

8. A display cabinet having, in combination, a base, a casing mounted upon said base and embodying therein oppositely inclined transparent walls and an end wall and a plurality of trays located within said casing and supported upon said end wall, said trays being disposed at an angle to the transparent wall located adjacent thereto.

9. A display cabinet having, in combination, a base, a casing mounted upon said base and embodying therein oppositely inclined transparent walls and an end wall and a plurality of trays located within said casing and supported upon said end wall, said trays being disposed at an angle to the transparent wall located adjacent thereto and means to simultaneously lock said trays to said end wall.

10. A display cabinet having, in combination, a base, a casing mounted upon said base and embodying therein oppositely inclined transparent walls and an end wall and a plurality of trays located within said casing and supported upon said end wall, said trays being disposed at an angle to the transparent wall located adjacent thereto, said casing also being provided with a display space located at the rear of and beneath said trays.

11. A display cabinet having, in combination, a base, a casing mounted upon said base and embodying therein an end wall, a plurality of trays located within said casing and entirely supported upon said end wall, a locking member slidably mounted upon said end wall and means to force said locking member into engagement with said trays to simultaneously lock the latter in their closed positions and also to remove said locking member from engagement with said trays to simultaneously release the latter.

12. A display cabinet having, in combination, a base, a casing mounted upon said base and embodying therein an end wall, a plurality of trays located within said casing and entirely supported upon said end wall, a locking member slidably mounted upon said end wall, means to position said locking member relatively to said trays and means to force said locking member into co-operative relation with said trays to simultaneously lock the latter in their closed positions.

13. A display cabinet having, in combination, a base, a casing mounted upon said base and embodying therein an end wall, a plurality of trays located within said casing and entirely supported upon said end wall, a locking member slidably mounted upon said end wall, means to position said locking member relatively to said trays, means to force said locking member into engagement with said trays to simultaneously lock the latter in their closed positions and to also release said locking member and means to force said locking member out of engagement with said trays when the former is released.

14. A display cabinet having, in combination, a base, a casing mounted upon said base and embodying therein an end wall, a plurality of supporting members fast to said wall and projecting inwardly therefrom, trays located within said casing and slidably mounted upon said supporting members and end wall and means to simultaneously lock said trays in their closed positions.

15. A display cabinet having, in combination, a base, a casing mounted upon said base and embodying therein an end wall, a plurality of supporting members fast to said wall and projecting inwardly therefrom, trays located within said casing and slidably mounted upon said supporting members and end wall, a locking member slidably mounted upon said end wall and adapted to interlock with said trays and means slidably mounted within said base to operate said locking member to simultaneously lock said trays in their closed positions and also to simultaneously unlock the same.

16. A display cabinet having, in combination, a base, a casing mounted upon said base, and embodying therein an end wall, a plurality of supporting members fast to said wall and projecting inwardly therefrom, trays located within said casing and slidably mounted upon said supporting members and end wall, a locking member slidably mounted upon said end wall and adapted to interlock with said trays, a drawer within said base and means upon said drawer engaging said locking member to force the latter into engagement with said trays to simultaneously lock said trays in their closed positions.

17. A display cabinet having, in combination, a base, a casing mounted upon said base and embodying therein an end wall, a plurality of supporting members fast to said wall and projecting inwardly there-

from, trays located within said casing and slidably mounted upon said supporting members and end wall, a V-shaped locking member slidably mounted upon said end wall and adapted to interlock with said trays, a drawer within said base and cam surfaces upon said drawer engaging said locking member to force the latter into engagement with said trays to simultaneously lock the latter in their closed positions.

18. A display cabinet having, in combination, a base, a casing mounted upon said base and embodying therein an end wall, a plurality of supporting members fast to said wall and projecting therefrom, trays located within said casing and slidably mounted upon said supporting members and end wall, a V-shaped locking member slidably mounted upon said end wall and adapted to interlock with said trays, a drawer within said base, cam surfaces upon said drawer engaging said locking member to force the latter into engagement with said trays to simultaneously lock the latter in their closed positions and means to release said trays when said locking member is released by said cam surfaces.

19. A display cabinet having, in combination, a base, a casing mounted upon said base and embodying therein a plurality of transparent walls and a non-transparent end wall, a plurality of trays located within said casing and supported upon said end wall, said trays being disposed at an angle to said transparent walls, a locking member located upon said end wall and means slidably mounted within said base to force said locking member into co-operative engagement with said trays to simultaneously lock the latter in their closed positions.

20. A display cabinet having, in combination, a base, a casing mounted upon said base and embodying therein a plurality of transparent walls and a non-transparent end wall, a plurality of trays located within said casing and supported upon said end wall, said trays being disposed at an angle to said transparent wall, a locking member located upon said end wall, a drawer located within said base and cam surfaces upon said drawer engaging said locking member and adapted to force the latter into co-operative engagement with said trays to simultaneously lock the latter in their closed positions.

21. A display cabinet having, in combination, a base, a casing mounted upon said base and embodying therein a plurality of transparent walls and a non-transparent end wall, a plurality of trays located within said casing and supported upon said end wall, said trays being disposed at an angle to said transparent wall, a locking member located upon said end wall, means to position and guide said locking member, a drawer located within said base, cam surfaces upon said drawer engaging said locking member and adapted to force the latter into co-operative engagement with said trays to simultaneously lock the latter in their closed positions and means to release said trays when said locking member is released by said cam surfaces.

22. A display cabinet having, in combination, a base, a casing mounted upon said base and embodying therein oppositely inclined transparent walls, a transparent end wall and a non-transparent end wall, a plurality of trays located within said casing and supported upon said non-transparent end wall, said trays being disposed at an angle to the inclined transparent wall adjacent thereto, said casing also being provided with a display space at the rear of and beneath said trays and visible through said transparent end wall and means to lock said trays in their closed positions.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

WILLIAM P. DE WITT.

Witnesses:
FRANKLIN E. LOW,
KATHRYN M. JOYCE.

Certificate of Correction.

It is hereby certified that Letters Patent No. 1,473,215, granted November 6, 1923, upon the application of William P. De Witt, of Somerville, Massachusetts, for an improvement in "Display Cabinets," were erroneously issued to "De Witt-La France Company, of Cambridge, Massachusetts, a Corporation of Massachusetts," as assignee of the entire interest in said invention, whereas said Letters Patent should have been issued to the inventor, said *William P. De Witt*, as sole owner of said invention; and that the said Letters Patent should be read with this correction therein that the same may conform to the record of the case in the Patent Office.

Signed and sealed this 16th day of June, A. D. 1925.

[SEAL.]

KARL FENNING,
Acting Commissioner of Patents.