Nov. 11, 1952 F. W. QUELLE 2,617,501

DISPLAY DEVICE

Filed Dec. 3, 1945

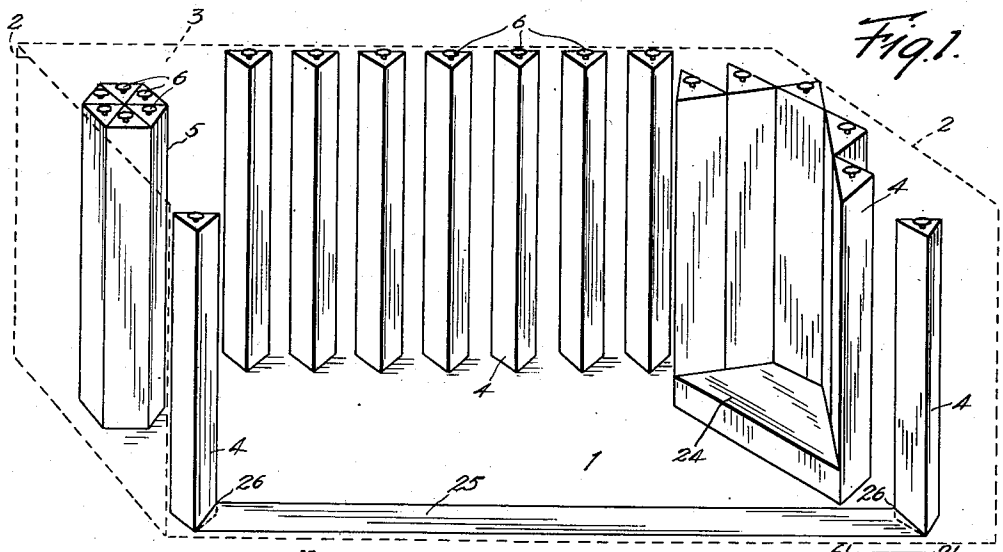


Fig. 1.

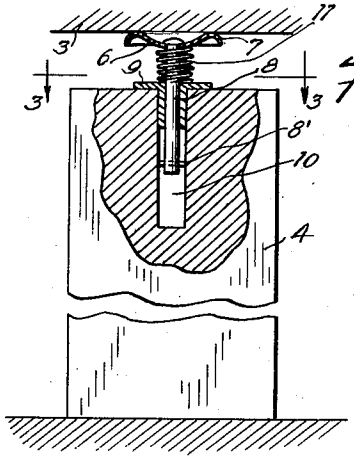


Fig. 2.

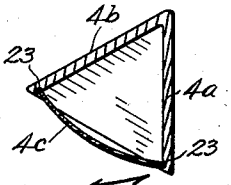


Fig. 6.

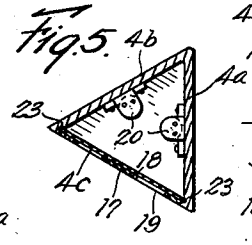


Fig. 5.

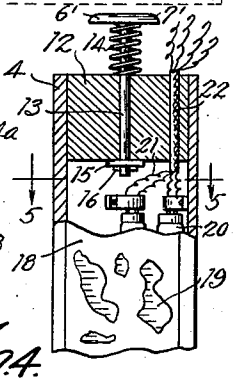


Fig. 4.

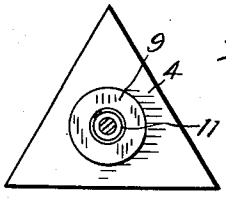


Fig. 3.

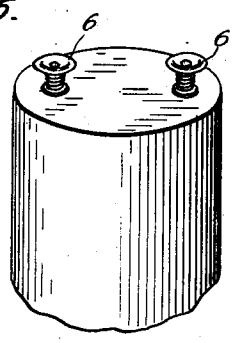
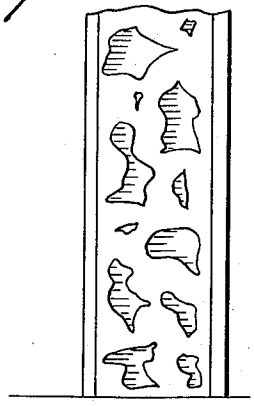


Fig. 7.



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DISPLAY DEVICE

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3 Claims. (Cl. 189—41)

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The present invention relates to an improvement in displays, such for example as those which may be set up in a store window, show case, or stage.

In its fundamental aspects the invention comprises an ornamental display which can be easily erected in accordance with a predetermined plan by the expedience of wedging between the upper and lower space-defining surfaces of a show window, show case or stage, such for example as the floor and ceiling thereof, ornamental columns which are retained in place without the necessity of using permanent or semi-permanent affixing means.

It has already been proposed in the past to decorate show windows, show cases, or stages by erecting thereon columnar display elements whose position upon the floor of the show windows, show case, or stage is maintained by their own weight or which are in some manner either secured to the floor or suspended from the ceiling, or are otherwise suitably fastened in place. Self-evidently when erecting such displays the component parts thereof are subject to marring and partial destruction by the necessity of using fastening elements such as nails, screws, cleats and the like which, upon removal, necessitate the repair of the objects. At the same time the floor and ceiling or other space-defining surfaces of the show window, show case or stage are also marred and damaged.

In ordinary stages such as those used in theaters and auditoriums, the stage scenery is often merely suspended from above, there being no definite upper space-defining surface such as a ceiling. In most cases the scenery is either provided with sufficiently wide bases to keep it from toppling over or else bases are provided on the side away from the beholder to keep it in vertical alignment. That expedient, however, is space consuming, and does not permit the placement of the decorative display columns in the extreme back wall or vertical defining surface of the show window, show case, or stage.

In accordance with the present invention, however, columnar elements are provided which are fitted with surface-contacting means which are under the influence of spring pressure so that by the expedient of merely wedging them between, for instance the floor and ceiling of a show window, show case, or stage, they may be kept in place and yet be readily moved about or their positions changed without the necessity of in any way marring either the floor or ceiling or the elements themselves.

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Accordingly it is one of the objects of the invention to provide a display comprising, in combination with spaced opposed substantially parallel space-defining surfaces, therebetween disposed columnar elements which elements are of a length which is slightly less than the distance between the said surfaces and which columnar elements are provided with surface-engaging members which serve to bridge the remaining distance between one of the ends of said columnar elements and the surface adjacent thereto as well as with means for pressing said member against its adjacent surface.

A further object of the invention comprises a display, in combination with a floor and ceiling, consisting essentially of vertically disposed elongated columnar elements of a height that is slightly less than the distance between the floor and ceiling, these elements being provided at one end with spring-pressed disc-like ceiling engaging means.

A further object of the invention is to provide individual display members for use in a show window, show case, or stage which consists of individual columns of suitable cross section which may be either round, triangular, quadrangular, or polygonal, and which preferably are so formed that by suitable juxtaposition various ornamental forms may be produced.

A further object of the invention concerns columnar decorating elements which may be hollow, and if desired, provided at least on one wall thereof with light-permeable coverings, or with coverings that are suitably foraminous or may have cut away portions so as to produce ornamental effects by illumination from within.

A still further object of the invention is to provide a display consisting of a combination of vertically disposed as well as horizontally disposed elements, some of which in connection with the vertical elements will give the effect of a picture frame or of platforms at various stages of elevation relative to the lower space-defining surface such as the floor.

Other objects of the present invention will become apparent from the further detailed description hereinbelow, and also from a study of the hereunto appended drawings in which:

Figure 1 is a general perspective view of a show window, show case, or stage having lower and upper horizontal space-defining surfaces, a vertical space-defining surface back of said space and therein disposed columnar elements of the type hereinabove discussed;

Fig. 2 is a vertical elevation partly in section

showing one end of the columnar elements together with the surface-engaging and pressing means;

Fig. 3 is a top plan view of the columnar elements with the spring pressed means shown in section along lines 3—3 of Fig. 2;

Fig. 4 is a vertical view partly in section showing a modification in which the columnar element is hollow and is provided with internal illuminating means;

Fig. 5 is a horizontal cross section taken along the line 5—5 of Fig. 4;

Fig. 6 is a horizontal cross section of a slight modification of Fig. 4, showing the means for inserting a transparent or translucent side of a triangular column; and

Fig. 7 is a perspective view of the upper portion of a substantially circular column, showing a plurality of surface-engaging means thereon.

In order to provide the improved display of the present invention, advantage is taken of the lower space-defining surface, such as the floor 1 of a show window 2, which is shown in dotted outline, the said show window also having an upper space-defining surface 3 which hereinafter will be referred to as the ceiling while the lower surface 1 will be hereinafter referred to as the floor. Upon the floor 1 of the show window illustrated in Fig. 1, there are placed a plurality of vertically extending columnar elements 4 which for the sake of illustration are here shown as being substantially equilaterally triangular in cross section, although it is to be understood that the invention is not limited to that particular form which has been chosen for purposes of illustration merely because it represents an element having the least number of possible sides. It will be self-evident that the cross section need not be equilaterally triangular, but could consist of various configurations, for instance the cross section might be that of an isosceles triangle. These elongated elements 4 may be either solid or may be internally hollow, as will be explained in further detail in connection with the other figures hereinbelow. When for example the columns 4 are equilaterally triangular in cross section it is possible to assemble them into a hexagonal column broadly indicated by the reference numeral 5 on the left hand side of Figure 1, the column being made up of six congruently erected elongated columns 4. These columns, whose bases rest upon the floor 1, are provided at their upper ends with surface-engaging means 6, which can be more readily ascertained from Fig. 2. Each of the elements 6 is preferably, but not necessarily, in the form of a centrally dished disc which preferably has rounded edges 7, whose function will be described in connection with the method of use of the display devices. The disc 6 is preferably carried upon a pin 8 which may be slidable within a ferrule 9 which partially extends into the opening 10 provided in the upper part of the column 4, the said ferrule also extending for a certain distance in contact with the upper surface of the column 4. A spring 11 which surrounds the pin 8 presses with one end against the ferrule 9, and with the other end against the lower surface of the surface-engaging disc 6. A cross pin 8' carried by pin 8 serves to limit outward movement of the latter.

As shown in Fig. 4 the construction can be considerably simplified by merely providing the upper end of the column 4, which in this case is hollow and is composed of three sides numbered respectively 4*a*, 4*b* and 4*c* (see Figs. 5 and 6), with

a suitable plug 12, having an opening through which extends a common bolt 13 at the upper end of which there is mounted a surface-engaging disc 6' which disc is pressed away from the upper surface of the plug 12 by means of the spring 14. The lower or inner end of the bolt 13 is provided with a washer 15 and a cotter pin 16 which prevents the spring 14 from pushing the bolt 13 out of the hole through which it slides. However, by pressing against the disc 6' the bolt 13 may enter a certain distance into the interior of the hollow column 4.

Here again the disc is preferably provided with round edges 7'.

In the construction shown in Fig. 7 there are shown two of the surface-engaging members 6 surmounting a column having a circular cross-section. The construction otherwise, however, is the same as that illustrated in Fig. 2, but of course may be constructed as in Figs. 4, 5 and 6.

In case the columns are made hollow as shown by Figs. 4, 5 and 6, the walls 4*a* and 4*b*, for example, may be solid and may be made of such material, for example, as pressed wood, cardboard, plywood, or the like, the third wall 4*c* being made of light-permeable material 18, there being interposed in front of it a portion 17, which may be opaque so as to produce an ornamental design when the transparent or translucent side 4*c* is seen through the openings 19. Within the hollow column there may be one or more elongated electric lamps 20 either of the incandescent or fluorescent variety, which are supplied with electric current through wires 21 passing through the cable 22. Two of such lamps are shown, but it is self evident that either one or a large number of them may be used according to desire. The lamps have been omitted in connection with Fig. 6, as their presence is of course purely a matter of choice.

Fig. 6 also illustrates the manner of placing a removable side 4*c* on the column. This side 4*c* may, for example, consist of an opaque strip of cardboard. Or it may be formed of a transparent or translucent sheet of plastic material such as a cellulose compound, for example, cellulose acetate, or transparent material such as one of the more modern plastics, such as the methacrylate resins. Sheets of this type are easily obtained and are sufficiently distortable so that they may be sprung into place for instance as shown in Fig. 6, the sides of the portions 4*c* extending into suitable grooves 23 provided at each side of the walls 4*a* and 4*b* respectively. In Fig. 6 the side 4*c* is shown as being somewhat curvilinear in cross section, but it is self evident that it may be made of such size that it will produce a flat wall for example as that shown in Fig. 5. Here too the manner of securing the side wall may comprise the aforementioned longitudinally extending notches 23. It is, however, within contemplation of the invention to erect the third side by merely gluing it or nailing it to the other two sides. Self-evidently if the cross section of the columns is other than triangular, suitable changes in putting it together may be necessary, but these are entirely within the skill of any good carpenter or workman, and are therefore not illustrated.

There is a particular advantage, however, in triangular columns particularly if they are equilaterally triangular in cross section, because this makes it possible to produce quite a variety of display effects. As already mentioned, six of these columns may be assembled to form a large

hexagonal column 5, as shown in Fig. 1; or a plurality, for instance five, of the triangular members 4, may be assembled as shown in the right of Fig. 1, with their lower ends adjacent to a platform 24 upon which certain displays may be placed, forming as it were a sort of secondary stage within a stage.

Furthermore, a number of columns, such for example as seven of them, may be placed at the extreme back of the stage to form a background. Here again considerable latitude is possible in the arrangement, and a number of arrangements will be self-evident to anyone.

Another effect which may be obtained is for example by erecting two columns at each forward side of, for instance, a show window, in such a manner that the edge of one of the columns will be practically touching or actually touching the glass of the window. There may then be placed between the two members 4 and 4 a horizontally extending member 25, which is suitably mitered at 26 so that when lying upon the floor and touching the two vertical columns 4 and 4, they will give the visual effect of a frame. The over-all effect, for example as shown by Fig. 1, is that of a frame showing a sort of stage with a secondary stage 24 thereon.

By supplying the window dresser with a suitable floor plan which may be either on a full scale or on a suitably reduced scale showing the loci of the various columns, it is possible for a central office to send out to its branch offices and stores, which may be in various locations about the city or country, a master plan which enables the various window dressers all to dress the window in a definitely predetermined manner. All that is necessary is for the window dressers to take the vertical columns 4 and to place them in a vertical position in such a manner that the surface engaging disc 6 will press against the ceiling, being pressed thereagainst by the springs 11 or 14. This can be simply done by up-ending the columns 4, the round edge 7 preventing the marring and scratching of the ceiling. It will, of course, be self-evident to a good mechanic that the distance between the top of the columns 4 and the upper space-defining surface 3 must be greater than the diameter of the columns so that they will not wedge edgewise when they are being erected. Ordinarily a spacing of from 4'' to 6'' has been found to be ample.

Columns are therefore wedged between the floor 1 and the ceiling 3 and therefore cannot fall down or be pulled out of place. If it is desired to move them to change their position, it is not necessary to lay them down again as a workman may grasp the column, pull it up against the ceiling, and then move it in either direction, and then let it back down on the floor, when again it will remain in place without danger of being upset. Inasmuch as most stages, show cases, and show windows have an upper transom or valance this will conceal the surface-engaging members 6 from the view of the beholder. This therefore will in nowise detract from the effectiveness of the display. The columns of course may be made up of various types of materials, and may be decorated to suit. Thus, they may be either black or white, or any color, or of a metallic effect, or in case they are transparent, may be illuminated with any desired color of light. Moreover, if a translucent or transparent light-permeable side is used, such as 4c, this may if desired be of any color or even may be so constructed that it will appear black to the eye but will transmit ultraviolet or infrared light, which former may be used to very great advantage by disposing upon the floor 1, or otherwise within the space, objects which will become fluorescent upon the influence thereon of ultraviolet light. Very striking displays can thus be produced and all these various advantages and modifications are to be construed as within the contemplation of the inventor, and to be within the scope and purview of his claims. The invention is not limited to the precise construction shown and any surface-engaging means which will produce the effect or perform the function of the surface-engaging members 6 and springs 11 are to be considered as within the scope of the hereunto appended claims.

Accordingly applicant claims:

1. A display comprising a plurality of individually erected and contiguously erected vertically disposed columns having equilaterally triangular cross-sections and erectable between a floor and a ceiling, said columns being sufficiently shorter than the distance between said floor and ceiling to permit tipping into place and provided at their ends with outwardly automatically spring-biased surface-engaging members having smooth rounded edges to prevent disfiguration of the surfaces against which they are slidingly pressed, the over-all length of said columns plus the spring-biased members being greater than the distance between said floor and ceiling, whereby said columns will be kept in place after erection by virtue of the pressure asserted against said surfaces by said surface-engaging members.

2. A display as defined in claim 1 in which six of said columns are arranged with two longitudinal surfaces of each column in contact with corresponding surfaces of adjacent columns to eventuate a larger column hexagonal in cross-section.

3. A display as defined in claim 1 in which a number of said columns are arranged with their longitudinal edges in contact.

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