

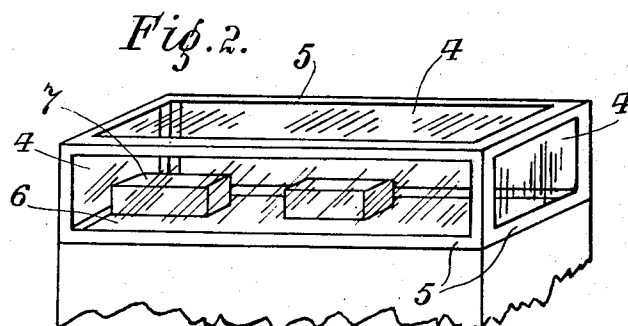
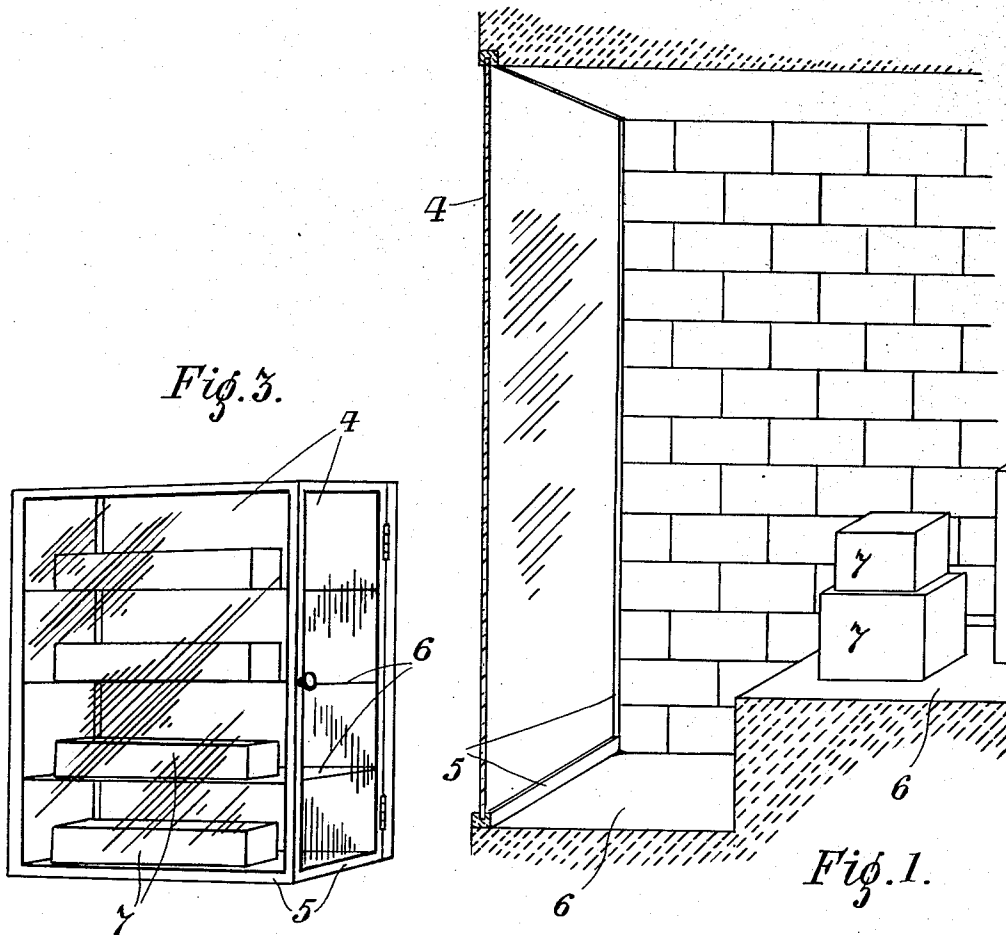
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STORE FRONT DISPLAY WINDOW

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STORE-FRONT DISPLAY WINDOW

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This invention relates to shop display windows through which goods on sale are viewed by customers.

The ordinary plate or sheet glass of which shop display windows consist has a slight greenish hue. The light in which goods behind these windows are viewed is detrimental to the appearance of goods of most kinds.

Probably the only goods viewed to advantage are themselves wholly or mainly green, and this colour is rarely chosen as a background or other display medium.

An object of this invention is to make provision whereby goods on display for sale are viewed through a window in a light which enhances their appearance without thereby impairing to any material extent the clearness in which they are seen.

Another object of the invention is a shop display window consisting of glass lightly tinted with a hue selected to suit the goods and a density giving a total light transmission of at least 83% and preferably in the region of 87% to 91% depending on the hue. The term "tinted" is used herein as is customary to mean deliberately coloured with a hue other than the slight greenish hue of ordinary plate or sheet glass.

The preferred hues from which appropriate selections may be made are pink, amber, mauve and cerise.

Another object of the invention is the combination of a window lightly tinted as aforesaid with a window frame supporting the window and a goods support arranged behind the window.

Other objects of the invention will be apparent from the following specification and claims.

The display windows may be manufactured according to the following examples which comprise approximate percentages of colouring agents added to a standard soda-lime glass of the type represented by the following composition:

	Per cent
SiO ₂	72.3
NaO ₂	12.3
CaO.....	14.6
Al ₂ O ₃	0.8

Example 1.—Pink glass is obtained by adding 0.005% to 0.01% selenium.

Example 2.—Amber glass is obtained by adding 0.05% to 0.20% sulphur and 0.10% to 0.20% carbon.

Example 3.—Mauve glass is obtained by adding 0.005% selenium and 0.0015% cobalt oxide.

Example 4.—Cerise glass is obtained by adding 0.0025% selenium and 0.00075% cobalt oxide (CoO).

The approximate percentages given in these examples have been determined for windows one quarter inch thick. For windows which are

thicker, or thinner, the percentages may be proportionately decreased, or increased, for the same densities of hue.

It is usual to find in the manufacture of colored glass that the plates or sheets produced from a batch vary one from another. Therefore in practice it is desirable when carrying out any of the examples hereinbefore specified to make a stock and select therefrom plates having the characteristics requisite for display windows according to this invention. The characteristics of glass plates to be selected are as follows, the figures given being approximations:

Example 1.—The maximum absorption in the visible spectrum is around the wavelength corresponding to 5000 Å., the transmission at the middle of this absorption range being 87% to 88%. The maximum transmission is around 6000 Å., being 90.5% to 91%. The total transmission for an eye of normal visual sensitivity over the spectrum is 89%–91%.

Thus it will be seen that the total transmission is practically the same as that of uncolored plate glass.

A slightly more densely tinted glass may be selected, the transmission of which are 84% to 86% at 5000 Å. and 90.0% to 90.5% at 6000 Å. and the total transmission of which is 88% to 89%.

Example 2.—The maximum transmission is in the orange region around 6500 Å. The glass is characterised by an increasing absorption towards both ends of the spectrum, the absorption in the blue being considerably greater than that towards the red. The total transmission is 87% to 90%.

A slightly more densely tinted glass may be selected, the total transmission of which is 83% to 87%.

Example 3.—This glass has a predominant absorption in the yellow-green around 5500 Å. and subsidiary absorptions which need not be precisely specified so long as they are small compared with that around 5500 Å. The total transmission of the glass is 90% to 91%.

A slightly more densely tinted glass may be selected, the total transmission of which is 89% to 90%.

Example 4.—This glass shows a number of absorption bands, but the predominant absorption is in the region of 6200 Å. giving a pink tending towards blue. So long as the glass has this predominant absorption, subsidiary absorptions will be of little consequence. The total transmission is 90% to 91%.

A slightly more densely tinted glass may be selected, the total transmission of which is 89% to 90%.

The lightly tinted windows according to the

several examples are selected to suit goods in the manner now to be described.

Pink tinted windows according to Example 1 are selected to display miscellaneous goods where the predominant colour tone is not blue, green, brown, or grey, i. e., general groceries, pharmacists' goods, patent medicines, stationery, confectionery, sweets, cakes, biscuits, art dealers' goods, glass and china, perfumery, drapery in colour harmony with pink, lingerie, furniture, soft furnishings, books, dairy produce, and all specialised displays in colour harmony with pink.

The slightly more densely tinted windows of this hue may be selected to display meat, provisions, farm produce, fruit, flowers, cooked meats, delicatessen, pork butchers' goods, bread, cakes, biscuits, and also all specialised displays in colour harmony with pink.

Amber tinted windows according to Example 2 are selected to display tobacco, cigars, smokers' requisites, brown furs and fur coats, brown rugs and carpets, brown furniture, fruits in colour harmony with yellow and brown, brown boots and shoes, bakers' goods such as cakes, biscuits, and bread, brown and yellow lingerie, wireless sets, leather goods, suit cases, travel ware, fawn and brown clothing and hats, and for special displays in colour harmony with yellow and brown.

The slightly more densely tinted windows of this hue may be selected to display any of the last-mentioned goods where a greater intensity of colour is desirable or brightness might be sacrificed and where the presence of flies is a nuisance, it having been found that this slightly denser amber tinted glass acts as a deterrent to flies entering a space lighted through such a window.

Mauve tinted windows according to Example 3 are selected to display clothing, millinery and miscellaneous displays of soft goods where the colours range between blues and greys, motor cars, motor sundries, hardware, metal displays of all kinds, aluminium, chromium plate, perfumery in colour harmony, toilet requisites, pharmacists' sundries, tapestries and art goods in colour harmony, black boots and shoes, black leather goods, and all specialised displays in blue, black or grey or in colour harmony therewith.

The slightly more densely tinted windows of this hue may be selected to display motor cars with black coachwork, mourning and other black clothes and hats, dark blue clothes, heavy hardware or metal displays, iron, steel and engineering goods, garden tools, and the goods already stated in respect to mauve where greater intensity of colour is desired.

Cerise tinted windows according to Example 4 are selected to display fabrics, millinery, lingerie, light drapery, light furnishings, summer clothing, bathing dress equipment, garden furnishings, holiday outfits, sports outfitters' goods, silk stockings, silk fabrics, perfumery, decorated cakes, sweets, fancy confectionery, flowers, ribbons, ladies' clothing, lampshades, and all specialised displays in colour harmony with pinks and pastel shades inclining to pink.

The slightly more densely tinted windows of this hue may be selected to display ladies' clothing in colour harmony, millinery, flowers, art needlework, soft furnishings, glass and china, electric fittings, lampshades, embroidery, art fab-

rics, fancy boxes, cartons and packages, in colour harmony with pinks and pastel shades and applicable to the goods already stated in respect of cerise where greater intensity of colour is desired.

The invention is applicable to the windows of shop fronts and also of show cases, display boxes and counters which display goods in shop interiors. In general the window has a frame which surrounds it and a goods support is provided behind the window so that customers view goods on said support through the window.

The accompanying drawing illustrates different applications of the invention. In the drawing:

Fig. 1 is a sectional perspective view of a shop front.

Fig. 2 is a fragmentary perspective view showing the top of a shop counter.

Fig. 3 is a perspective view of a show case.

In each of the figures the reference numeral 4 denotes a window or windows of lightly tinted glass, 5 denotes a frame in which the respective window is mounted, 6 denotes a support for goods on display for inspection through the respective window by customers and 7 denotes the goods, which are conventionally represented.

I claim:

1. A shop display window through which goods on sale are to be viewed and which consists of glass lightly tinted pink with a density giving a total light transmission of 88% to 91%.

2. A shop display window through which goods on sale are to be viewed and which consists of glass lightly tinted amber with a density giving a total light transmission of 87% to 90%.

3. A shop display window through which goods on sale are to be viewed and which consists of glass lightly tinted mauve with a density giving a total light transmission of 89% to 91%.

4. A shop display window for the display of any of the following goods namely general groceries, stationery, books, confectionery, glass, china, meat, fruit and flowers, such window being of plate glass lightly tinted pink by adding selenium to the constituents of the glass in a proportion giving a total light transmission nearly 91%.

5. A shop display window for the display of any of the following goods namely tobacco, bakers' goods, furs, carpets and leather goods, such window being of glass lightly tinted amber by adding sulphur and carbon to the constituents of the glass in proportions giving a total light transmission nearly 90%.

6. A shop display window for the display of any of the following goods namely hardware, metal goods and black articles, such window being of glass lightly tinted mauve by adding selenium and cobalt oxide to the constituents of the glass in proportions giving a total light transmission nearly 91%.

7. A tinted shop display window through which goods are to be viewed, consisting of glass having incorporated therein a coloring agent imparting to said glass a tint in color harmony with the goods displayed, said tinted glass having a light transmission density, depending upon the color tint incorporated in said glass, ranging from 87% to 91%.

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