

Feb. 25, 1969

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3,429,082

BANK DRIVE-UP WINDOW CONSTRUCTION

Filed Oct. 11, 1965

Sheet 1 of 4

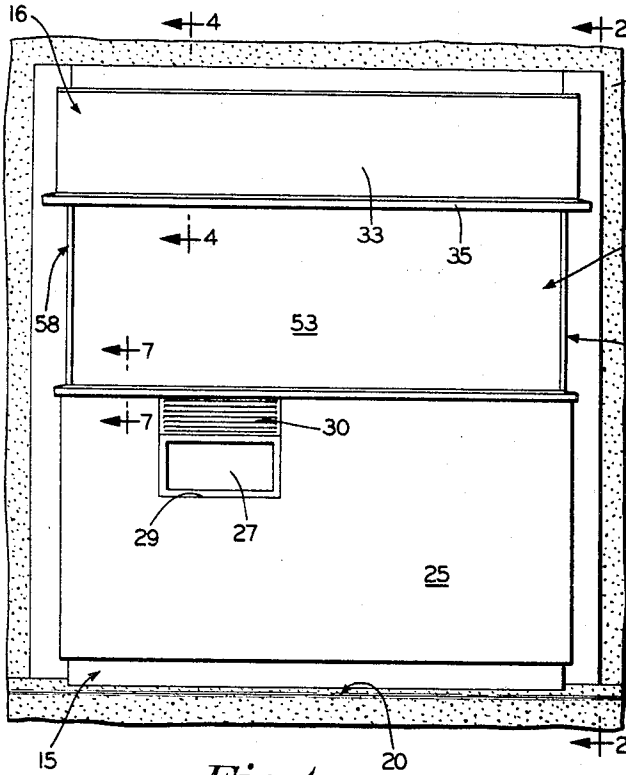


Fig. 1

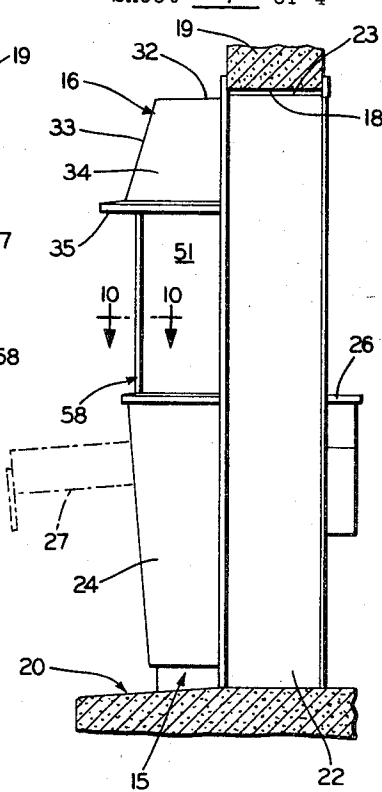


Fig. 2

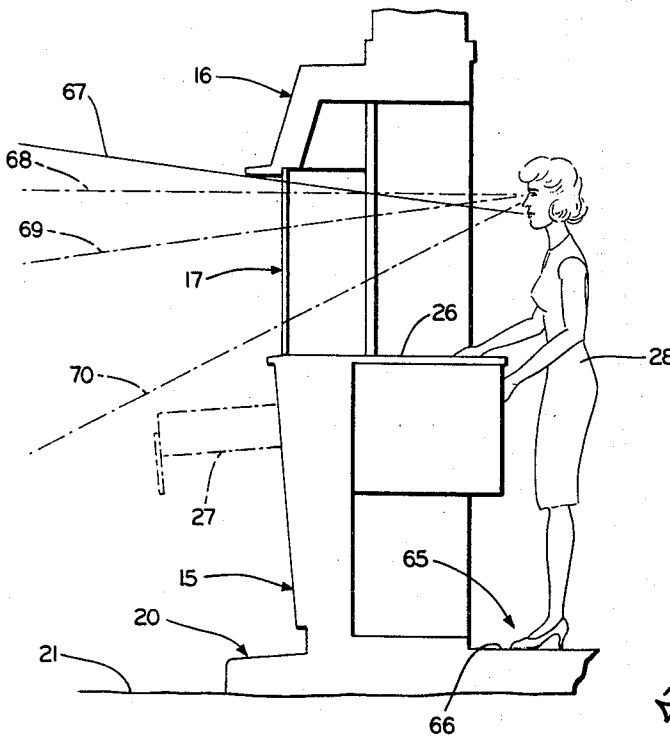


Fig. 3

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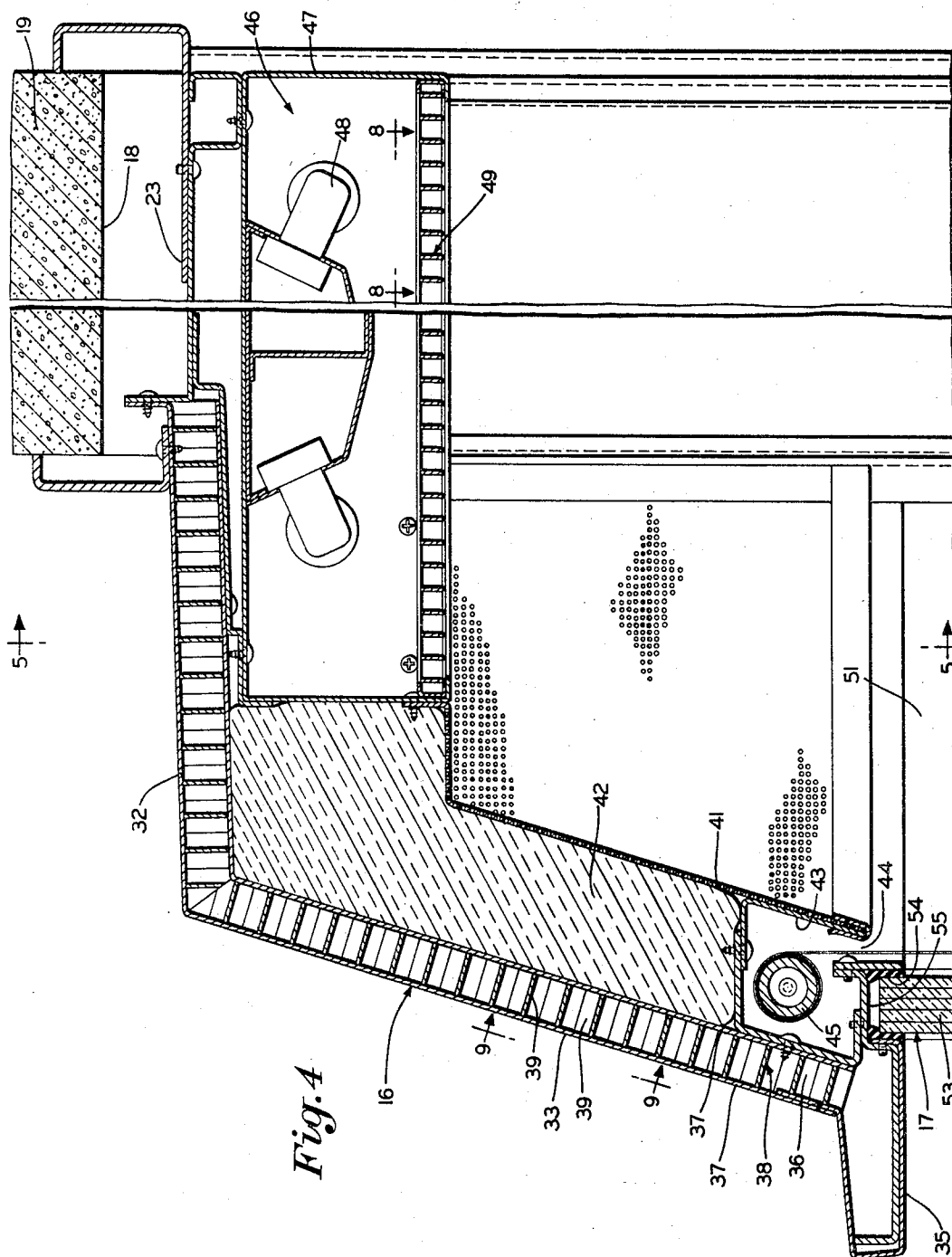
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Fig. 6

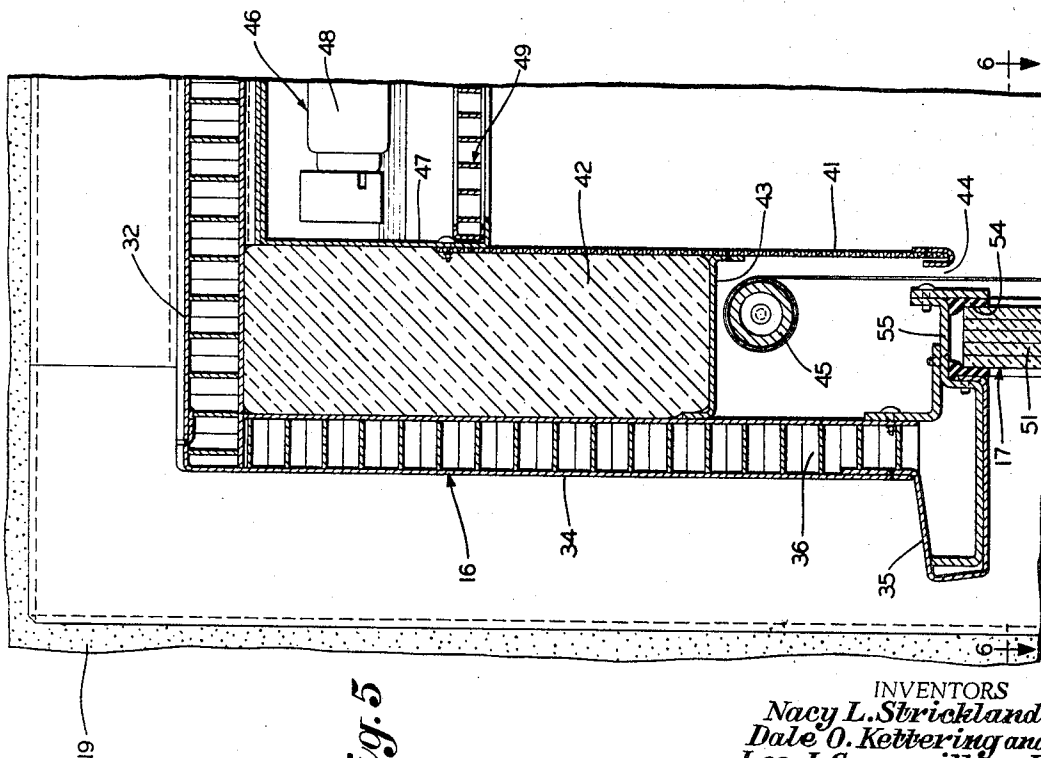
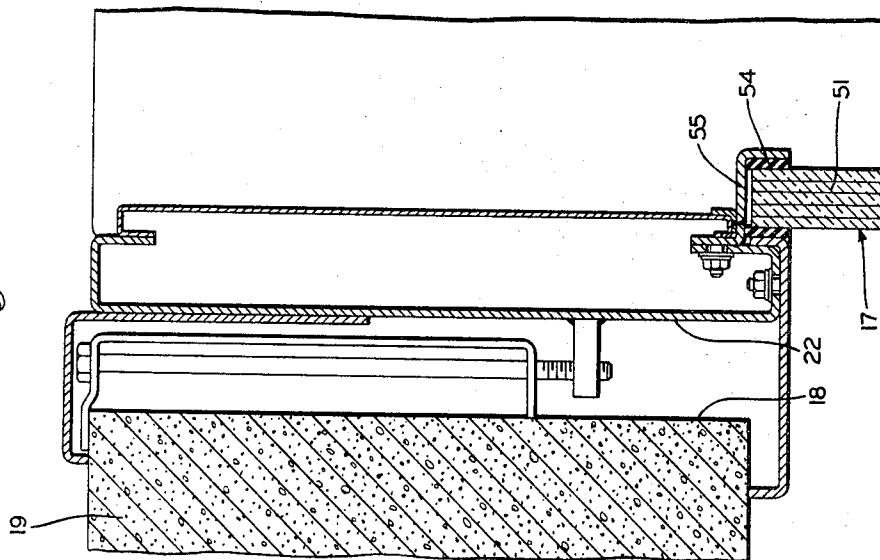


Fig. 5

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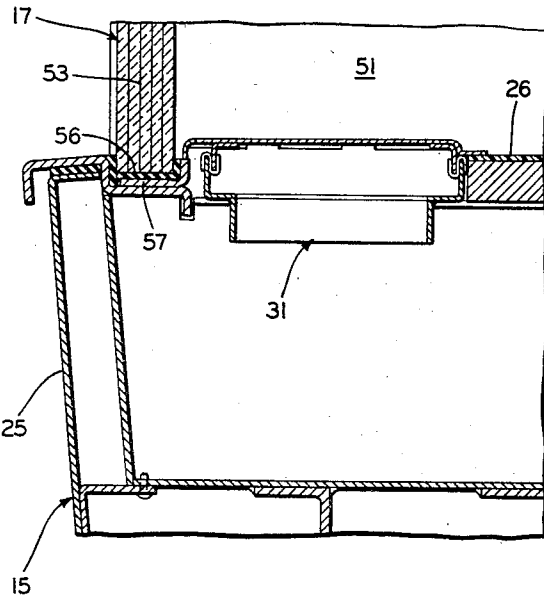


Fig. 7

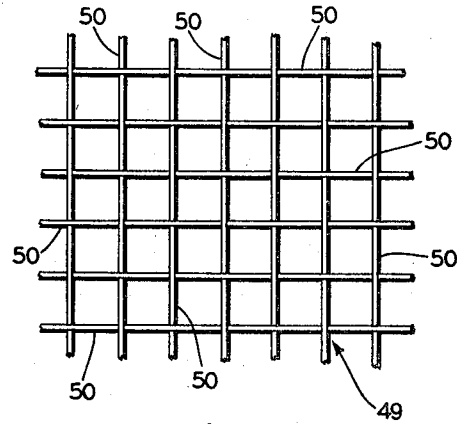


Fig. 8

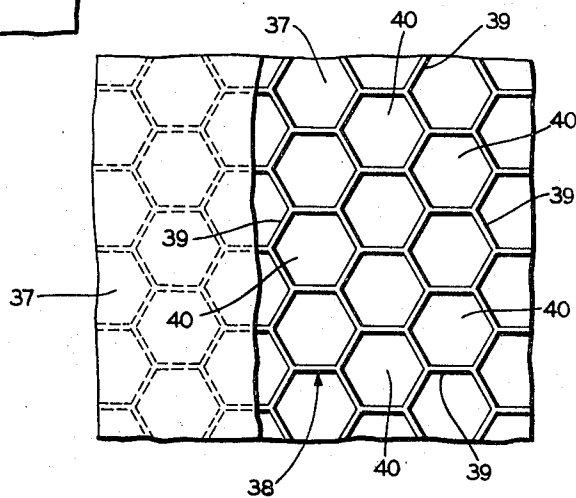


Fig. 9

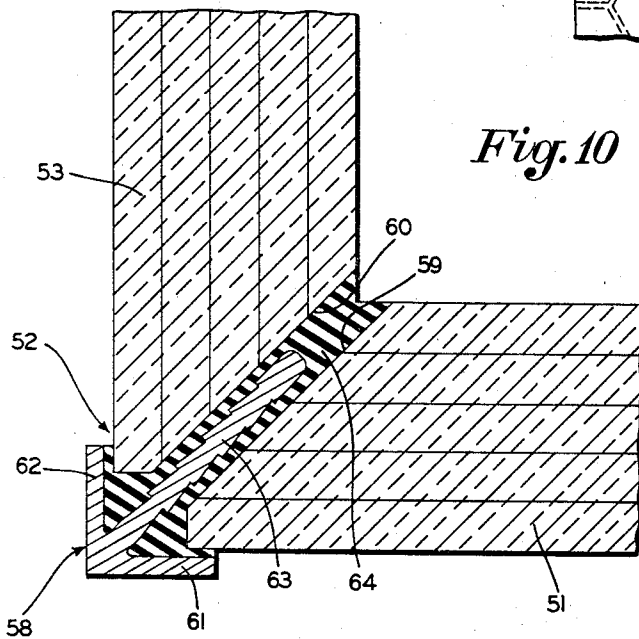


Fig. 10

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BANK DRIVE-UP WINDOW CONSTRUCTION
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12 Claims

Int. Cl. E04h 14/00; E06b 1/38; A47f 9/00

ABSTRACT OF THE DISCLOSURE

Bank drive-up window construction of the bay-window type having a self-supporting canopy secured to the building wall and extending outwardly and then downwardly in cantilever fashion, a base spaced below the canopy and glass means connected to the downward extension of the canopy and extending downwardly to the base member and being connected to and supported thereby, the canopy not being supported by the glass means and base member. The canopy includes spaced sheet metal members with a metal honeycomb structure sandwiched therebetween. A deal drawer is movable through an opening in the base member between an inner teller-accessible position and an outer customer-accessible position.

The glass means includes spaced side portions and a front portion extending at substantially right angles to each other in horizontal cross section forming generally right-angle corners spaced outwardly from the building, opposed edges of the front and side portions at the corners extending at substantially 45° in horizontal cross section, and corner molding strips at said corners.

Light means is located beneath the outward extension of the canopy, and light directing means is provided beneath the light means comprising a horizontal honeycomb structure having vertical openings.

A horizontal teller supporting surface is formed on the inside of the window assembly, the relationship between the vertical height and inward spacing of the teller supporting surface and the bottom of the downward extension of the canopy combining to shade direct sunlight from the eyes of a teller of average height positioned on the teller supporting surface.

Our invention relates to improvements in bank drive-up windows, and more specifically to bay-window-type bank drive-up windows wherein the window assembly is secured in an opening of a building wall and projects outwardly from the wall. Even more specifically, our invention relates to a bay-window-type window assembly generally comprised of an upper hood or canopy spaced above a lower base member mounting the usual movable deal drawer and with glass means extending downwardly from the canopy to the base member completing the window enclosure.

To our knowledge, in all prior bay-window-type drive-up window assemblies, due to the outward extension of the hood or canopy from the building wall, it has been necessary to provide relatively massive mullions extending vertically between the canopy and the base member so that the canopy may be properly supported on and spaced above the base member. These load-bearing canopy-supported mullions have usually been positioned at the corners between side and front portions of the window glass with the result that the teller positioned within the window assembly has the problem of an interrupted or obstructed line of vision outwardly through the window glass at these glass corners.

For this reason, it is desirable in bay-window-type window assemblies to form the canopies self-supporting so that the massive corner mullions can be eliminated. Even

if these corner mullions are eliminated, however, in view of the fact that the glass side and front portions must be joined at these glass corners, it is still necessary to provide some form of covering molding strip at these glass corners at the outer sides thereof in order to cover the line of joinder between the glass side and front portions.

In view thereof, although the greater vision obstructing of the more massive load-bearing mullions can be greatly reduced by providing the canopy self-supporting, permitting the use of much smaller molding strips at the glass corners, there is still a vision obstructing problem remaining. It is, therefore, desirable to provide some means whereby the molding strips at the glass corners, although still positioned at the outer sides of these glass corners, are substantially invisible to a teller positioned inward of the window assembly so that the teller may have virtually uninterrupted 180° vision through the window glass.

Still another problem encountered in prior drive-up window constructions is occasioned by the fact that the interior of the window assembly must be relatively brightly illuminated in order that the teller may properly carry out the necessary banking transactions. When proper illumination is provided, however, there has been a problem with the light reflecting from the window glass causing a glare in the teller's eyes.

Still another problem frequently encountered with prior drive-up window construction is caused by the outside sunlight. In modern banking business, the trend has been toward later banking hours so that, in many cases, the sun may reach a declination such that there will be direct sunlight into the teller's eyes. This problem can, of course, be eliminated by installing the drive-up window at such a location or facing in such a direction that this sunlight cannot become a problem, but if this is necessary, the locations of installations are more greatly limited.

It is, therefore, a general object of the present invention to provide a bank drive-up window construction which eliminates the difficulties, disadvantages and problems encountered with the prior constructions as discussed above.

It is a primary object of the present invention to provide a bank drive-up window construction having a series of interrelated and, in certain cases, interdependent features of construction co-operating to eliminate the foregoing and other problems.

It is a further object of the present invention to provide a bank drive-up window construction of the bay-window-type in which the hood or canopy is formed completely self-supporting and is not required to be supported by the window, base or glass, including any corner metal molding members over the glass corners.

It is still a further object of the present invention to provide a bank drive-up window construction of the bay-window-type in which the usual glass corners between the glass side and front portions are specifically formed to provide virtually uninterrupted 180° vision through the glass for a teller positioned within the window assembly, even though molding members are provided at the glass corners for outwardly covering the usual line of joinder between these glass side and front portions.

It is a further object of the present invention to provide a bank drive-up window construction which is properly artificially interiorly lighted, yet there is no problem of light glare from this interior lighting into the teller's eyes.

It is still another object of the present invention to provide a bank drive-up window construction of the bay-window-type in which the problem of direct sunlight into the teller's eyes is eliminated, despite the much later modern banking hours and regardless of the direction that the window assembly faces.

It is still a further object of the present invention to provide a bank drive-up window in which an improved

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after-hour shade construction is provided wherein the shade is completely recessed above the window glass so as not to be visible when not in use.

Finally, it is an object of the present invention to provide bank drive-up window construction which satisfies all of the above objects in a unique and relatively simple manner, yet may be provided economically.

These and other objects are accomplished by the parts, constructions, arrangements, combinations and subcombinations comprising the present invention, a preferred embodiment of which—illustrative of the best mode in which applicants have contemplated applying the principles—is set forth in the following description and illustrated in the accompanying drawings, and which is particularly and distinctly pointed out and set forth in the appended claims forming a part hereof.

In general terms, certain of the principles of the present invention in bank drive-up window construction reside preferably in a bay-window-type assembly secured in a building wall opening, with the window assembly being formed by an upper hood or canopy spaced above a lower base member with glass means extending therebetween, and a deal drawer mounted selectively movable through an opening in the base member between an inner teller-accessible position and an outer customer-accessible position. Furthermore, the improvements of the present invention may include; the canopy being rigid and self-supporting and being free of structural support from the glass means and base member, said canopy preferably being formed of spaced metal sheet-like skin members connected by a metal honeycomb structure sandwiched therebetween; the glass means preferably having side and front portions joined at glass portion corners at substantially right angles in horizontal cross-section, with the edges on the glass front and side portions at these corners extending at substantially 45° in horizontal cross-section, and the corner molding strips mounted over the outer sides of these glass portion corners and covering parts of these corners being related in horizontal extension away from the corners to the horizontal glass thickness such that the light refraction through the glass at these glass portion corners provides these corner molding strips substantially invisible to a teller positioned inwardly and generally centrally of the window assembly; the light means mounted beneath the outward extension of the canopy for illuminating the interior of the window assembly preferably having light directing means spaced therebeneath extending generally horizontally and being formed by a honeycomb structure having vertical openings therethrough for directing light from the light means vertically downwardly into the interior of the window assembly, and with this light directing means co-operating with the glass means side and front portions when assembled to extend generally vertically so as to substantially eliminate light glare at the interior of the window assembly from the light means by preventing light from the light means reflecting from the glass; a horizontal teller supporting surface formed interiorly of the window assembly at a predetermined vertical height, with the construction and arrangement of the window assembly establishing a teller position on the teller supporting surface spaced a predetermined distance inwardly of the glass means and a downward extension of the canopy, so that the relationship between the vertical height of the teller supporting surface and the inward spacing of the teller position from the glass means and downward extension of the canopy and the downward extension of the canopy combining to shade direct sunlight from the eyes of a teller of average height positioned on the teller supporting surface at the teller position until the sun has reached a declination of at least 7° above the horizon; and a shade housing means formed recessed upwardly within the downward extension of the canopy above the glass means side and front portions and between wall members and the downward extension of the canopy, such

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shade housing means opening downwardly, inwardly adjacent the glass means side and front portions and having window shade means operably mounted therein for selective vertically downward extension inwardly adjacent the glass means side and front portions toward and to the base member.

By way of example, an embodiment of the bank drive-up window construction of the present invention is illustrated in the accompanying drawings forming a part hereof, wherein like numerals indicate similar parts throughout the several views, and in which:

FIG. 1 is a front elevation of a bay-window-type bank drive-up window construction incorporating the improvements of the present invention;

FIG. 2, a sectional view looking in the direction of the arrows 2—2 in FIG. 1 and showing the window construction in side elevation;

FIG. 3, a diagrammatic side view of the window construction illustrating the improved sun shade principles of the present invention;

FIG. 4, an enlarged fragmentary sectional view, part in elevation, looking in the direction of the arrows 4—4 in FIG. 1;

FIG. 5, a fragmentary sectional view, part in elevation, looking in the direction of the arrows 5—5 in FIG. 4;

FIG. 6, a fragmentary sectional view, part in elevation, looking in the direction of the arrows 6—6 in FIG. 5;

FIG. 7, an enlarged fragmentary sectional view, part in elevation, looking in the direction of the arrows 7—7 in FIG. 1;

FIG. 8, an enlarged fragmentary sectional view, looking in the direction of the arrows 8—8 in FIG. 4 and showing the construction of the light directing means;

FIG. 9, an enlarged fragmentary sectional view, part in elevation and with parts broken away, looking in the direction of the arrows 9—9 in FIG. 4 and showing the internal construction of the canopy; and

FIG. 10, an enlarged fragmentary sectional view, looking in the direction of the arrows 10—10 in FIG. 2 and illustrating the glass corner construction.

Referring particularly to FIGS. 1, 2 and 3, the bank drive-up window construction of the present invention is preferably a bay-window-type window assembly including a somewhat usual base, generally indicated at 15, a unique hood or canopy, generally indicated at 16, with a unique form of glass means, generally indicated at 17 extending between the base and canopy. The window assembly is secured in the usual opening 18 of a building wall 19 projecting outwardly therefrom, and in the case of the particular embodiment illustrated, the window assembly is positioned at curb level, generally indicated at 20, so as to be spaced at curb height above the level of the customer's automobile, generally indicated at 21 in FIG. 3.

As shown in FIGS. 1 through 6, the various portions of the window assembly are preferably mounted on the somewhat usual flanged side structural members 22 and top structural member 23, clamped within the building wall opening 18 by appropriate means, as shown, and not of particular importance to the improvements of the present invention. Furthermore, inwardly of these structural members, the various portions of the window assembly are provided with somewhat usual and appropriate paneling of various types, some of which will be described later more in detail as it relates to the improvements of the present invention.

As previously stated, the base 15 is of somewhat usual construction, as shown in FIGS. 1 through 7, may be formed of sheet-metal members, and includes the side walls 24 projecting outwardly from the building wall 19 and the front wall 25 spaced outwardly from the building wall. Furthermore, the base 15 mounts the inwardly projecting teller's counter 26, beneath which is mounted a deal drawer 27 selectively movable by the teller 28 be-

slightly rearwardly of the teller's counter 26 and a customer-accessible position, illustrated in broken lines in FIGS. 2 and 3, projecting outwardly from the base front wall 25 and, in this particular case, accessible to a customer sitting in an automobile positioned on the customer's level 21.

As can be seen in FIG. 1, the deal drawer 27 moves through the usual deal drawer opening 29 of the base front wall 25, above which may be mounted usual grill work 30 for forming a guarded opening for the usual communication equipment necessary for communication between the teller and customer. Also, the usual heating and glass defrosting ducts 31 may be mounted in the teller's counter 26 inwardly adjacent the glass means 17, a portion of which is shown in FIG. 7.

The canopy 16, of particular importance to the principles of the present invention, extends outwardly and downwardly from the building wall 19, so as to include, in the particular form illustrated, a top generally horizontal wall 32 rearwardly secured to the building wall 19 and extending outwardly therefrom, a front slightly forwardly angled generally vertical wall 33 connected to the forward end of the top wall 32, and the side generally vertical walls 34 extending along the sides of the top wall 32 and connecting between the building wall 19 and front wall 33. The front and side walls 33 and 34 are formed at the lower edges thereof with the rain flange 35 at the lower edges thereof, and these front and side walls are also connected at a lower portion 36 thereof to the glass means 17, to be hereinafter described.

Thus, canopy 16 is supported on the building wall 19 through the side and top structural members 22 and 23 projecting outwardly and downwardly in cantilever fashion. Furthermore, this canopy 16, according to the principles of the present invention, is completely self-supporting merely through the mounting thereof on the building wall 19, and does not derive any support from the base 15 or glass means 17.

As shown best in FIGS. 4 and 5, this self-supporting of the canopy 16, despite the extension thereof in cantilever fashion from building wall 19, is possible by forming the top front and side walls 32, 33 and 34 of spaced metal sheet-like skin members 37 joined by a continuous honeycomb structure 38 sandwiched therebetween. As shown in FIG. 9, this honeycomb structure 38 is formed by a series of connected, laterally extending web portions 39 extending perpendicularly between the skin members 37 and forming a series of openings 40 between these web portions which are closed by the skin members. Also, as shown in FIG. 9, it is preferred that the web portions 39 are arranged so as to provide the openings 40 six sided or hexagonal in cross-section taken parallel to the skin members 37, but various degrees of rigidity and supporting strength may be provided by arranging these web portions in various other formations, all of which can be broadly termed "honeycomb."

Sheet-like interior wall members 41 are mounted on the window assembly preferably through connection to the canopy 16, positioned spaced inwardly from and preferably generally parallel to the canopy front and side walls 33 and 34, as well as portions of the top walls 32, and it is preferred that these wall members will be perforated, as shown in FIGS. 4 and 5, in the usual manner for sound deadening characteristics. Also, usual insulation material 42 may be positioned between the canopy top, front and side walls 32, 33 and 34, and the interior wall members 41 at various locations in order to insulate against weather extremes, as well as the incidental sound deadening qualities.

The shade housing members 43 are formed generally rectangular in vertical cross-section, extending upwardly from the lower portions 36 of the canopy front and side walls 33 and 34 above the glass means 17 and between these canopy front and side walls and the lower parts of the interior wall members 41, again as shown in FIGS. 4

and 5. These shade housing members 43 open downwardly through a shade slot 44 inwardly adjacent the upper extremities of the glass means 17 and at the lower edges of the interior wall members 41.

A series of after-hour shades 45 are mounted in these recessed shade housing members 43 arranged for downward extension through the shade slots 44 and inwardly adjacent the glass means 17. Shades 45 may be of any usual construction and may be arranged to operate in the usual manner as to extension and retraction.

Thus, according to the principles of the present invention, after-hour shades 45 may be provided for selectively inwardly covering the glass means 17 completely around the outwardly exposed portion of the window assembly, that is, completely around the canopy front and side walls 33 and 34, yet when not in use, these shades 45 may be retracted upwardly through the shade slots 44 and will be virtually undetectable.

An interior light assembly 46 is mounted secured to and underlying the canopy top wall 32, as also shown in FIGS. 4 and 5, with this light assembly including the downwardly opening rectangular box-like housing 47, light fixture 48 and light directing member 49. As shown, the light fixture 48 is mounted recessed within the housing 47 for providing light downwardly into the interior of the window assembly.

The light directing member 49 is mounted horizontally across the lower extremities of the housing 47 beneath the light fixture 48, so that light from the light fixture must pass through this light directing member prior to reaching the interior of the window assembly. An enlarged section of the light directing member 49 is shown in FIG. 8 in plan view, that is, as viewed looking vertically downwardly, and is formed in a honeycomb pattern by crossed reflecting section members 50 positioned extending edgewise vertically so as to have vertically extending reflective surfaces and forming, in this case, substantially square vertical openings downwardly through light directing member 49. Other opening shapes may be used as long as vertically extending reflective surfaces are provided.

Thus, according to the principles of the present invention, the light from the light fixture 48 must pass downwardly through the vertical openings of the light directing member 49 and, due to the vertical reflective surfaces of this light directing member, will be formed into vertically extending beams, and lateral spreading of the light beams will be at least greatly minimized, if not virtually eliminated. As will be discussed later, with this vertical light directing means in combination with the later to be discussed preferably vertical extension of the glass means 17, the light from the light fixture 48 is prevented from reflecting off the glass means due to the vertical direction thereof, to thereby minimize the possibility of light glare from such artificial lighting within the window assembly.

Also, referring to the previously discussed construction of the canopy 16 providing this canopy completely self-supporting and free from any support by or through the base 15 and glass means 17, it will be noted that not only does canopy 16 support its own structure on the building wall 19, but also supports at least the major part of the previously described recessed shade housing members 43 with the after-hour shades 45 and light assembly 46.

The glass means 17 includes the spaced glass side portions 51 extending outwardly from the building wall 19, outwardly connected at the glass portion corners 52 by the glass front portion 53, spaced outwardly from the building wall, as best seen in FIGS. 1, 2 and 3. Furthermore, each of these glass side and front portions 51 and 53 is formed of usually preferably 5-ply laminated bullet-proof glass. Still further, each of these glass side and front portions 51 and 53 is connected to the lower portions 36 of the canopy side and front walls 34 and 33 through appropriate resilient sealing members 54 housed in appropriate metal retaining members 55, as shown

in FIGS. 4 and 5, and is supported on the base side and front walls 24 and 25 through similar resilient sealing members 56 housed in metal retaining members 57, as shown for instance in FIG. 7.

In order to provide the previously discussed non-glare feature of the present invention as a result of the particular construction of the light assembly 46 with the light directing member 49, and as previously mentioned in a discussion of that non-glare feature, the glass side and front portions 51 and 53 extend substantially vertically between the base 15 and canopy 16, although for this non-glare feature, it is not necessary that the glass side portions 51 be parallel in the extension thereof from the building wall 19 to the glass front portion 53. In order to provide a further important feature of the present invention, however, it is necessary that these glass side portions 51 will extend substantially parallel and form substantially right angle glass portion corners 52 with the glass front portion 53 within limits to be discussed below, but as to this further feature, it is not necessary that these glass side and front portions 51 and 53 will extend substantially vertically between the base 15 and canopy 16, but rather may extend at substantially any vertical angle.

This further feature of the present invention provided by a particular construction of the glass means 17 is that the teller 28 is provided with virtually 180° vision from the interior of the window assembly outwardly through the glass side and front portions 51 and 53, and particularly full substantially unbroken and, at the most, only slightly distorted vision through the glass portion corners 52, even though these glass portion corners are outwardly covered by vertically extending, preferably metal, corner molding strips 58, as illustrated in elevation in FIGS. 1 and 2. As shown in enlarged horizontal section in FIG. 10, in order to provide this unbroken corner vision, the glass portion corners 52 must be substantially right angle corners in horizontal cross-section within the limits in the order of plus or minus 10°, and the generally vertically extending edges 59 on the glass side portions 51 and the generally vertically extending edges 60 on the glass front portion 53 at the glass portion corners 52 must extend at substantially 45° in horizontal cross-section within the limits in the order of plus or minus 5°.

With these glass portion corners 52 extending at substantially right angles as described, the light refraction through these glass portion corners becomes a function of the horizontal thickness of the glass side and front portions 51 and 53 at these corners, so that if the horizontal extension of the corner molding strip 58 is maintained at or less than a maximum horizontal dimension, as determined by the glass thickness, the refraction of light at these glass portion corners will be such that the corner molding strips are substantially invisible to a teller 28 positioned interiorly of the window assembly and substantially centrally between the glass side portions 51, that is, with a line of vision substantially aligned with the glass portion corners or approximately 45° to the glass side and front portions. The maximum permissive horizontal extension of the corner molding strips 58 from the glass portion corners 52 in either direction outwardly along either of the glass side or front portions 51 and 53 at either corner may be calculated by the formula: width of molding = 0.461 glass thickness, so that, for example, with a glass thickness of 1.186 inches, the molding strip 58 may have side and front flanges 61 and 62 each extending horizontally away from a glass portion corner 0.547 inch and still be invisible to the teller 28.

In view of the limits set forth above, when the glass portion corners 52 are referred to in the present specification and appended claims as right angle corners and the glass edges 59 and 60 of the glass side and front portions 51 and 53 are referred to as extending at substantially 45°, it should be understood that these terms are intended within the approximate limits defined, so that "right angle" is intended to mean 90° plus or minus approximately 10°

and 45° is intended to mean plus or minus approximately 5°.

Referring to the preferred specific construction of the glass portion corners 52 shown in FIG. 10, each of the corner molding strips 58 is preferably formed of one piece with the side and front flanges 61 and 62 and with the inwardly directed fastening member or members 63. As shown, the space between the facing substantially parallel glass edges 59 and 60 of the glass side and front portions 51 and 53 may be filled with a usual resilient sealing material 64, with the molding fastening member or members being received into and gripped by this sealing material for retaining the corner molding strips 58 positioned over the glass portion corners 52. It should be further understood that these corner molding strips 58 are preferably purely for decorative purposes and are preferably not load-bearing, so that these molding strips do not transmit any weight of the canopy 16 downwardly into the base 15, as long as the self-supporting canopy feature of the present invention is provided as previously described. If this feature is not provided, then these molding members will be load-bearing, and this does not necessarily have any effect on the feature of unbroken vision through the glass portion corners 52 as just described.

Referring to FIG. 3, a further improved feature of the present invention is related to the particular location of the teller 28 and the particular construction of the canopy 16. As shown, the teller 28 is positioned at a predetermined teller position, generally indicated at 65, on a positioning surface 66 which is at a predetermined vertical height and a predetermined distance inwardly from at least the glass front portion 53 of glass means 17 and the lower extremity of at least the front wall 33 of canopy 16. Furthermore, the front wall 33 of canopy 16 extends downwardly a predetermined distance or to a predetermined vertical height.

With the co-operation of these various factors and the proper dimensioning thereof, in the construction of the present invention, the canopy 16 will shade direct sunlight from the eyes of a teller 28 of average height, in the case illustrated 5' 7", until the sun has reached a declination of at least 7° to the horizon. This 7° declination is shown by the solid line 67 in FIG. 3 and it can be seen that the rays of the sun could not yet reach the eyes of the teller 28. Further, in FIG. 3 the horizontal line of sight of the teller 28 is shown by the broken line 68, and the normal optimum sight range of the teller for transacting the usual banking business with window construction of the present invention is shown between the broken lines 69 and 70.

Thus, the window assembly of the present invention, when constructed to include the foregoing dimensional relationship, may be positioned extending from virtually any building wall 19 desired without regard as to the particular direction, since the direct rays of sunlight will never become a problem.

In the foregoing description, certain terms have been used for brevity, clearness and understanding but no unnecessary limitations are to be implied therefrom, because such words are used for descriptive purposes herein and are intended to be broadly construed.

Moreover, the embodiment of the improved construction illustrated and described herein is by way of example and the scope of the present invention is not limited to the exact details of construction shown.

Having now described the invention, the construction, operation and use of a preferred embodiment thereof, and the advantageous new and useful results obtained thereby, the new and useful construction and reasonable mechanical equivalents thereof obvious to those skilled in the art are set forth in the appended claims.

We claim:

1. Bank drive-up window construction of the type in which a bay-window-type window assembly is secured in an opening of a building wall and projects outwardly

from the building wall; in which the window assembly is formed by an upper canopy vertically spaced above a lower base member with glass means extending therebetween; and in which a deal drawer is selectively movable through an opening in the base member between an inner teller-accessible position and an outer customer-accessible position; the improvements including the canopy being secured to and supported entirely upon the building wall and extending outwardly and then downwardly in cantilever fashion, the glass means being connected to a lower portion of the downward extension of the canopy and extending downwardly to the base member, the glass means being connected to and supported on the base member, and the canopy being constructed and arranged rigid and self-supporting and being free of structural support by the glass means and base member.

2. Bank drive-up window construction of the type in which a bay-window-type window assembly is secured in an opening of a building wall and projects outwardly from the building wall; in which the window assembly is formed by an upper canopy vertically spaced above a lower base member with glass means extending therebetween; and in which a deal drawer is selectively movable through an opening in the base member between an inner teller-accessible position and an outer customer-accessible position; the improvements including the glass means being formed by spaced side portions extending outwardly from the building wall and a front portion spaced outwardly from the building wall, the glass side portions extending at substantially right angles in horizontal cross-section to the glass front portion forming generally right angle glass portion corners spaced outwardly from the building wall, edges on the front and side portions at the glass portion corners formed extending at substantially 45° in horizontal cross-section to form the right angle glass portion corners, corner molding strips mounted over outer sides of the glass portion corners covering parts of at least one of the glass front and side portions at and extending horizontally away from each of the glass portion corners, and the relationship between the horizontal extensions of the corner molding strips from the glass portion corners and the horizontal glass thickness of the front and side portions being such that the light refraction through the front and side portions at the glass portion corners provides the corner molding strips substantially invisible to a teller positioned inwardly and generally centrally of the window assembly and provides the teller with substantially uninterrupted and at most slightly distorted vision outwardly through the glass portion corners.

3. Bank drive-up window construction as defined in claim 2 wherein the corner molding strips are mounted over outer sides of the glass portion corners covering parts of each of the front and side portions at and extending horizontally away from each of the glass portion corners.

4. Bank drive-up window construction as defined in claim 2 wherein the corner molding strips mounted over outer sides of the glass portion corners are formed right angled in horizontal cross-section and are positioned covering parts of each of the glass front and side portions at each of the glass portion corners; wherein a resilient sealing material is positioned between the edges of the front and side portions at each of the glass portion corners; and wherein fastening means are connected to the corner molding strips extending into and being gripped by the resilient sealing material at each of the glass portion corners.

5. Bank drive-up window construction as defined in claim 2 wherein the relationship between the horizontal extension of the corner molding strips from the glass portion corners and the horizontal glass thickness of the glass means front and side portions is determined by the formula $W=0.461T$, where W is the maximum horizontal

extension of a corner molding strip from a glass portion corner and T is the horizontal glass thickness.

6. Bank drive-up window construction as defined in claim 2 wherein the canopy is secured to the building wall and extends outwardly and then downwardly in cantilever fashion; wherein the glass means side and front portions are connected to a lower portion of the downward extension of the canopy and extend downwardly to the base member; wherein the glass means is connected to and supported on the base member; and wherein the canopy is constructed and arranged rigid and self-supporting and is free of structural support by the glass means and base member including the corner molding strips mounted over the outer sides of the glass portion corners.

7. Bank drive-up window construction of the type in which a bay-window-type window assembly is secured in an opening of a building wall and projects outwardly from the building wall; in which the window assembly is formed by an upper canopy vertically spaced above a lower base member with glass means extending therebetween; and in which a deal drawer is selectively movable through an opening in the base member between an inner teller-accessible position and an outer customer-accessible position; the improvements including the canopy being operably connected to and supported entirely upon the building wall and extending outwardly and then downwardly, the glass means being connected to a lower portion of the downward extension of the canopy and extending downwardly to the base member, a generally horizontal teller supporting surface formed interiorly of the window assembly at a predetermined vertical height, the construction and arrangement of the window assembly establishing a teller position on the teller supporting surface spaced a predetermined distance inwardly of the glass means and the downward extension of the canopy, and the relationship between the vertical height of the teller supporting surface and the inward spacing of the teller position from the glass means and downward extension of the canopy and the downward termination height of the downward extension of the canopy combining to shade direct sunlight from the eyes of a teller of about 5'7" height positioned on the teller supporting surface at the teller position until the sun has reached a declination of at least 7° above the horizon.

8. Bank drive-up window construction as defined in claim 7 wherein light means is mounted connected to the window assembly beneath the outward extension of the canopy for illuminating the interior of the window assembly; wherein light directing means is mounted connected to the window assembly spaced beneath the light means, and the light directing means extends generally horizontally and is formed by a honeycomb structure having vertical openings therethrough for directing light from the light means vertically downwardly into the interior of the window assembly; wherein the glass means is formed by spaced generally vertically extending side portions extending outwardly from the building wall and a generally vertically extending front portion spaced outwardly from the building wall; and wherein the light directing means and the generally vertically extending glass means side and front portions cooperate to substantially eliminate light glare at the interior of the window assembly from the light means by preventing light from the light means reflecting from the glass means.

9. Bank drive-up window construction as defined in claim 7 wherein the glass means is connected to and supported on the base member; and wherein the canopy is secured to the building wall extending outwardly and downwardly in cantilever fashion and is constructed and arranged rigid and self-supporting and is free of structural support by the glass means and base member.

10. Bank drive-up window construction of the type in which a bay-window-type window assembly is secured in an opening of a building wall and projects outwardly

from the building wall; in which the window assembly is formed by an upper canopy vertically spaced above a lower base member with glass means extending therebetween; and in which a deal drawer is selectively movable through an opening in the base member between an inner teller-accessible position and an outer customer-accessible position; the improvements including the canopy being operably connected to the building wall and extending outwardly and then downwardly, the glass means being formed by spaced side portions extending outwardly from the building wall and a front portion spaced outwardly from the building wall, the glass means side and front portions being connected to a lower portion of the downward extension of the canopy and extending downwardly to the base member, sheet-like interior wall members operably connected to the canopy spaced inwardly from and extending downwardly along the downward extension of the canopy, the wall members terminating downwardly inwardly adjacent the lower portion of the downward extension of the canopy, shade housing means formed between the wall members and the lower portion of the downward extension of the canopy above the glass means, the shade housing means opening downwardly inwardly adjacent the glass means side and front portions, window shade means operably mounted in the shade housing means, and the window shade means being constructed selectively vertically downwardly extensible inwardly adjacent the glass means side and front portions to the base member.

11. Bank drive-up window construction as defined in claim 10 wherein the canopy is secured to the building wall extending outwardly and downwardly in cantilever fashion; wherein the glass means side and front portions are connected to and supported on the base member; and wherein the canopy is constructed and arranged rigid and self-supporting and is free of structural support by the glass means and base member.

12. Bank drive-up window construction of the type in which a bay-window-type window assembly is secured in an opening of a building wall and projects outwardly from the building wall; in which the window assembly is formed by an upper canopy vertically spaced above a lower base member with glass means extending therebetween; and in which a deal drawer is selectively movable through an opening in the base member between an inner teller-accessible position and an outer customer-accessible position; the improvements including the canopy being secured to the building wall and extending outwardly and then downwardly in cantilever fashion, the glass means being connected to a lower portion of the downward extension of the canopy and extending downwardly to the base member, the glass means being connected to and supported on the base member, the glass means being formed by spaced generally vertically extending and substantially parallel side portions extending outwardly from the building wall and a generally vertically extending front portion spaced outwardly from the building wall, the glass side portions extending at substantially right angles in horizontal cross-section to the glass front portion forming generally vertically extending right angled glass portion corners spaced outwardly from the building wall, generally vertically extending edges on the front and side portions at the glass portion corners formed extending substantially 45° in horizontal cross-section to form the right angle glass portion corners, generally vertically extending corner molding strips mounted over outer sides of the glass portion corners covering parts of at least one of the glass front and side portions at and extending horizontally away from each of the glass portion corners, the relationship between the horizontal extensions of the corner molding strips from the glass portion corners and the horizontal glass thickness of the front and side portions being such that the light refraction through the front and side portions at the glass portion corners provides the corner molding strips substantially in-

visible to a teller at a teller position inwardly of and generally centrally of the window assembly and provides the teller with substantially uninterrupted and at most slightly distorted vision outwardly through the glass portion corners, the canopy being constructed and arranged rigid and self-supporting and being free of structural support by the glass means and base member including the corner molding strips mounted over the outer sides of the glass portion corners, light means mounted connected to the window assembly beneath the outward extension of the canopy for illuminating the interior of the window assembly, light directing means mounted connected to the window assembly spaced beneath the light means, the light directing means extending generally horizontally and being formed by a honeycomb structure having vertical openings therethrough for directing light from the light means vertically downwardly into the interior of the window assembly, the light directing means and the generally vertically extending glass means side and front portions cooperating to substantially eliminate light glare at the interior of the window assembly from the light means by preventing light from the light means reflecting from the glass means, a generally horizontal teller supporting surface formed interiorly of the window assembly at a predetermined vertical height, the construction and arrangement of the window assembly establishing the teller position on the teller supporting surface and spaced a predetermined distance inwardly of the glass means and downward extension of the canopy, the relationship between the vertical height of the teller supporting surface and the inward spacing of the teller position from the glass means and downward extension of the canopy and the downward termination height of the downward extension of the canopy combining to shade direct sunlight from the eyes of a teller of average height positioned on the teller supporting surface at the teller position until the sun has reached a declination of at least 7° above the horizon, sheet-like interior wall members operably connected to the canopy spaced inwardly from and extending downwardly along the downward extension of the canopy, the wall members terminating downwardly inwardly adjacent the lower portion of the downward extension of the canopy, shade housing means formed between the wall members and the lower portion of the downward extension of the canopy above the glass means, the shade housing means opening downwardly inwardly adjacent the glass means side and front portions, window shade means operably mounted in the shade housing means, and the window shade means being selectively vertically downwardly extensible inwardly adjacent the glass means side and front portions to the base member.

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