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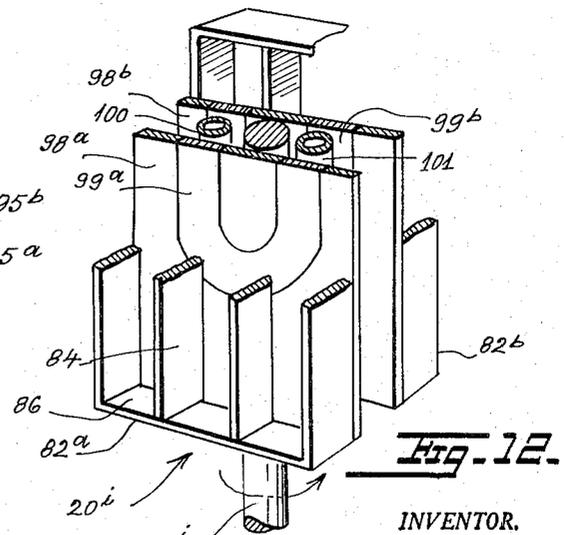
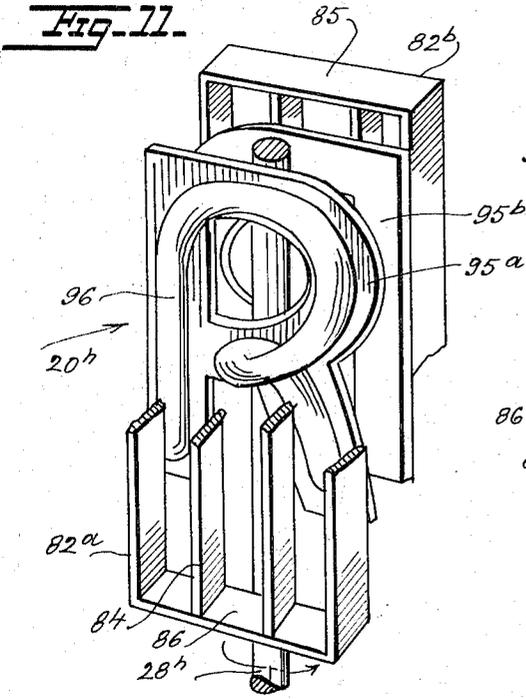
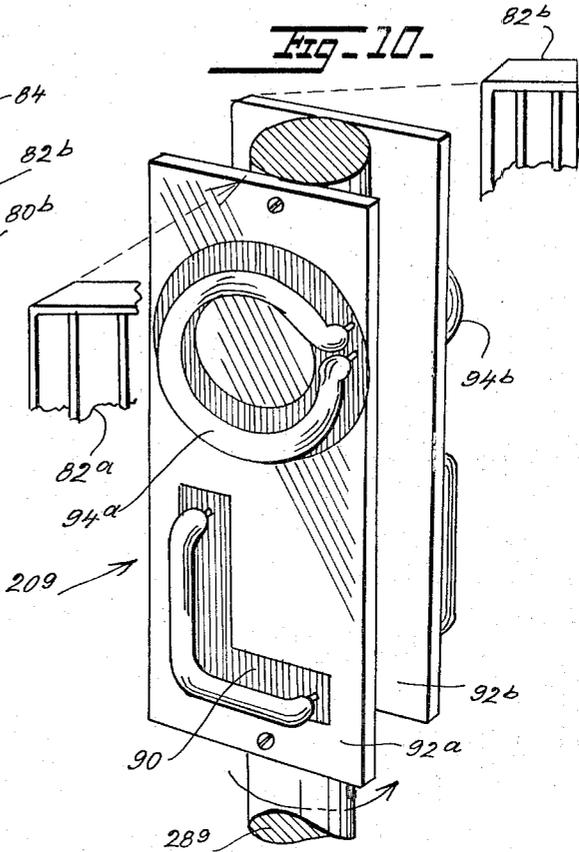
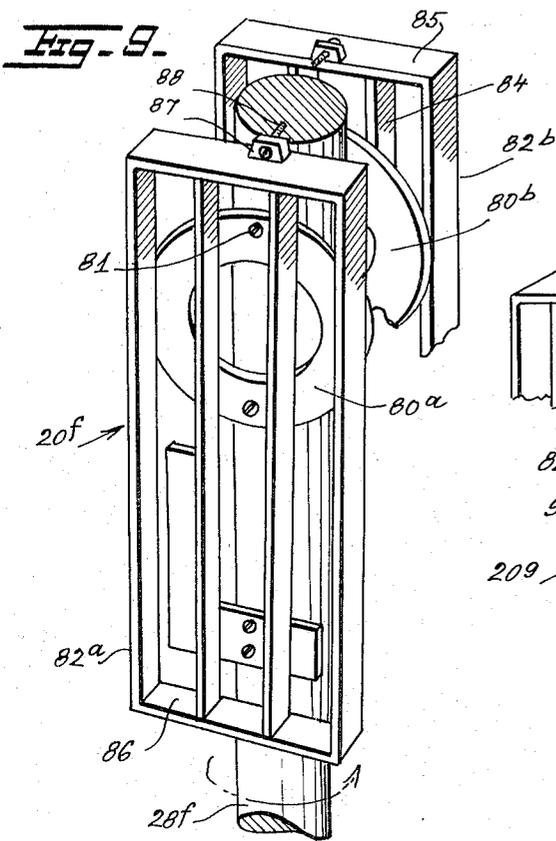
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3,295,240

REVOLVING SIGN DISPLAY

Filed Oct. 21, 1964

3 Sheets-Sheet 2



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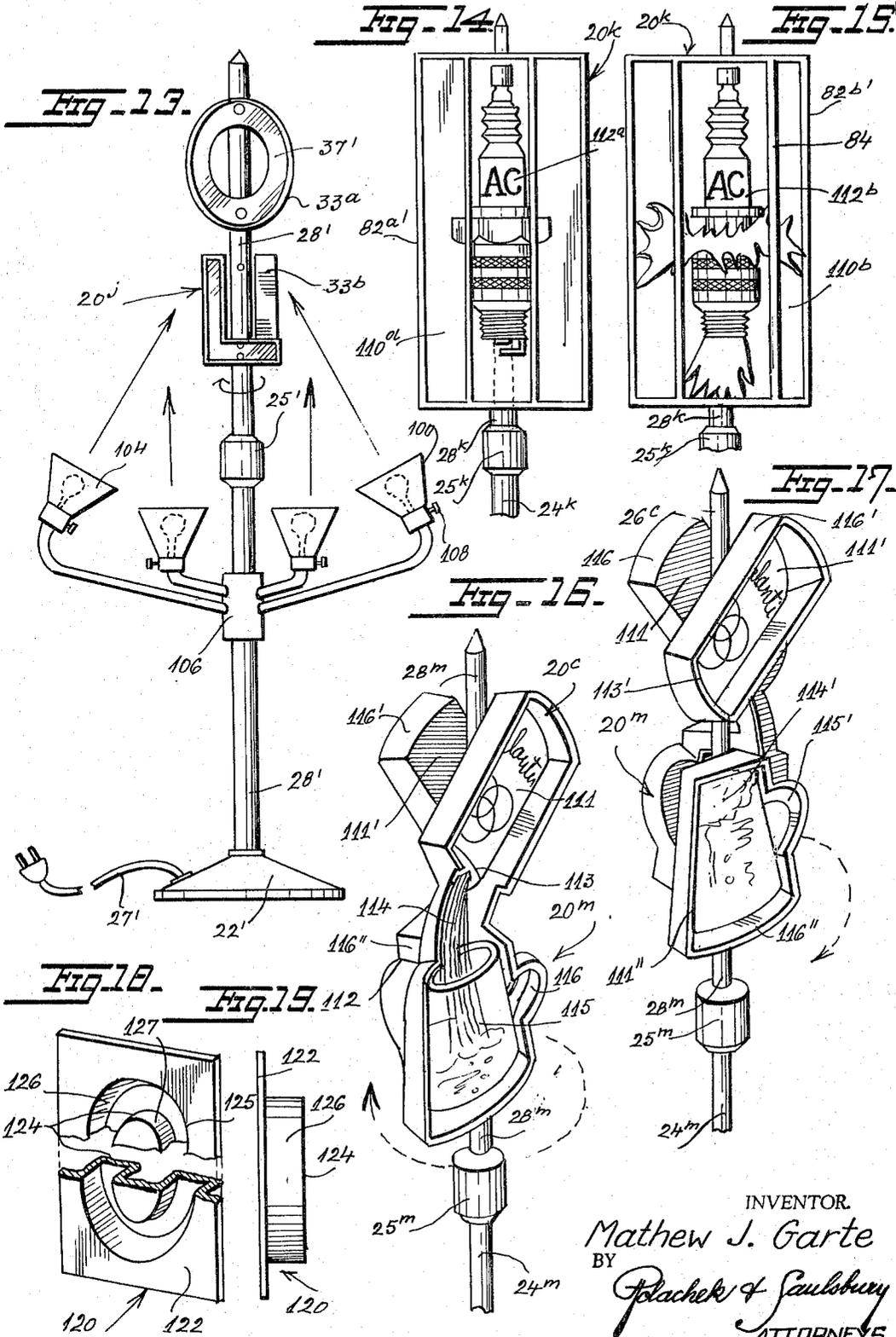
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3,295,240  
**REVOLVING SIGN DISPLAY**  
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 Filed Oct. 21, 1964, Ser. No. 405,479  
 17 Claims. (Cl. 40-33)

This invention relates to sign displays and more particularly concerns a rotary sign display.

According to the invention two identical or similar sets of letters, symbols, figures or pictures are secured on opposite sides of a rotatable post or similar support. The post axle may be round or flat in shape and may be made of metal, plastic or other suitable material. The sign display may be illuminated at night by light projected from external projection lamps. Alternatively the letters or pictures can be made of self illuminated fluorescent tubes, or illuminating lamps can be mounted on the rotating sign display to rotate with and illuminate the letters and pictures. By day artificial illumination will generally not be needed but may be used if desired. The letters, symbols, figures or pictures may be set in frames. The sign display is rotated by a motor at high speed. The sign display will appear to be stationary to an observer, regardless of his viewing position at any point around the sign. The sign display thus provides uniform 360° viewing. The observer will not see a blurred image or a periodically screened image because the letters, symbols, figures or pictures are set deeply in the frames. The observer sees the display clearly from any angle, which makes a vivid impression. The sign display serves as an effective advertising medium.

The sign display may be erected on a pole, post, roof, canopy, tower, or other elevated support. It may be attached laterally to a side wall or on top of a building or other support.

Vertical grates or sets of thin vertical slats can be disposed in front of the sign displays to provide the optical illusion of being stationary, instead of mounting the letters, symbols, figures and pictures in deep frames. The grates and frames can be made of metal, plastic or other suitable material.

If the sign displays are made of translucent material, illumination can be applied from the backs of the displays. The lettering, pictures or figures can be made somewhat different on each side of the sign display so as to appear to repeat prescribed movements as the sign display rotates. When the sign displays are illuminated by external or internal electric lamps rotating with the sign display suitable means is provided to conduct electricity to the lamps.

The letters, symbols, figures or pictures can be attached directly to a post to rotate with the post. Alternatively the letters, symbols, figures or pictures must be mounted identically, and symmetrically on both opposite sides on rectangular or circular boards on opposite sides of the post to which the boards are attached. The letters, symbols, figures or pictures can be inscribed deeply in the boards so that no encircling frames or front grates are required. Similarly if the letters or symbols are made of self illuminated neon tubes embedded deeply in their supporting boards no encircling frames or front grates will be required.

The sign display can be provided with a photoelectrically operated switch for turning illumination on automatically at night and off by day. By day no other illumination than natural daylight will in general be necessary.

It is one object of the invention to provide a rotating sign display which presents an optical illusion of being stationary to an observer regardless of his viewing position taken 360° around the sign.

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A further object is to provide a rotating sign display in which letters, symbols, figures and pictures are set in frames in such a way that no blurring occurs in the image presented to an observer.

5 Another object is to provide a rotating sign display in which a vertical grate or a plurality of thin slats are disposed in front of the sign display so as to present optical illusion of the display's being stationary.

10 Another object is to provide a rotating sign display as described, wherein illumination of the sign display comes from external stationary lamps, from lamps rotating with sign display either in front of or behind the sign display, or from fluorescent tubes of which the sign display is made.

15 Still another object is to provide a rotating sign display of the character described wherein there is a slight difference between letters or figures on opposite sides of the sign display so that the letters or figures appear to move while the sign display rotates.

20 It is a further object that the construction of the letters and the lights may be in various combinations to produce effects depending on the size of the sign whether indoors or outdoors.

25 It is a still further object that this could receive its operating electrical potential by microwave transmission.

For further comprehension of the invention, and of the objects and advantages thereof, reference will be had to the appended claims in which the various novel features of the invention are more particularly set forth.

30 In the accompanying drawings forming a material part of this disclosure:

FIGURE 1 is a side elevational view of a sign display assembly embodying the invention.

35 FIG. 1A is a sectional view taken on line 1A-1A of FIG. 1.

FIG. 2 is an enlarged perspective view of the upper part of another sign display.

FIG. 3 is an exploded perspective view of parts of the assembly of FIG. 2.

40 FIG. 4 is a horizontal sectional view taken on line 4-4 of FIG. 3.

FIG. 5 is a perspective view of another sign display assembly.

45 FIG. 5A is an enlarged cross sectional view taken on line 5A-5A of FIG. 5.

FIG. 6 is a side elevational view of another sign display.

50 FIG. 6A is a cross sectional view taken on line 6A-6A of FIG. 6.

FIG. 7 and FIG. 8 are perspective view of two further sign displays.

FIG. 7A is a cross sectional view taken on line 7A-7A of FIG. 7 and FIG. 8.

55 FIGS. 9, 10, 11 and 12 are fragmentary perspective views of upper parts of other sign displays.

FIG. 13 is a side view of another sign display assembly.

FIG. 14 and FIG. 15 are side elevational views showing opposite sides of a further sign display.

60 FIG. 16 and FIG. 17 are perspective views showing opposite sides of another sign display.

FIG. 18 is a perspective view with parts broken away showing construction of a sign display member.

65 FIG. 19 is an edgewise elevational view of the sign display member of FIG. 18.

Referring first to FIGS. 1 and 1A, there is shown a sign display assembly 20 including a stationary base 22 which supports a tubular cylindrical post 24. Mounted on the post is a motor 25 energized via power wires 27. This motor has a rotating shaft 26 inserted in a recess in the bottom of a rotary pole 28. The pole is secured on the shaft by a set screw 30. Mounted on the pole by screws

or bolts 31 inserted in threaded holes 32 in the pole are two sets 33a and 33b of channel-shaped frames 34. The frames in each set are in axially spaced vertically spaced positions on the pole. The frames are shaped to be in the forms of alphabetical letters. The letters are the same in each set of frames, but are back to back on opposite sides of the pole so that when the pole rotates frames 33a and 33b successively occupy the same positions. Viewed from the front as in FIGS. 1 and 1A the letters of set 33b are reversed with respect to frames 33a. As best shown in FIG. 1A each frame 34 has a vertical wall 35 and a peripheral wall 36 standing outwardly of the vertical wall. The outer side of wall 35 has a coating 37 in the shape of a letter in a suitable color such as red. Alternatively a shaped letter made of plastic, metal or other suitable material may be cemented in place inside the frame. The coating 37 may be luminescent to glow of itself or it may be phosphorescent to glow when daylight and artificial light falls upon it. In any case the shaped letter inside the frame, is framed within parallel sides of spaced parts of wall 36 so that the letter is located in a recessed position within the channel shaped frame. When the pole is stationary, the recessed colored letter inside the frame can be seen only when viewed from a position substantially perpendicular to the plane of wall 35. When the pole is rotated at high speed exceeding approximately 50 to 200 revolutions per minute, the letters in the frames will appear to be stationary to an observer viewing the sign display from any position in an area 360° around the sign display. The appearance of the letters being stationary is of course an optical illusion and is due to the fact that the observer sees letter for only a small fraction of an instant during each revolution of the pole, and each letter repeats at least 1 to 4 times per second, so there is no flickering.

FIGS. 2-4 show frames 34' of a sign display 20a in which tubes 40 containing neon, argon or other fluorescent gas are mounted in the frames. Electric wires 42 are connected to ends of the tubes for conducting electric energy to the tubes. These wires will terminate at double slip ring contacts 44, 46 on pole 28a. Fixed contacts 48, 50 contact the rotating contacts 44, 46 and conduct electricity thereto from wires 52 which pass through holes in post 24a and from there to a suitable power supply. Wires 27 which energize motor 25a also pass through post 24a. The frames 34' and other parts of the sign display are otherwise arranged like those of sign display 20 and corresponding parts are identically numbered.

It will be apparent that the letters 37 outlined by the frames 34' will be visible by natural daylight by day when the tubes 40 may not be illuminated. By night the tubes 40 may be illuminated for best optical effects. As in sign display 20, the letters will appear to be stationary to the observer regardless of his position with respect to the sign display while the pole and framed letters rotate. The tubes 40 should be recessed sufficiently inside the frames so that there is no blurring of the optical image apparent to the observer. The sign displays 20 and 20a thus serve as 360° displays even though they are actually two-sided signs.

If desired motor 24 drives the pole and letters at one to four revolutions per second or approximately 50 to 200 revolutions per minute; each letter will then repeat to the observer's view eight times per second which will produce a flickering, stationary image. This will attract considerable attention and adds to the interest and attractiveness of the sign display. The higher the speed, the faster the flicker. The poles 28 and 28a can thus be directly coupled to the high speed motor 25 without use of any speed reduction gearing. Suitable switches (not shown) can be used to turn on and off the electric power supplied to the luminous tubes 40. The switches can be photoelectrically controlled to turn on automatically at dawn.

FIGS. 5 and 5A show a sign display assembly 20b in which the motor 25b is mounted on stationary base 22a

and rotates a vertical flat board 60. Secured to opposite sides of the board are plates 62a, 62b in which are grooves 63 defining letters of an advertising display. The inner surfaces 64 of the grooves are sufficiently recessed so that these surfaces which are in the shapes of alphabetical letters seem to be stationary when the board 60 rotates at high speed.

Sign display assembly 20c shown in FIGS. 6 and 6A has a flat pole 28b with tapered ends 65, 66. The upper end 65 is rotatably engaged in a horizontal arm 67 of a stationary bracket 68 secured to the side of a support 70 which may be the side of a building or the like. Motor 25c rotatably supports tapered end 66. The motor is fixed in a stationary position on fixed horizontal arm 72 of the bracket. Grooves 63a in the pole 28b define alphabetical letters of an advertising message. These letters are on inner surfaces 64a recessed like surfaces 64 of assembly 20b so that the sides of the grooves prevent the images of the letters from appearing blurred to the observer.

FIGS. 7 and 7A show a sign display assembly 20d in which rectangular plates 75a, 75b on opposite sides of the rotary pole 28d are individually secured by screws or bolts 31' to the pole. The individual plates are formed with grooves 63d outlining recessed letters 64d. When motor 25d on base 22d supporting the pole rotates the pole at high speed the letters outlined by the plates seem stationary.

FIG. 8 shows sign display assembly 20e arranged like assembly 20d and corresponding parts are identically numbered. The plates 75a' and 75b' are circular in assembly 20e.

FIG. 9 shows part of a sign display assembly 20f in which flat letter plates 80a, 80b in the forms of alphabetical letters are secured by screws or bolts 81 on opposite sides of rotary pole 28f in vertically spaced positions. Grating 82a, 82b are mounted respectively in front of the sets of letters. Each grating has a plurality of thin vertical slats 84 held by upper and lower horizontal plates 85, 86. Brackets 87 receive screws 88 which attach the gratings to the rotary pole. The planes of the vertical slats are perpendicular to the planes of the lettered plates 80a, 80b. Thus the letters are best seen only when the observer is directly in front of the letters while the letters are stationary. While the letters are rotating with pole 28f the vertical slats prevent blurring of the clear, stationary images of the letters.

FIG. 10 shows parts of a sign display assembly 20g in which alphabetical letters are outlined by colored areas 90 vertically spaced apart on flat boards 92a, 92b mounted at opposite sides of vertical rotary pole 28g. Gratings 82a and 82b will be mounted on the boards respectively in front of fluorescent tubes 94a, 94b secured to the boards in front of the colored lettered areas 90. The gratings will insure that the images of the letters appear stationary and not blurred when the display rotates. The tubes 94a, 94b are shaped to correspond with the shapes of the lettered areas.

FIG. 11 shows parts of sign display assembly 20h in which flat letter plates 95a, 95b are secured to opposite sides of rotary pole 28h. In front of the letter plates are fluorescent tubes 96 having shapes corresponding to those of the letter plates. Gratings 82a, 82b with vertical slats 84 are mounted on the pole 28h in front of the fluorescent tubes.

The letter plates 80a, 80b of assembly 20f are viewed by reflected light which may be natural daylight or artificial light projected on the letter plates. Letter plates 95a, 95b and lettered areas 90 are also viewed by reflected light during the daytime. At night the tubes 94a, 94b and 96 will be self illuminated by application of electric power thereto in the same manner as described in connection with sign display assembly 20a of FIGS. 2, 3, 4.

Sign display assembly 20i of FIG. 12 employs opaque plates or boards 98a, 98b mounted on rotary pole 28i. Translucent insert letters 99a, 99b are provided in the

plates. Illuminating lamps 100, 101 are mounted on the pole between the plates 98a, 98b so that the letters 99a, 99b are illuminated at night. By day the lamps 100, 101 can be turned off. Power is supplied to the lamps in the same manner as described in connection with tubes 40 of assembly 20a.

Slatted gratings 82a, 82b will be secured to the pole 28i in front of the translucent lettered areas 99a, 99b so that the letters appear to be stationary when the display rotates at high speed. Rotation of the poles 28f-28i is effected by motors mounted in any of the ways shown in FIGS. 1, 5, 6, 7.

Sign display assembly 20j of FIG. 13 is similar to that of assembly 20 of FIG. 1 and corresponding parts are identically numbered. The framed letters 37' are illuminated by electric bulbs 102 mounted in lamp fixtures 104 secured to a bracket 106. The bracket is fixed on stationary post 28' mounted on base 22'. Electric power to illuminate the lamps is provided via the same power cord 27' which supplies power to drive motor 25'. The lamps may be turned off by day by operating local switches 103. The motor rotates pole 28' at high speed so that the letters in frames 33a, 33b seem to be stationary.

Sign display 20k of sample modifications views FIGS. 14 and 15 has rotary pole 28k supporting two boards 110a, 110b on opposite sides thereof. A figure 112a such as a simulated unignited spark plug is applied to and supported by the board 110a. On board 110b is mounted a figure 112b simulating a spark plug being fired. When rotary pole 28k driven by motor 25k rotates at high speed the spark plug seems to fire periodically repeatedly as the sign display rotates on stationary post 24k. Slatted grates or frames 82a', 82b' are provided in front of the respective boards and figures and rotate with them. The deep slats 84 insure that the figures 112a, 112b seem to be stationary while the display is rotating at high speed.

Sign display 20m in sample modification views FIGS. 16 and 17 has a flat board 111 mounted on rotary pole 28m. The board has figure 113 simulating a can from which pours a stream of beer or other liquid 114 into the simulated figure of a mug 115. A wall 116 is provided as a frame around the periphery of the figure display board. On the opposite side of the pole 28m is another board 111' in which figure 113' simulates an empty can. Spaced below this board is another board 111'' simulating a mug 115' filled with beer or other foaming liquid 114'. A framing wall 116' is provided around board 111' and another framing wall 116'' is provided around board 111''. When the figures are rotated by motor 25m on stationary post 24m, the sign display repeatedly shows a mug being filled and completely filled. The framing walls 116, 116' and 116'' insure that the images appear to be stationary and prevent blurring of the images. The figures of display 20m can be illuminated internally or by external projection lamps as shown in display 28j. The figures of display 20k can be similarly externally illuminated.

FIGS. 18 and 19 show another form of display member 120 which can be used in a rotary sign display. This member has a flat plate 122 and integrally formed therewith is a depressed or recessed wall 124 in the shape of a letter offset from an opening 125 in plate 122 by framing walls 126, 127. Opening 125 has the same shape of an alphabetical letter as wall 124. The entire display member is an integral structure and may be punched or pressed out of sheet metal or may be integrally molded out of plastic, composition material, fiberboard or other suitable material. The letter-shaped wall 124 is recessed between inner and outer walls 126, 127 in a channel-shaped arrangement. The walls 126, 127 keep the image of the letter shaped wall 124 from being blurred when this member is mounted on a rotary pole in a display assembly such as shown in FIGS. 1 and 13.

In all forms of the invention described it will be noted that the letters, figures or sign symbols are either recessed

within framing walls or they are disposed behind vertical slatted gratings. In either case the effect is the same. When the sign display rotates at high speed the framing walls or slatted gratings prevent the images of the letters from blurring and they seem to be stationary to an observer regardless of his viewing position.

While I have illustrated and described the preferred embodiments of my invention, it is to be understood that I do not limit myself to the precise constructions herein disclosed and that various changes and modifications may be made within the scope of the invention as defined in the appended claims.

What is claimed is:

1. A sign display assembly, comprising a stationary base, a motor secured to said base, a vertical support rotatable on a vertical axis, said support being rotated by the motor at high speed, similar display members mounted on said support at opposite sides thereof, and frame means extending outwardly from the display members so that when said support is stationary the display members on each side of the support are visible only when viewed from a single viewing position in a direction substantially perpendicular to the display members and whereby the display members appear to be stationary when viewed from all viewing positions in an area entirely surrounding the support and display members when the support and display members are rotating at high speed.

2. A sign display assembly, comprising a stationary base, a motor secured to and supported on said base, a vertical pole rotatably carried by said motor and rotated thereby on a vertical axis at high speed, a first set of channel shaped display members in the form of certain alphabetical letters mounted at one side of said pole in vertically spaced array, a second set of channel shaped display members in the same form as said alphabetical letters identically mounted at the other side of said pole in another vertically spaced array, each of said display members having at least one peripheral wall surrounding the display member and standing outwardly thereof so that the interior of the display member is visible only when viewed from a single viewing position when the pole and display members are stationary, and whereby the letters defined by interior surfaces of the display members appear to be stationary when viewed from all viewing positions in an area entirely surrounding the pole and display members when the pole and display members are rotating at high speed.

3. A sign display assembly, comprising a stationary base, a motor secured to and supported on said base, a vertical pole rotatably carried by said motor and rotated thereby on a vertical axis at high speed, a first set of channel shaped display members in the form of certain alphabetical letters mounted on one side of said pole in vertically spaced array, a second set of channel shaped display members in the same form as said alphabetical letters mounted at the other side of said pole in another vertically spaced array, a luminous tube in the shape of an alphabetical letter mounted in each channel shaped display member, each of said display members having at least one peripheral wall surrounding the display member and the luminous tube therein, said wall standing outwardly of the tube and interior surface of the display member so that the interior of the display member and the tube therein are visible only when viewed from a single viewing position when the pole and display members are stationary, and whereby the letters defined by interior surfaces of the display members appear to be stationary when viewed from all viewing positions in an area entirely surrounding the pole and display members when the pole and display members are rotating at high speed.

4. A sign display assembly, comprising a stationary base, a motor secured to and supported on said base, a vertical flat board rotatably carried by said motor and ro-

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tated thereby on a vertical axis at high speed, a first set of plates mounted on one side of said board in a vertically spaced array, a second set of plates mounted on the opposite side of said board in another vertically spaced array, each of said plates having deep grooves outlining alphabetical letters so that the interior surface of each groove defining a letter is visible only when viewed from a single viewing position when the board and plates are stationary, and whereby the letters defined by the interior surfaces of the grooves appear to be stationary when viewed from all viewing positions in an area entirely surrounding said board and plates when the board and plates are rotating at high speed.

5. A sign display assembly comprising a stationary base, a motor secured to and supported on said base, a thick vertical support rotatably carried by said motor and rotated thereby on a vertical axis at high speed, said support having deep grooves on opposite sides thereof outlining alphabetical letters so that the interior surface defining a letter in each groove is visible only when viewed from a single viewing position when the support is stationary, and whereby the letters defined by the interior surfaces of the grooves appear to be stationary when viewed from all viewing positions in an area entirely surrounding said support when said support is rotating at high speed.

6. A sign display assembly, comprising a stationary base, a motor secured to and supported on said base, a vertical pole rotatably carried by said motor and rotated thereby on a vertical axis at high speed, a first set of plates mounted on one side of the pole in a vertical spaced array, a second set of plates on the other side of the pole in another vertical spaced array, said plates having deep grooves therein defining similar alphabetical letters at opposite sides of the pole, the interior surface of each groove defining a letter being visible only when viewed from a single viewing position when the support is stationary, and whereby the letters defined by the interior surfaces of the grooves appear to be stationary when viewed from all viewing positions in an area entirely surrounding said pole when the pole is rotating at high speed.

7. A sign display assembly according to claim 6, wherein each of said plates is rectangular in form.

8. A sign display assembly according to claim 6, wherein each of said plates is circular in form.

9. A sign display assembly, comprising a stationary base, a motor secured to said base, a vertical support rotatably carried by said motor and rotated thereby on a vertical axis at high speed, a first set of flat display members having the forms of alphabetical letters secured to one side of said support in a vertically spaced array, a second set of other flat display members having the same forms as those of the first set of flat members secured to the other side of said support in another vertically spaced array, and a pair of gratings mounted on said support and respectively disposed adjacent to the two sets of flat members, each of said gratings having vertical slats spaced apart and extending perpendicularly to said flat members so that the letters defined by said members are visible only when viewed from a single viewing position in a direction substantially perpendicular to the display members when said support is stationary, and whereby the display members appear to be stationary when viewed from all viewing positions in an area entirely surrounding said support when the display members and support are rotating at high speed.

10. A sign display assembly, comprising a stationary base, a motor secured to said base, a vertical support rotatably carried by said motor and rotated thereby on a vertical axis at high speed, flat boards mounted in vertical positions on opposite sides of said support, luminous tubes in the shapes of letters mounted on said boards in vertically spaced array, the tubes on one board being similar in shape to the tubes on the other board, areas of said boards adjacent to said tubes defining letters identical

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to those letters defined by the tubes, and a pair of gratings mounted on said support and respectively disposed adjacent to the tubes on the two boards, each of said gratings having vertical slats spaced apart and extending perpendicularly to the boards so that the letters defined by said tubes and said areas are visible only when viewed from a single viewing position in a direction substantially perpendicular to the boards when said support is stationary, and whereby the letters defined by the tubes and said areas appear to be stationary when viewed from all viewing positions in a field entirely surrounding said support when the boards and support are rotating at high speed.

11. A sign display assembly, comprising a stationary base, a motor secured to said base, a vertical support rotatably carried by said motor and rotated thereby on a vertical axis at high speed, a first set of flat display members having the forms of alphabetical letters secured to one side of said support in a vertically spaced array, a second set of other flat display members having the same forms as those of the first set of flat members secured to the other side of said support in another vertically spaced array, luminous tubes having shapes corresponding to the letters defined by said display members mounted adjacent to said members respectively, and a pair of gratings mounted on said support and respectively disposed adjacent to said tubes on opposite sides of said support, each of said gratings having vertical slats spaced apart and extending perpendicularly to said flat display members so that the letters defined by said display members and said tubes are visible only when viewed from a single viewing position when said support is stationary, and whereby the display members and tubes appear to be stationary when viewed from all viewing positions in an area entirely surrounding said support when the support, display members and tubes are rotating at high speed.

12. A sign display assembly, comprising a stationary base, a motor secured to said base, a vertical support rotatably carried by said motor and rotated thereby on a vertical axis at high speed, two flat opaque boards mounted in vertical, parallel positions on opposite sides of said support, translucent members in the form of alphabetical letters fitted in openings in the boards, illuminating lamps mounted on said support between the boards adjacent to said translucent members for illuminating the same, and a pair of gratings mounted on said support and respectively disposed adjacent to said boards, said gratings having spaced vertical slats disposed near the translucent members and extending perpendicularly to the boards so that the letters on each board are visible only when viewed from a single viewing position when said support is stationary, and whereby the letters appear to be stationary when viewed from all viewing positions in a field entirely surrounding said support when the support and boards are rotating at high speed.

13. A sign display assembly, comprising a stationary base, a motor secured to and supported on said base, a vertical pole rotatably carried by said motor and rotated thereby on a vertical axis at high speed, a first set of channel shaped display members in the form of certain alphabetical letters mounted at one side of said pole in vertically spaced array, a second set of channel shaped display members in the same form as said alphabetical letters mounted at the other side of said pole in another vertically spaced array, each of said display members having at least one peripheral wall surrounding the display member and standing outwardly thereof so that the interior of the display member is visible only when viewed from a single viewing position when the pole and display members are stationary, and whereby the letters defined by interior surfaces of the display members appear to be stationary when viewed from all viewing positions in an area entirely surrounding the pole and display members when the pole and display members are rotating at high speed, and a plurality of lamps mounted on said sta-

tionary base and arranged to illuminate said display members while said members rotate.

14. A sign display assembly, comprising a stationary base, a motor secured to said base, a vertical support rotatable on a vertical axis, said support being rotated by the motor at high speed, similar display members mounted on said support at opposite sides thereof, and frame means extending outwardly from the display members so that when said support is stationary the display members on each side of the support are visible only when viewed from a single viewing position in a direction substantially perpendicular to the display members and whereby the display members appear to be stationary when viewed from all viewing positions in an area entirely surrounding the support and display members when the support and display members are rotating at high speed, and a plurality of lamps mounted on said stationary base and arranged to illuminate said display members while said members rotate.

15. A sign display assembly, comprising a stationary base, a motor secured to said base, a vertical support rotatably carried by said motor and rotated thereby on a vertical axis at high speed, a pair of boards mounted on opposite sides of said support, figures on said boards respectively representing objects in different operating conditions, and frame means extending outwardly from said boards around said figures, so that the figures are visible only when viewed from a single viewing position when said support and boards are stationary, and whereby said figures appear to be stationary when viewed from all viewing positions in an area entirely surrounding said support when said support and boards are rotating at high speed.

16. A sign display assembly, comprising a stationary base, a motor secured to said base, a vertical support rotatably carried by said motor and rotated thereby on a vertical axis at high speed, a pair of boards mounted on

opposite sides of said support, figures on said boards respectively representing objects in different operating conditions, gratings secured to said boards, said gratings having spaced vertical slats extending outwardly perpendicular to the boards, so that the figures are visible only when viewed from a single viewing position when said support and boards are stationary, and whereby said figures appear to be stationary when viewed from all viewing positions in an area entirely surrounding said support when said support and boards are rotating at high speed.

17. A sign display assembly, comprising a stationary base, a motor secured to said base, a vertical support rotatably carried by said motor and rotated thereby on a vertical axis at high speed, a pair of boards mounted on opposite sides of said support, figures on said boards respectively representing objects in different operating conditions, frame members extending outwardly of said boards around the peripheries of said figures, so that the figures are visible only when viewed from a single viewing position when said support and boards are stationary, and whereby said figures appear to be stationary when viewed from all viewing positions in an area entirely surrounding said support when said support and boards are rotating at high speed.

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