June 14, 1960 E. RESSEL 2,940,198

FRAME STRUCTURES FOR CENTER POST MOUNTED ILLUMINATABLE SIGNS

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Fig. 1.

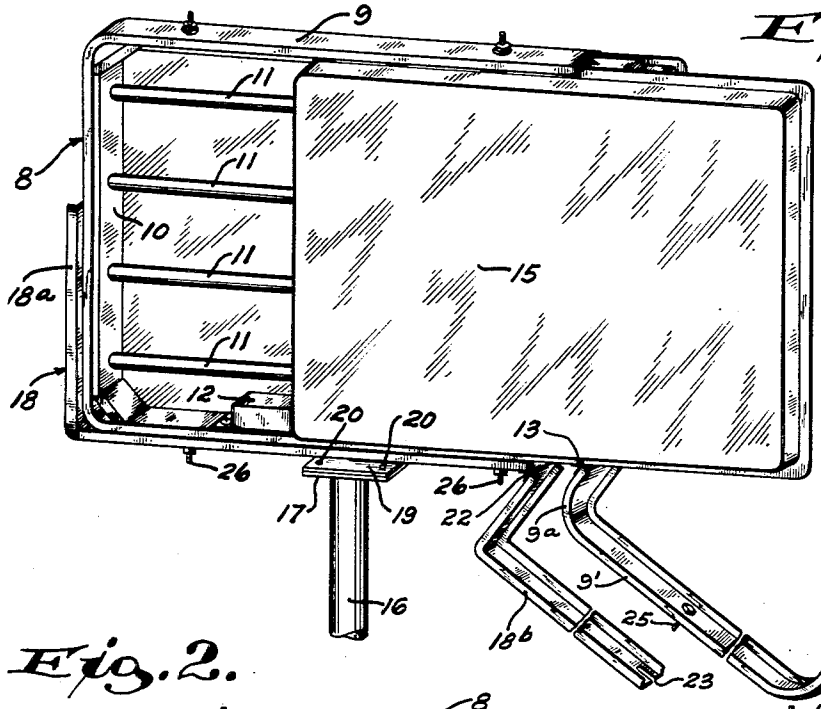
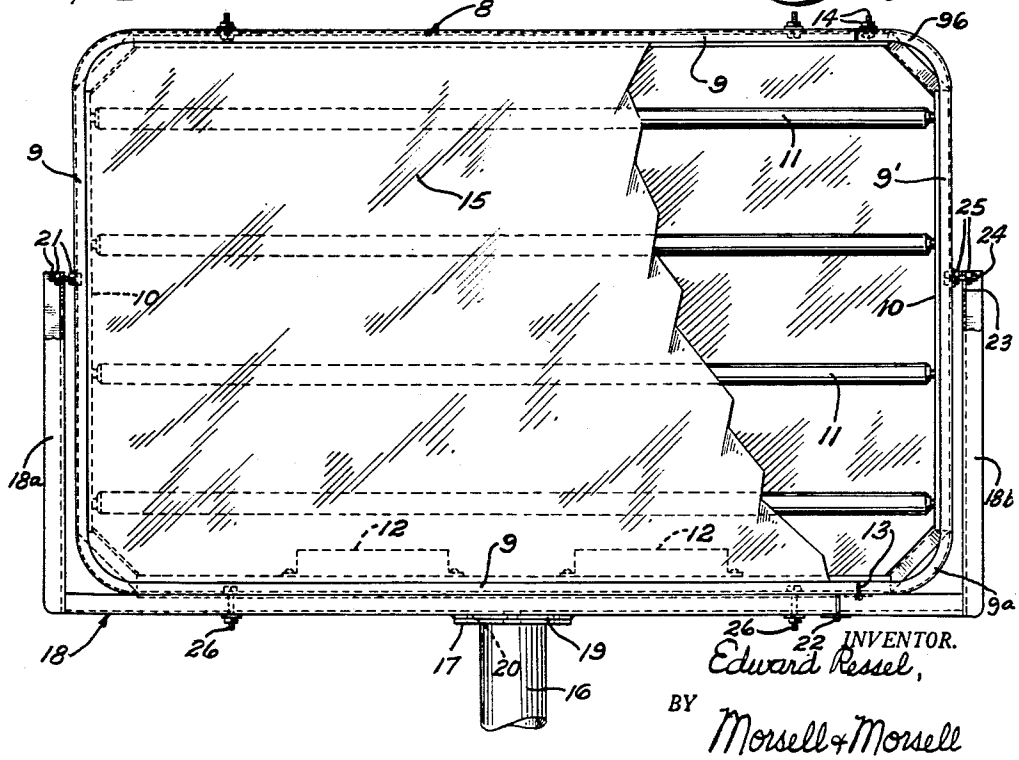


Fig. 2.



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Fig. 3.

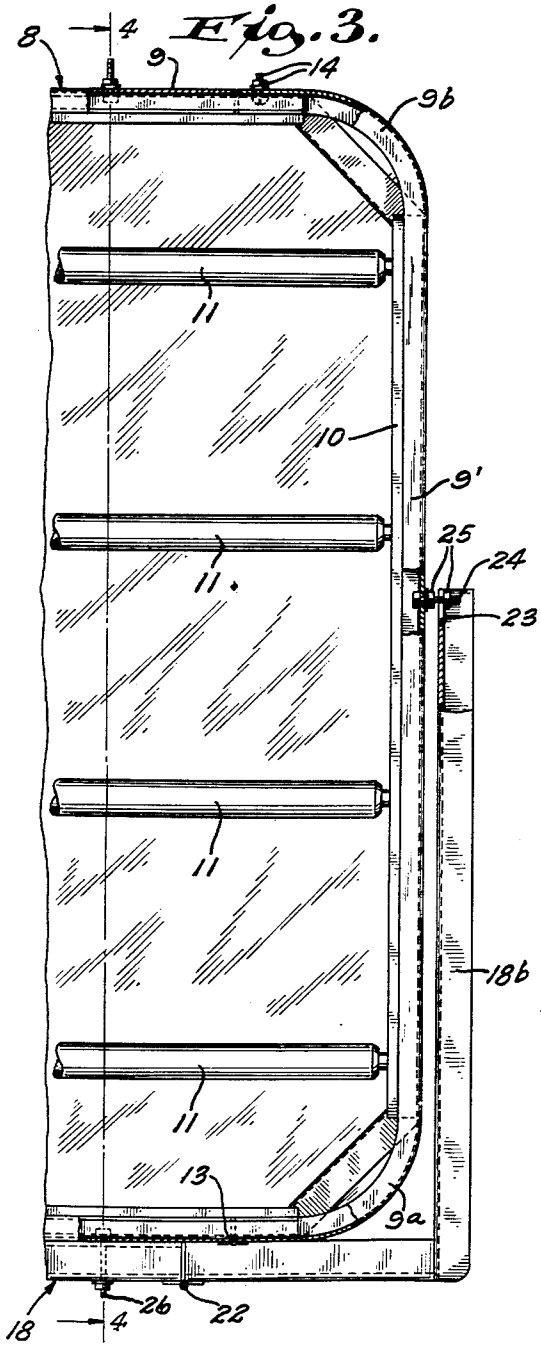
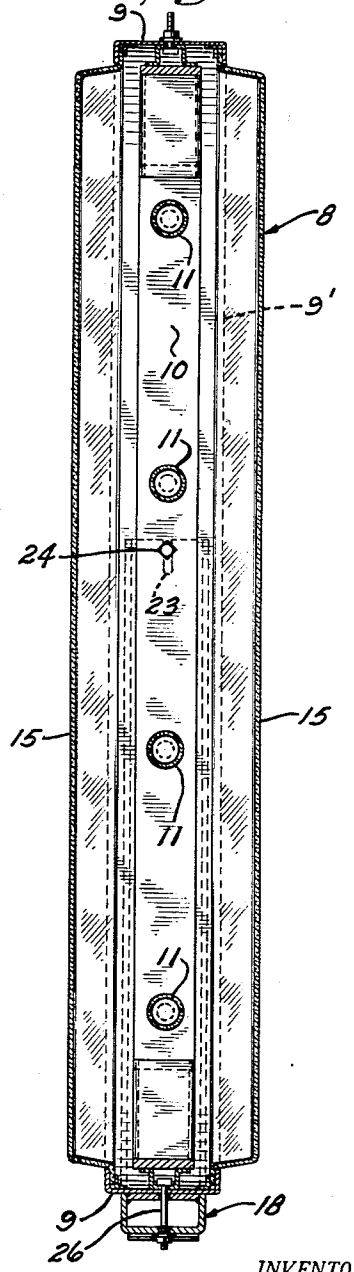


Fig. 4.



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FRAME STRUCTURES FOR CENTER POST MOUNTED ILLUMINATABLE SIGNS

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2 Claims. (Cl. 40—130)

This invention relates to improvements in frame structures for center post mounted illuminatable signs.

Electric display signs are customarily very bulky and relatively thick and include a wide frame member. Illuminatable display signs of this type are arranged for elevated mounting on a building, or on a center post. With respect to the conventional display signs having bulky wide frames, no problem is involved in the mounting of the same on center posts because the sign drum frame is of sufficient width to be formed with an opening to directly receive the upper end of the vertical supporting post. Recently, however, there have been developed illuminatable display signs of relatively narrow, compact formation wherein the drum frames of narrow structural steel elements are too narrow to receive the upper end portion of a supporting post should it be desired to mount such a display sign on a center post.

This problem was overcome, however, in the K. W. Richter Patent No. 2,791,851 of May 14, 1957, wherein the illuminatable display sign having a relatively narrow frame is carried between the upright arms of a stirrup which is centrally mounted on the vertical supporting post, thus providing a satisfactory center post mounting for a relatively narrow display sign frame.

With respect to illuminatable display signs, however, it is necessary that the same be susceptible of being serviced, and in particular, the frame carried translucent facings must be susceptible of displacement or removal to permit cleaning thereof and to give access to the interior of the sign frame for replacement of the lighting tubes, ballasts and other electrical appurtenances. The center post mounted sign disclosed in said Patent No. 2,791,851, because of the rigid connections between the ends of the frame and the stirrup, renders it difficult to disassemble any portions of the sign frame and displace or remove a facing so as to permit access to the interior of the frame for convenient servicing.

With the foregoing in mind it is, therefore, a primary object of the present invention to provide a frame structure for a center post mounted illuminatable sign wherein the sign frame is carried by the upright arms of a post mounted stirrup, but which is arranged so that end elements of the sign frame and the stirrup may be hingedly swung away from their normal positions to free the end portions of the sign facings and permit ready displacement thereof for access to the interior of the sign frame.

A further object of the invention is to provide a center post mounted illuminatable sign arranged so that the sign, in its mounted condition, may have a facing thereof readily manually displaced or removed to afford access to the interior of the sign frame, without any major disassembly operations or disturbing the sign mounting.

A further object of the invention is to provide a center post mounting for a narrow framed illuminatable display sign which is of unique and attractive appearance, and which in no manner interferes with the exposed surfaces or facings of the sign.

A further object of the invention is to provide a frame structure for a center post mounted illuminatable sign which is of very simple construction, which is relatively inexpensive, which is easy to assemble and mount, which provides ready access to the interior of the frame for servicing, and which is well adapted for the purposes described.

In the accompanying drawings in which the same reference characters indicate the same parts in all of the views:

Fig. 1 is a front perspective view of the improved center post mounted illuminatable sign frame structure with one end portion of the sign frame and supporting stirrup being hingedly swung to releasing poistions to permit sliding displacement of a facing of the sign for access to the interior thereof;

Fig. 2 is a front view of the center post mounted sign frame structure, on a larger scale, and with a portion of a facing broken away to show the interior of the frame and with portions of the frame supporting stirrup broken away and in section;

Fig. 3 is an enlarged fragmentary view of an end portion of the sign frame and supporting stirrup with a front facing removed and with portions of the frame and stirrup broken away and in section to show structural details; and

Fig. 4 is a vertical sectional view taken on line 4—4 of Fig. 3.

Referring now more particularly to the drawings, it will appear that a relatively thin frame illuminatable display sign is indicated generally by the numeral 8. The same includes an open rectangular frame of relatively heavy channel iron members 9 which are secured together to form a rectangular enclosure and which frame remains stationary and has secured within its end elements vertical supports 10 for mounting the end portions of conventional illuminating lamps or tubes 11. Also mounted on the lowermost horizontal element of the frame 9, within the outline thereof, are ballasts 12.

As will best be seen from Figs. 1, 2 and 3, one end of the rectangular frame composed of the channel iron members 9, as for instance, the right-hand end in the drawings, is susceptible of being opened. For that purpose the right-hand channel iron member of the frame, designated 9' has curved end extents 9*a* and 9*b*, proportioned, together with the intermediate portion of the member 9' therebetween, so that when said element 9' is in its frame closing position as shown in Figs. 2 and 3, the curved portion 9*a* will extend around the lower right-hand corner of the frame (relative to the drawings), with the major extent of the element 9' traversing the right-hand end of the frame. The portion 9*b* then extends around the upper right-hand corner of the frame. The free end of the portion 9*a* of the element 9' is hinged to the adjacent end of the bottom frame element 9, as at 13. The free end portion of the curved extent 9*b* of the swingable frame element 9' has an aperture therein to register with an aperture in an underlapping flange on the adjacent end of the top element 9 to which it is removably secured by bolt and nut means 14.

The open rectangular frame formed of the members 9 and 9' is adapted to carry on one or both of its faces a transluscent facing sheet 15 which displays lettering or advertising indicia made visible through the illumination of the lamps or tubes 11 within the sign frame. As is shown best in Fig. 4, the peripheral portions of the facing sheets 15 are flanged inwardly and outwardly so as to slidably engage within the channeled portions of the frame elements 9 and 9'. When the end frame element 9' is released by removing the bolt and nut securing means 14 and swung outwardly downwardly on its hinge 13 to the position of Fig. 1, the end of the sign frame will be opened and one or both of the facing

sheets 15 may be longitudinally slid from the normal position of Fig. 2 to a partially open position as in Fig. 1, or to a completely removed position to give access to the interior of the sign frame for servicing the electrical elements including the tubes and ballasts, and for cleaning the surfaces of the sign facings.

The improved thin frame illuminatable display sign is primarily adapted for mounting on a vertical post 16 which may have its lower end imbedded in the ground or other base material (not shown). The upper end of said post 16 has welded or otherwise affixed thereto a plate 17. A U-shaped frame supporting bracket or stirrup is indicated generally by the numeral 18 and the lower surface of the same, intermediate its sides, has welded or otherwise secured thereto a complementary plate 19 adapted to seat on the post carried plate 17 and to be secured thereto by bolts 20.

The spread between the vertical side arms of the U-shaped bracket or stirrup 18 is slightly greater than the length of the sign frame to be received therebetween, in the manner shown in Figs. 1 and 2. One of the vertical arms of the stirrup 18, as the arm 18*a*, has its upper end portion terminating midway between the upper and lower margins of the sign frame and it is removably secured to the frame element 9 by bolt and nut means 21. The other vertical side arm 18*b* of the stirrup 18 has an angular lower end portion to extend around the element 9*a* of the frame member 9′ and is hinged to the adjacent end of the bottom member of the stirrup 18, as at 22. The free end of the vertical extent of the stirrup arm 18*b* terminates midway between the upper and lower margins of the frame element 9′ and is provided with a vertical U-shaped slot 23 therein which, when the stirrup arm 18*b* is in its normal upright position, engages the shank portion of a bolt 24 rockingly carried by and projecting outwardly from an intermediate portion of the frame element 9′. Securement of the hinged stirrup arm 18*b* to the frame element 9′ is accomplished by engaging the bolt 24 in the U-shaped slot 23 and tightening the nuts 25 carried by the bolt 24. It will be evident, however, that when the bolt 24 is disengaged from the slot 23, the stirrup arm 18*b* may be swung from its normal position to the open position shown in Fig. 1 which thereby permits downward swinging of the sign frame element 9′, when it is released, to permit displacement or withdrawal of the sign facing 15.

The post and stirrup arrangement provides a very efficient form of mounting for a narrow frame illuminatable sign. The sign frame is, of course, securely bolted to the bottom element of the stirrup 18 by the bolts 26 and there is additional securement between the frame element 9 and the stirrup arm 18*a*, and normally between the frame element 9′ and the stirrup arm 18*b*. The securing members do permit, when necessary for replacement, the ready detachment of the entire sign 3 from the post and stirrup mounting.

The particular improvement in the present construction resides in the hinged arrangement of the frame element 9′ and the stirrup arm 18*b* so that when servicing of the interior of the sign frame is required, through a simple manipulation, the members 18*b* and 9′ may be released and swung downwardly to the position of Fig. 1 whereupon one or both of the facings 15 may be displaced for easy and complete access to the interior of the sign frame.

The generally rectangular sign frame illustrated is merely one form of sign, and within the contemplation of the present invention, the sign to be carried by the improved centerpost mounting may be of any suitable geometrical shape.

The improved frame structure for a center post mounted illuminatable sign is neat and attractive in appearance and permits the frame to be mounted in a manner so that the sign facings are in no manner covered or interfered with, and for servicing operations only a simple manual operation is required to hingedly displace the stirrup arm 18*b* and the frame element 9′ to permit sliding movement of a facing for access to the interior of the sign frame.

The frame structure, besides being simple and affording great accessibility, is well adapted for the purposes set forth.

What is claimed as the invention is:

1. An illuminatable display sign assemblage comprising an upright supporting post, a first L-shaped stirrup element including an upright arm portion and a right angularly-directed base arm portion, the latter portion being secured to the upper end portion of the post, a complementary second L-shaped stirrup element including a base arm portion and an upright arm portion, an end portion of the base arm portion of said second L-shaped stirrup element being hingedly connected to the adjacent end portion of the base arm portion of the first stirrup element to form a continuation of the base arm portion thereof and to normally project the upright arm portion of the complementary second stirrup element into parallelism with the upright arm portion of the first stirrup element, said complementary second stirrup element being swingable outwardly downwardly, a rectangular display sign frame formed of a plurality of elongated elements including a U-shaped element forming one end of the frame and portions of two adjacent sides thereof, an end of said U-shaped element being hingedly connected to an adjacent end portion of a side of the frame and being overlapped by portions of the hinged, second L-shaped element of the stirrup, other portions of the stirrup overlapping other portions of the frame, the hinged, L-shaped, second element of the stirrup being displaceable to permit displacement of the U-shaped element of the display sign frame to open a peripheral portion of the frame, and a facing sheet mounted within the frame to normally close one face thereof, but shiftable in the plane of the frame through the opening therein when said U-shaped frame element is displaced and the hinged L-shaped, second stirrup element is swung outwardly in an arc away from the frame.

2. A display sign frame comprising, a first L-shaped stirrup element including an end arm portion and a right angularly-directed base arm portion, a complementary second L-shaped stirrup element including a base arm portion and an end arm portion, an end portion of the base arm portion of said second L-shaped stirrup element being hingedly connected to the adjacent end portion of the base arm portion of the first stirrup element to form a continuation of the base arm portion thereof and to normally project the end arm portion of the complementary second stirrup element into parallelism with the end arm portion of the first stirrup element, said complementary second stirrup element being swingable outwardly, and a rectangular display sign frame formed of a plurality of elongated elements including a U-shaped element forming one end of the frame and portions of two adjacent sides thereof, an end of said U-shaped element being hingedly connected to an adjacent end portion of a side of the frame and being overlapped by portions of the hinged, second L-shaped element of the stirrup, other portions of the stirrup overlapping other portions of the frame, the hinged, L-shaped, second element of the stirrup being displaceable to permit displacement of the U-shaped element of the display sign frame to open a peripheral portion of the frame.

References Cited in the file of this patent

UNITED STATES PATENTS

218,882	Hopkins	Aug. 26, 1879
1,419,598	Zelazo	June 13, 1922
1,650,177	Arnold	Nov. 22, 1927
2,626,473	Howenstine	Jan. 27, 1953
2,791,851	Richter	May 14, 1957