June 27, 1939. R. G. McCONNELL 2,163,695

HOUSE NUMBER SIGN

Filed Oct. 6, 1938 2 Sheets-Sheet 1

Fig. 3

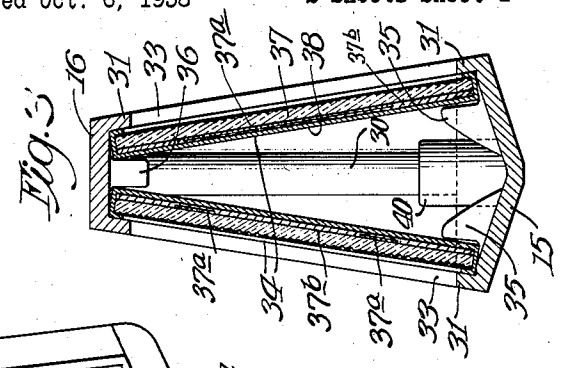



Fig. 2

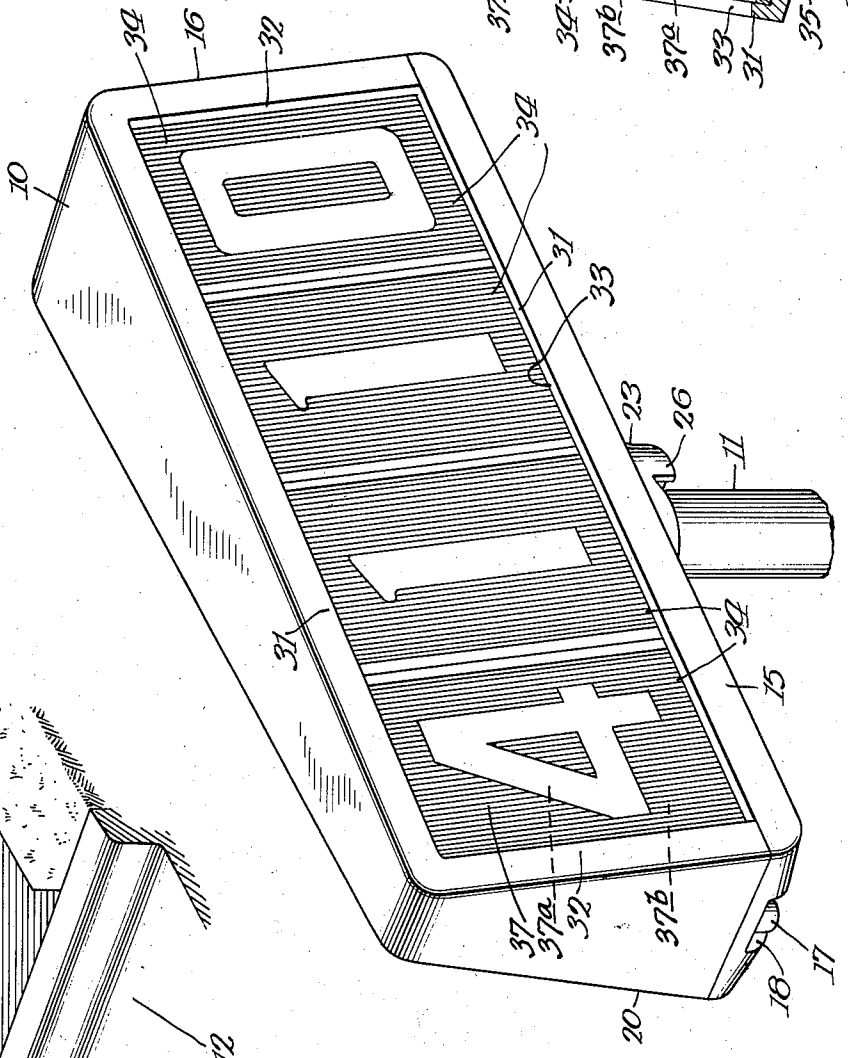
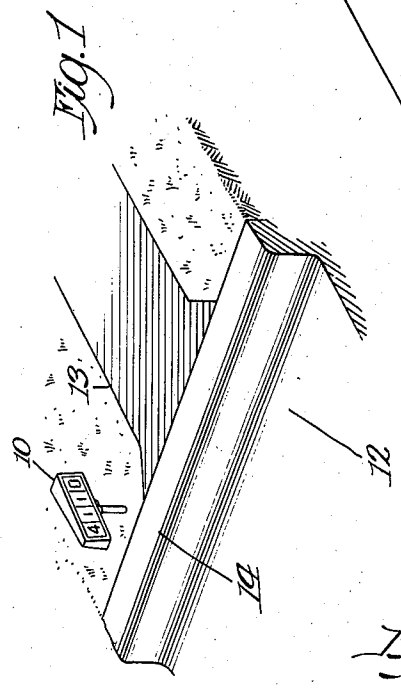



Fig. 1




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HOUSE NUMBER SIGN

Filed Oct. 6, 1938 2 Sheets-Sheet 2

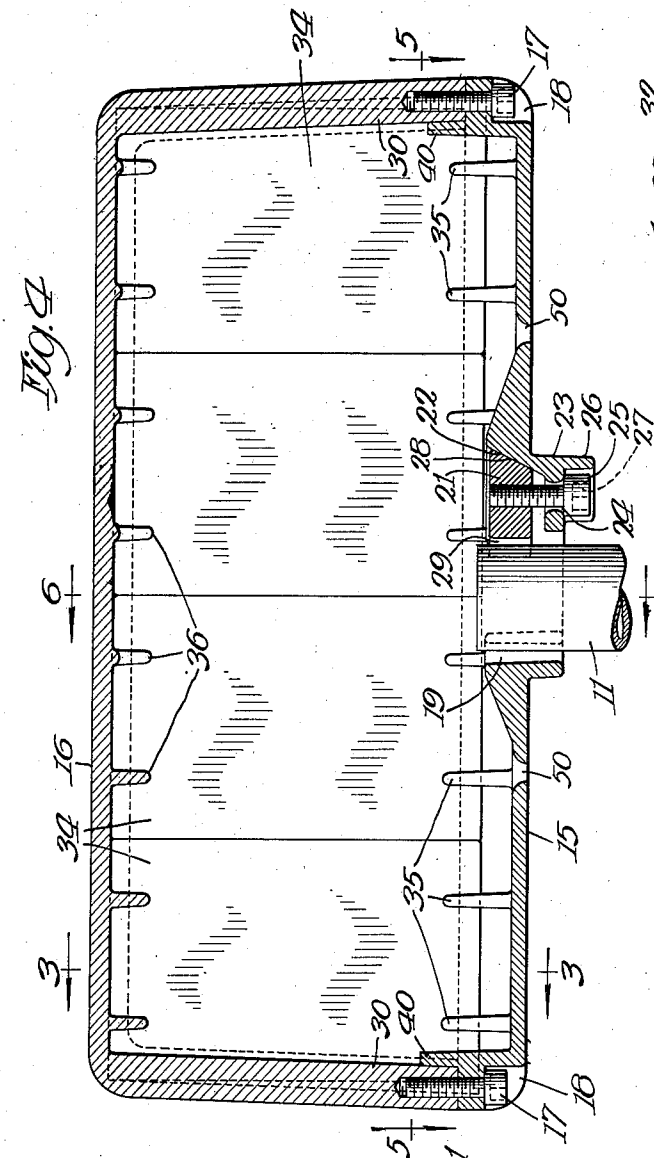


Fig. 4

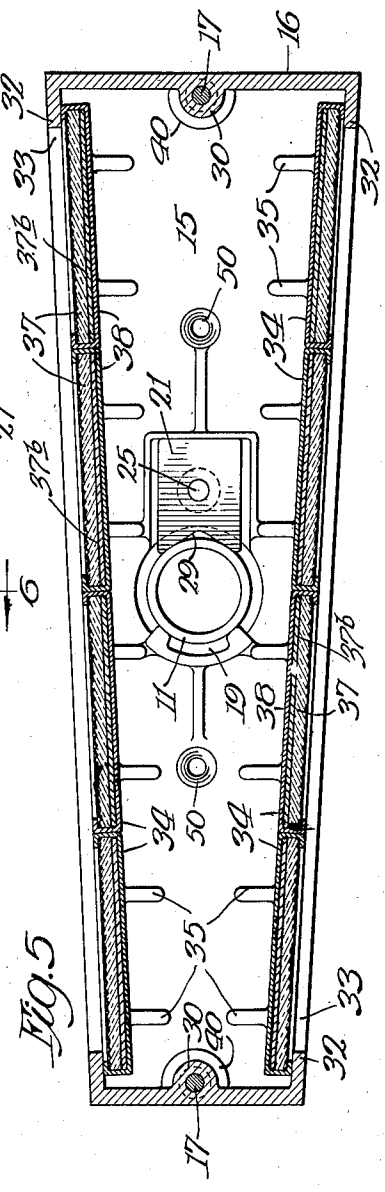


Fig. 5

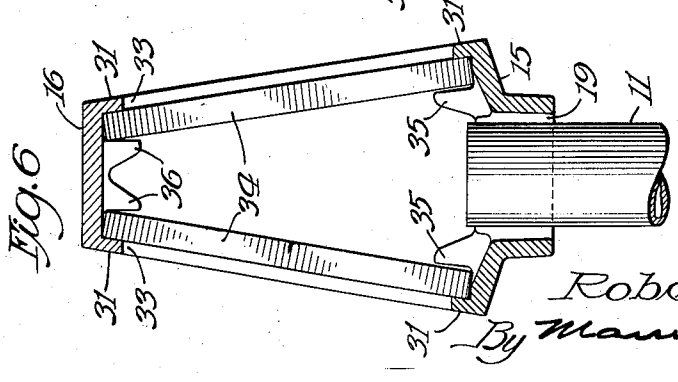


Fig. 6

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Patented June 27, 1939 2,163,695

# UNITED STATES PATENT OFFICE

2,163,695

## HOUSE NUMBER SIGN

Robert G. McConnell, Springfield, Ill., assignor of one-third to William D. McConnell and one-third to Fred W. Neuner, both of Springfield, Ill.

Application October 6, 1938, Serial No. 233,559

10 Claims. (Cl. 40—140)

This invention relates to display boards or signs, and more particularly to a casing or signboard for displaying house numbers.

One of the objects of the invention is the provision of a new and improved reflector sign for indicating house numbers, and adapted to be located adjacent to the curb in front of a house.

Another object of the invention is the provision of a new and improved sign having reflector units arranged in a novel manner so that the driver of a vehicle may readily read a house number when driving in either direction past the sign.

A still further object of the invention is the provision of a new and improved house number sign casing having novel means for securing the casing in operative position in front of a dwelling, office, store, or other building.

A further object of the invention is the provision of a new and improved sign board or reflector sign casing that is inexpensive to manufacture, easily installed, efficient in operation, and one in which the numbers may be readily changed when desired.

Other and further objects and advantages of the invention will appear from the following description, taken in connection with the accompanying drawings, in which

Fig. 1 is a perspective view of a portion of a street and private walk leading thereto, and showing the invention in position relatively thereto;

Fig. 2 is a perspective view of the device shown on an enlarged scale, and with parts broken away;

Fig. 3 is a section on the line 3—3 of Fig. 4;

Fig. 4 is a longitudinal section of the house number sign device;

Fig. 5 is a section on the line 5—5 of Fig. 4; and

Fig. 6 is a section on the line 6—6 of Fig. 4.

It is often difficult for any one to locate the house or street number of a house or residence, due to the fact that there is no uniformity in the position or location of these numbers. At some residences the numbers are on the door, some above or below the door, some on the steps or on the curb in front of the house, and still others may be located on trees in the yard in front of the house or on a column or gate post in front of the house. This makes it extremely difficult for any one driving an automobile along the street to find the desired number, even in the daytime, and becomes extremely difficult, if not impossible in many instances, if it is attempted at night.

The present invention seeks to remedy these difficulties by providing a residence number sign that is adapted to be located adjacent to the curb in front of the dwelling, and be so constructed that the numbers will be plainly visible to a driver or occupant of a car driving along the street past the sign, during the night time as well as during the day.

Referring now to the drawings, the reference character 10 designates the reflecting house number sign which is adapted to be mounted on a post 11, secured in the ground adjacent to the junction of the street 12 and the front walk 13 of a dwelling. The street 12 is provided with the usual curb 14, and the sign 10 is arranged with its longitudinal axis transversely to the curb 14, as shown in Fig. 1.

The sign or sign device comprises a sectional frame 20, having a bottom plate, lower member, lower section, or base 15, to which is adapted to be detachably connected an upper section or member having depending arms forming an inverted U-shaped frame member 16, as by means of screws or bolts 17, or the like, extending through the ends of the plate 15 and tapped into the lower ends of the depending arms of the upper member. In order to prevent unauthorized removal of the U-frame 16 from the plate 15, the plate member is provided with recesses 18 for receiving the heads of the screws or bolts 17, and the bolts are provided with Allen or socket heads whereby a tool for engaging in the socket is required for removing the bolts.

In order to properly position the frame member 16 on the plate 15 (Figs. 4 and 5) the latter has at each end thereof an upwardly extending curved flange 40, forming a vertically extending groove or recess for receiving a vertically extending bead or rib 30 on the depending arms of the frame member 16.

The plate 15 is provided with a central opening 19, for detachably receiving the upper end of the supporting post 11. Suitable means are provided for rigidly attaching the plate to the standard. In the form of construction selected to illustrate one embodiment of the invention, a wedge-block 21 is employed for this purpose. At one side of the opening 19 the plate is provided with a wedging or inclined surface 22, and with a depending portion 23, which is provided with an opening 24 for receiving a bolt or screw 25. The bolt 25 is threaded into the block 21, and when tightened pulls the wedge-block 21 downward for clamping the post 11 against the opposite wall of the opening 19 for locking the casing

20 to said post. The projection 23 is preferably, though not necessarily, provided with a depending flange 26, which extends about the head of the screw so that access may be had to the head thereof only with a special tool for engaging in an angular recess 27 in the head of the bolt or screw 25. This arrangement will prevent unauthorized removal of the set-screw and the entire sign device from the post 11.

The wedge-block 21 is provided on one end with an inclined surface 28, corresponding to the inclined surface 22 on the plate 15, with which it is adapted to engage. The inner end of the clamping block 21 is provided with a recess 29, which is adapted to be forced into clamping engagement with the supporting post 11. When it is desired to attach the sign device to the post 11 the screw 25 is released to permit the release of the wedge-block 21, and after the post is inserted in the opening 19 the screw 25 is turned an inclined surface 28, corresponding to the inclined surface 22 and clamp the post 11 for locking the sign device in position on the post.

Suitable means are provided for mounting reflecting insignia or sign units within the frame of the sign device. In the form of construction shown, the bottom plate 15 and the inverted U-shaped frame member 16 are provided with flanges 31, 32 respectively, which extend in common planes at each side of the device and define openings 33 (Figs. 2 and 3) through which the reflecting sign units 34 may be seen. These flanges prevent the outward movement of the reflecting units.

The plate 15 is provided with a plurality of projections 35 at each side edge thereof for engaging the rear face of the reflecting units 34 for holding the lower edge of same from moving inwardly. Likewise the upper horizontal portion of the inverted U-shaped frame member 16 is provided with a plurality of projections 36 (see Figs. 3 and 4), which are adapted to engage the upper edges of the reflecting units 34 for holding the units in position within the frame.

The projections 35, 36, are longer than the width of the flanges 31, 33, so that by partially releasing the bolts 17 and raising the frame member sufficiently to permit the upper portion of the flange 31 to clear the units, but not far enough to clear the projections, the intermediate units may be easily removed and the end units may then be removed by first sliding them laterally from behind the flange 33 extending downwardly across the end of the frame 20, after which it may be removed.

In the construction illustrated four reflecting numerals are shown, but it is understood that by increasing or reducing the length of the frame any number of units may be employed. By the use of blank units in a frame any number may be represented within the capacity of the frame. For instance, if the capacity of the frame is four units, a number with two digits could be represented by using a blank unit at each side of the number units.

Each of the units 34 has a single character thereon, and each is of the reflecting type now on the market. These units as now constructed each comprises a glass plate 37, having its rear face silvered as at 37*a* to outline the number or character to be reflected and the whole back surface covered with paint or other opaque substance as at 37*b*. In order that the units may be changed to correspond with any particular house number, each unit is mounted separately in a metal frame 38, so that the same may be removed from the casing or sign device 10 and be replaced by another unit when desired. The front face of the glass is provided with innumerable small hemispherical projections for diffusing the light, as is usual in such constructions. Since other commercial types may be used, and since the details of the reflecting units constitute no part of the present invention, it is not thought necessary to further illustrate or describe the same.

In order that the rays from an automobile headlight, or other vehicle in the street, falling on the units 34, shall be reflected to the eyes of the driver or occupant of the vehicle, the units on each side are so arranged that the planes of these units converge toward the curb and also converge upwardly. This is accomplished by making the front end of the frame 20, or the end adjacent to the curb, narrower than its rear end, and making the upper wall of the casing 20 narrower than the lower. In other words, the frame for the sign device has its sides tapering both forwardly or toward the street (Fig. 5) and upwardly, as shown in Fig. 3. By inclining the reflecting units both upwardly and forwardly light falling on the units will be reflected upwardly and outwardly toward the street, whereby the house numbers may be easily seen by the driver of a car passing along the street.

When the reflecting units are all in place on the frame 20, a hollow casing, closed on all sides, including the top and bottom, is formed. If desired, suitable openings 50 may be provided in the base plate 15 for draining water that may collect in the casing.

It is thought from the foregoing, taken in connection with the accompanying drawings, that the construction and operation of my device will be apparent to those skilled in the art, and that changes in size, shape, proportion and details of construction may be made without departing from the spirit and scope of the appended claims.

I claim as my invention:

1. In a house number sign, a casing in the form of a box-like member, means for supporting said casing adjacent to a highway and slightly above the plane of said highway, said casing having its longitudinal axis normal to said highway and having two sides provided with reflecting surfaces outlining house identifying characters, the character bearing sides converging upwardly and toward the street whereby rays from the headlights of an automobile on said highway approaching said sign from either direction will be reflected from said surfaces to the eyes of the driver of said car.

2. In a sign, a casing comprising a boxlike structure having its sides made up of a plurality of rectangular reflecting units, each outlining a sign character, said sides converging forwardly and upwardly, and means for supporting said casing above, but adjacent to, the ground, whereby said characters will be reflected by light from a vehicle to indicate the house number of the premises.

3. In a house number sign, a frame tapering toward its top and toward one end, a plurality of reflecting units each having a numeral digit thereon, and means for securing said units on opposite sides of said frame.

4. In a house number sign, a frame, a standard for supporting the same adjacent to a street curb with its longitudinal axis transversely thereto, a plurality of reflecting units mounted in said

frame at opposite sides thereof, each unit having a character thereon, the units at the sides being in planes that converge upwardly and toward said curb, and means for supporting said frame above, but adjacent to, the horizontal plane of said curb.

5. In a house number reflecting sign, a frame, a plurality of reflecting number-bearing units mounted on opposite sides of said frame and forming the side walls thereof, a curb, and means for supporting said frame above the level of but adjacent to said curb with the planes of said units arranged at acute angles to said curb in both horizontal and vertical planes.

6. A frame for supporting reflecting units for a house sign comprising a base member, an upper member having depending arms supported on said base member, means for detachably connecting said members together, said members having flanges defining an opening, numeral bearing reflecting units mounted in said opening and seated against said flanges, and means on said members engaging the backs of said units for holding said units against said flanges.

7. In a house number reflecting sign, a base member having a vertical opening therethrough for receiving a supporting post, said opening having an extension provided with an inclined wall, a clamping block having an inclined surface engaging said wall, and means for moving said block along said wall for clamping said post.

8. In a house number reflecting sign, a base member having a vertical opening therethrough for receiving a supporting post, said opening having an extension provided with an inclined wall, a clamping block having an inclined surface engaging said wall, a projection on said base member having a vertical opening therein, a bolt extending through said opening and threaded into said block for moving said block along said inclined wall, said bolt having a socketed head, and a shield surrounding said head for preventing unauthorized loosening of said bolt.

9. A frame for supporting reflecting units for a house sign comprising a base member, an upper member having depending arms supported on said base member, means for detachably connecting said members together, said members having flanges defining an opening, numeral bearing reflecting units mounted in said opening and seated against said flanges, bolts extending through said base member and threaded into said arms for holding said members together, and projections on said members engaging the backs of said units for retaining the units against said flanges, said projections being longer than the widths of said flanges whereby upon the loosening of said bolts said members may be separated sufficiently for removing or replacing said units.

10. A house reflecting sign, comprising a structure having two sides converging upwardly and toward one end of said structure, means for supporting said structure adjacent to a street and just above the horizontal plane thereof, said sides converging toward said street and having transparent portions provided with reflecting surfaces on the back thereof outlining house identifying characters whereby rays from a headlight of an automobile on the street approaching said sign from either direction will be reflected from said surfaces to the eyes of the driver of said automobile.

ROBT. G. McCONNELL.