March 31, 1936. A. LINDSTROM 2,035,659

SIGN BOX

Filed May 15, 1935

Fig. 1

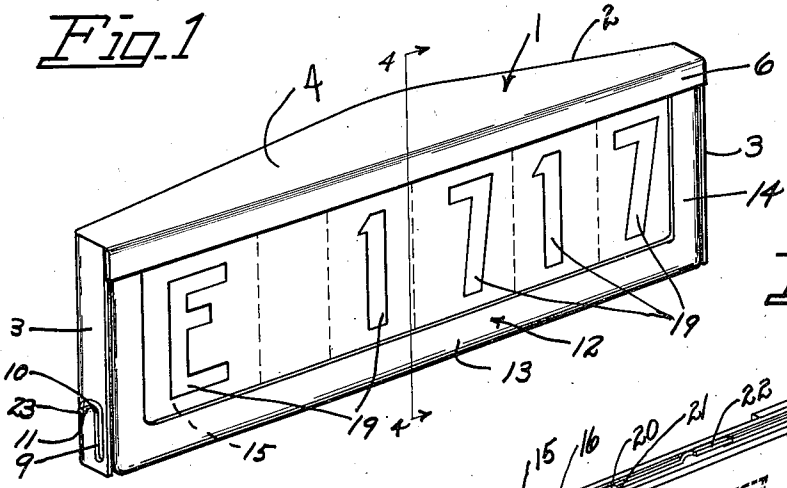



Fig. 2

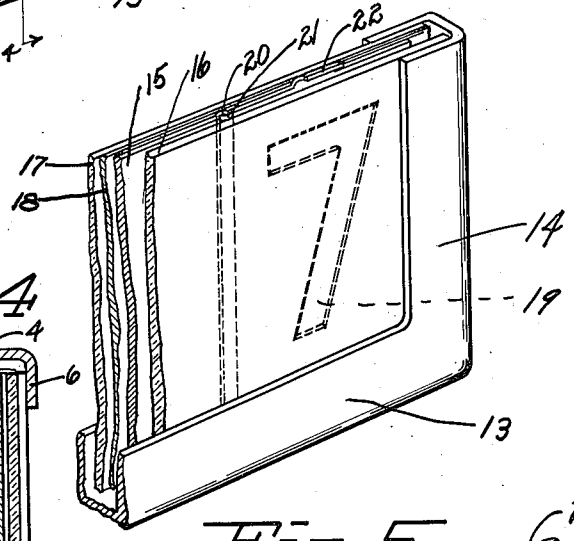



Fig. 3

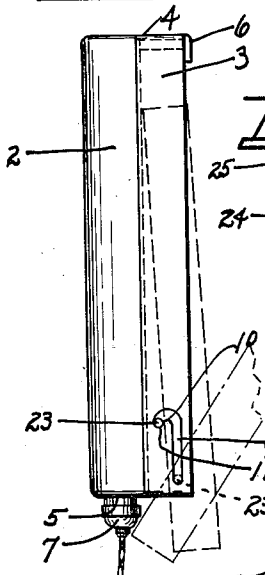



Fig. 4

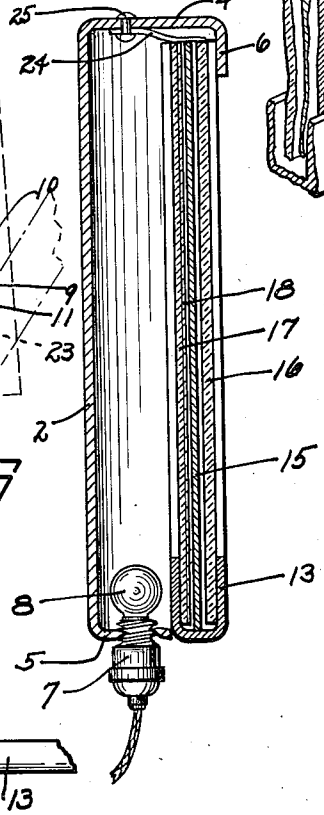



Fig. 5

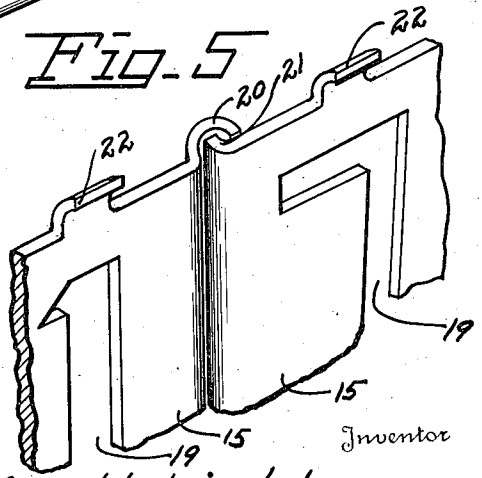
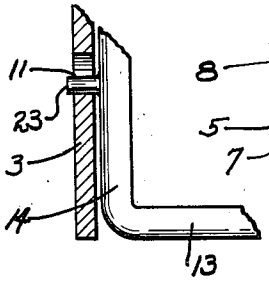



Fig. 6




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2,035,659

# UNITED STATES PATENT OFFICE

2,035,659

## SIGN BOX

Arnold Lindstrom, Spokane, Wash.

Application May 15, 1935, Serial No. 21,557

3 Claims. (Cl. 40—132)

This invention relates to display devices, and more particularly to a sign or number box which is compact in construction and may be used as a license display device for automobiles or as a number box for a house, it being also adapted as a general purpose sign.

One object of the invention is to so construct the device that while it will serve very effectively as an illuminated sign it will also be very effective when not illuminated and thus permit it to be serviceable during the day as well as at night.

Another object of the invention is to provide a sign of such construction that plates having character defining openings formed therein may be easily inserted or removed but prevented from slipping out of place, thereby providing a sign having changeable letters or numbers which can be removed whenever replacement or cleaning is necessary.

Another object of the invention is to provide the sign with a casing having a display frame associated therewith which will normally remain in closing relation to the open front of the casing but can be easily moved outwardly to an extended position when removal of character carrying plates from the frame is desired.

Another object of the invention is to provide a sign formed principally of stamped sheet metal and thus capable of being cheaply manufactured and sold at a reasonable price.

The invention is illustrated in the accompanying drawing, wherein

Figure 1 is a perspective view of the improved sign.

Figure 2 is a perspective view of an end portion of a frame forming part of the sign.

Figure 3 is an end elevation of the sign, the dotted lines indicating the manner in which the frame is released and swung outwardly from the casing.

Figure 4 is a section taken vertically through the sign along the line 4—4 of Figure 1.

Figure 5 is a perspective view of a pair of plates forming part of the sign.

Figure 6 is a fragmentary view illustrating the manner in which the frame is supported in position to close the front of the casing.

This improved sign or number box, as it may be termed, has a casing 1 which is formed of sheet metal and may be of any dimensions desired according to the use to which it is to be put. The rear wall 2 of the casing is bent intermediate its ends to provide depth for the casing and at its ends the rear wall terminates in end walls 3 which project forwardly therefrom. The upper and lower walls 4 and 5 extend from upper and lower ends of the rear wall between the end walls but the upper wall projects forwardly to the front edges of the end walls and terminates in a depending flange 6 whereas the lower wall is of less depth than the upper wall and terminates in spaced relation to front edges of the end walls, as shown in Figure 4. The reason for the difference in depth of the upper and lower walls will be hereinafter brought out. An opening is formed in the lower wall or bottom of the casing midway the width thereof to receive a socket 7 carrying an electric bulb 8 and the end walls have their lower portions each formed with a slot or track 9 extending vertically therein forwardly of the lower wall and at its upper end formed with a rearwardly extending portion 10 which is curved as shown in Figure 3 so that its rear end forms a depending seat 11. The seats 11 are disposed over the bottom wall.

A frame 12 which closes the open front of the casing when in place, fits into the casing between the end walls with its lower bar resting upon the bottom wall 5 and its upper portion overlapped by the depending flange 6. This frame is formed from a strip of channel metal which is bent to form a lower bar 13 and end bars 14, but no upper bar and, therefore, plates 15 and transparent sheets 16 and 17 may be slid into the frame through the open upper end thereof and held in the frame by the inner and outer flanges of the frame. The sheets 16 and 17 are formed of glass or other light penetrable material, the outer sheet being clear and the inner sheet having its outer or front surface coated with a white translucent material, as shown at 18, to serve as a background for numbers or letters or equivalent characters defined by openings 19 formed in the plates 15. The plates 15 are formed of sheet metal and are of a height corresponding to the sheets 16 and 17. One side edge of each plate is bent to form a rearwardly extending arcuate flange or channel 20 which extends the full height of the plate and at its other side each plate is bent to form a rearwardly extending flange 21 which fits into the channel of an adjoining plate and thus interlocks the plates and prevents light from escaping between the plates. Therefore, light can only pass outwardly through the openings 19 and the letters or numbers defined by these openings will be clearly displayed when the bulb is lighted. Tongues 22 project upwardly from the plates and provide means for withdrawing them from the

frame when change of plates is necessary. As the white coating of the rear or inner sheet 16 is back of the plates and shows through the openings, the letters and numbers will show clearly during the day when the light is shut off and an automobile license number or a house number can be easily seen during the day as well as at night when the sign is illuminated. When the bulb is lighted the coating 15 causes the light to be diffused and all of the numbers and letters clearly displayed.

The frame is to be mounted for movement into and out of closing relation to the open front of the casing and in order to do so there has been provided a pin 23 at each end of the frame. These pins project from the end bars 14 in spaced relation to lower ends thereof and are engaged in the slots 9 to slidably and tiltably mount the frame. When the frame is in its normal closing relation to the open front of the casing, the pins are disposed in the seats 11 at the rear ends of the extensions 10 of the slots where they will support the frame in vertical position with its lower end in front of the lower wall of the casing, as shown in Figure 4, and the depending flange 6 will be disposed in front of the upper portion of the frame and prevent any likelihood of the frame tilting forwardly out of its proper position. A spring 24 which is secured against the inner or under face of the top wall by a rivet 25 and projects forwardly therefrom has its free forward end portion bearing against the upper edges of the sheets and plates in the frame and serves to yieldably hold the pins in the seats 11. Therefore, the pins will be prevented from being dislodged from the seats when an automobile is traveling over a rough road. When it is desired to move the frame to an extended position in order to remove the character carrying plates for replacement thereof by others or permit the glass sheets to be cleaned or a new bulb to be inserted into the socket, pressure will be applied to the under face of the lower bar 13 to shift the frame upwardly and this bar will then be grasped and drawn forwardly to move the pins forwardly in the extensions 10 of the slots to a position in which they may pass downwardly in the slots to the lower ends thereof. When the pins reach the lower ends of the slots, downward movement of the frame will be stopped and the frame may then be tilted forwardly out of the casing to the position indicated by dot and dash lines in Figure 3. The open upper end of the frame will thus be exposed and the plates may be grasped by their tongues 22 and drawn upwardly out of the frame. If the glass sheets are to be washed or broken glasses replaced, the plates and glass sheets may be withdrawn as a unit from the frame. After the glass sheets and character carrying plates have been replaced, the frame will be tilted upwardly and rearwardly to a vertical position, then thrust upwardly to dispose the upper edge portions of the sheets and plates back of the flange 6 and pressure applied to force the upper portion of the frame rearwardly until the pins move through the extensions 10 of the slots and return to the seats 11. The spring strip 24 will prevent upward movement of the frame and the flange 6 prevent the frame from tilting forwardly.

Having thus described the invention, what is claimed as new is:

1. A sign comprising a casing open at its front and having its top wall and end walls projecting forwardly beyond the front edge of its bottom, the top wall being provided with a depending front flange, the end walls having slots formed vertically therein, said slots being located adjacent lower ends of the end walls and at their upper ends being formed with rearwardly extending portions, a frame for filling the open front of said casing, pins projecting from ends of said frame and engaged in said slots to slidably mount the frame for vertical movement into and out of position to fill the open front of the casing and permit tilting of the frame when in a lowered position, said pins when moved into the rearwardly extending upper portions of the slots supporting the frame in a raised position with its upper portion overlapped by the depending flange of the top wall of the casing, and a spring in the upper portion of said casing for engaging the upper edge of the frame and applying tension thereto to yieldably retain the pins in the extensions of the slots.

2. In a sign, a casing open at its front and having end walls formed near their lower ends with vertically extending tracks having rearwardly extending upper portions, an abutment at the top of the open front of the casing, an open frame, pins projecting from ends of the frame and engaged through the tracks to mount the frame for vertical sliding movement into and out of a raised position to fill and close the open front of the casing and also pivotally mount the frame for tilting forwardly out of the casing when in a lowered position, the pins when engaged in the rearwardly extending upper portions of the tracks supporting the frame in its raised position.

3. A sign comprising a casing open at its front and having a top wall and end walls, the top wall being provided with a depending front portion, the end walls having tracks formed vertically therein and provided with rearwardly projecting upper portions forming downwardly extending seats, a frame for filling and closing the open front of said casing, and pins projecting from ends of said frame and engaged in the tracks to slidably mount the frame for vertical movement into and out of position to fill the open front of the casing and also permit tilting of the frame when in a lowered position, said pins when moved into the seats of the tracks supporting the frame in a raised position with its upper portion disposed back of and overlapped by the depending front portion of the top wall of the casing.

ARNOLD LINDSTROM.