

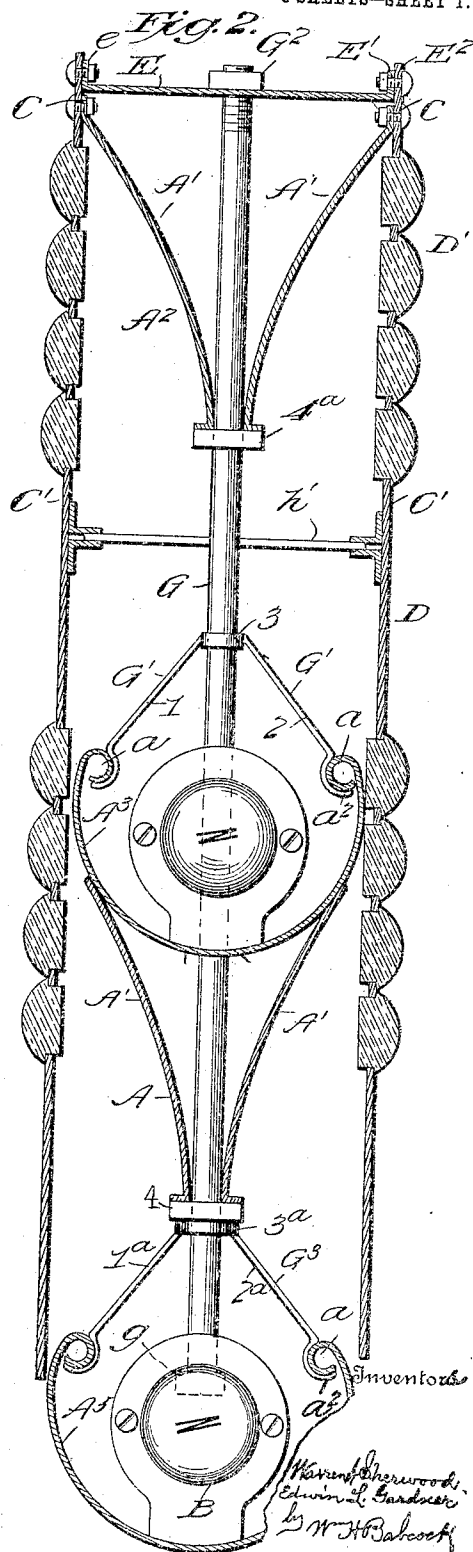
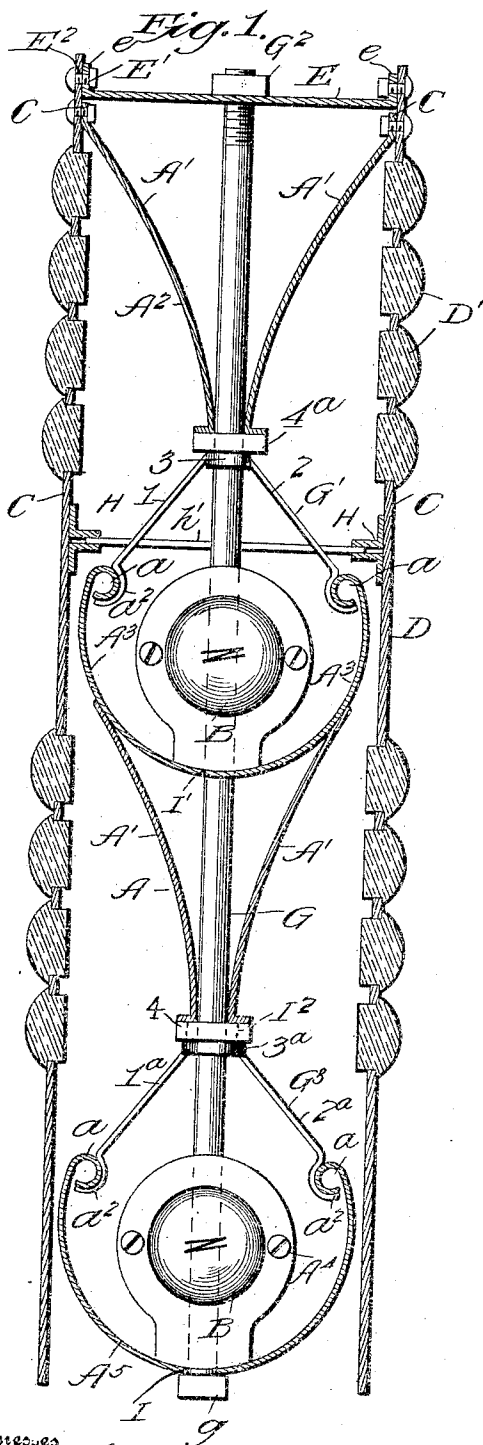
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ILLUMINATED SIGN.

958,838.

APPLICATION FILED MAY 10, 1909.

Patented May 24, 1910.

3 SHEETS—SHEET 1.



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APPLICATION FILED MAY 10, 1909,

Patented May 24, 1910.

3 SHEETS—SHEET 2.



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3 SHEETS—SHEET 3.

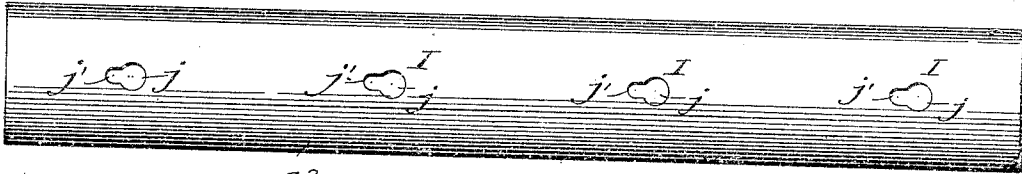


Fig. 4.

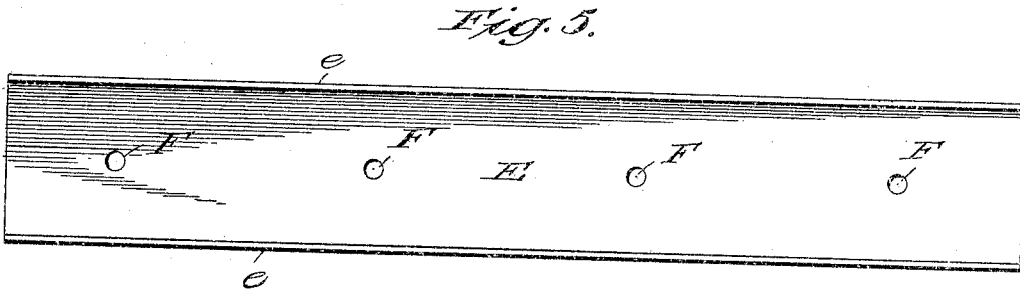


Fig. 5.

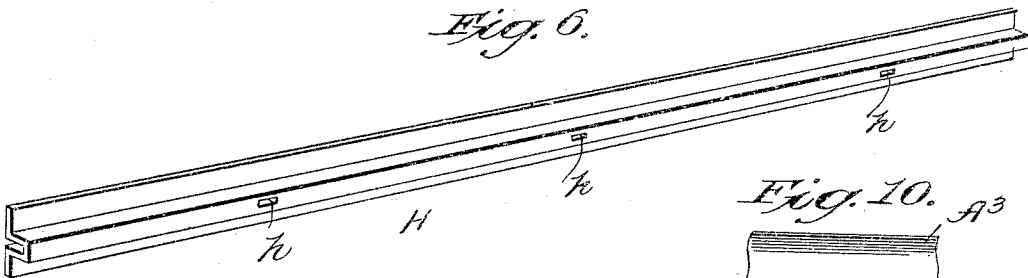


Fig. 6.

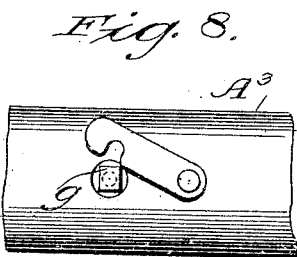


Fig. 8.

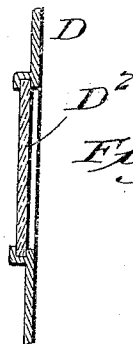


Fig. 7.

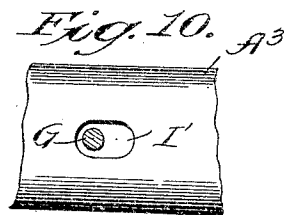


Fig. 10.

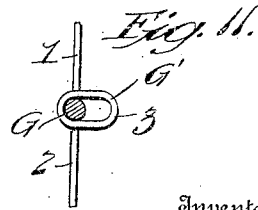


Fig. 11.

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UNITED STATES PATENT OFFICE.

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ILLUMINATED SIGN.

958,838.

Specification of Letters Patent.

Patented May 24, 1910.

Application filed May 10, 1909. Serial No. 495,199.

To all whom it may concern:

Be it known that we, WARREN A. SHERWOOD and EDWIN L. GARDNER, citizens of the United States, residing at Lancaster, in the county of Lancaster and State of Pennsylvania, have invented certain new and useful Improvements in Illuminated Signs; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to illuminated signs of the kind using a V-shaped reflector or a pair of converging reflectors having both sides lighted by an additional reflector and lamps under the apex thereof. It duplicates the sets of reflectors and consists in the construction and combination of parts herein-after more particularly set forth and claimed.

In the accompanying drawings Figure 1 represents a vertical cross-section of an elongated illuminated sign embodying our invention taken on the line 1—1 of Fig. 3, the devices being in their normal position; Fig. 2, a similar view, with the lamps and proximate devices partly lowered far enough to remove the lowest reflector from the sign case, this reflector being slightly broken away; Fig. 3, a side elevation of the devices embodying our invention, the casing and the lower set of reflectors being sectioned vertically; Fig. 4, a bottom view of the lower trough-shaped base reflector; Fig. 5, a plan view of the top plate of the casing; Fig. 6, a detail perspective view of one of the brackets or T-irons H hereinafter described; Fig. 7, a detail sectional view of a modified form of show front; Fig. 8, a detail bottom view of a portion of the lower trough-shaped base reflector, the head of the supporting rod and the catch engaging above the latter. Fig. 9 is a detail sectional view on the line 9—9 of Fig. 3, looking downward; Fig. 10 represents a plan view of a part of the trough-shaped base reflector A³ and a longitudinal section of the supporting rod G. Fig. 11 represents a plan view of the check and a longitudinal sectional view of the supporting rod as it would appear in its normal position in the sign.

A² designates an upper pair of downwardly converging reflectors A' preferably concave, and A a lower pair of the same, the converging ends in each instance being connected, preferably by a plate 4^a in the

upper set and 4 in the lower as shown and constituting therewith a composite V-form reflector having a longitudinal series of holes I² for rods G hereinafter described. A trough-shaped base reflector A³ is arranged below the upper composite reflector A² to throw light simultaneously on its concave sides A' from lamps B arranged at intervals in said trough-shaped base reflector. A lower trough-shaped reflector A⁵ is similarly arranged under the lower composite reflector A and carries a series of the lamps B corresponding to the upper series before mentioned. These lamps are preferably electric but any convenient source of light may be used and they may be fastened detachably in reflectors A³ and A⁵ in any convenient way as conventionally indicated at A⁴. The sign casing D normally inclosing said devices has two opposite show faces or sides C'.

The reflectors A' of set A² are fastened by any suitable means at C to the sides C' of the casing D. The top E of the sign casing is a thin sheet of metal or other material having side flanges e provided with holes E' corresponding to holes E² in the sides of said casing D is held in position by bolts or rivets being passed there-through and secured and is also provided with a central longitudinal line of perforations.

The supporting rods G are arranged at regular intervals within the device and may be secured at any point above the position of the checks G' when in their normal position. In the preferred form as shown in the drawings, rods G are carried up through the perforations F in the top E and secured there by means of a nut G² or other suitable means. The sides C' C' may have letters cut in them and a glass D² inserted on the inside of the sign next to said sides as a backing, they may be perforated and have lenses D' of glass inserted in such perforations or may be fashioned in any way provided they may be illuminated. The T-irons H H are provided on the inside of the casing and have holes h at corresponding regular intervals into which the ends of brace rods h' are placed.

The supporting rods G are provided with enlarged parts or heads g. The plate 4 connecting the pair A of reflectors A', A', is provided at regular intervals corresponding to the intervals between the supporting

rods G, along its longitudinal middle line with holes I^2 and the trough-shaped base reflector A^3 above referred to is also provided with holes I' , directly above and corresponding in shape to holes I^2 , said holes I' and I^2 being of sufficient size to permit the shifting of the trough-shaped base reflector and the passage therethrough of the heads or enlarged parts g of the above referred to supporting rods. To the edges a of the trough-shaped base reflector A^3 are secured the ends a^2 of the check G' . These checks may consist of rods 1 and 2 fastened to the edges a of the trough-shaped base reflector A^3 and a ring 3 having a longitudinal elongated opening, the inner width thereof being less than the diameter of the above mentioned heads g , of a single piece of metal modeled or cast to the proper shape or of a piece of sheet metal provided with a hole in the center thereof of sufficient size to permit the insertion of one of the supporting rods G.

The trough-shaped base reflector A^5 is provided with several perforations I in its longitudinal middle line, said holes being of key-form with a large part j , large enough to permit the passage therethrough of the heads g and a small part j' adapted to allow the lateral insertion of the supporting rods G but too small to allow the passage of the heads g . To the edges of the trough-reflector A^5 and to the bottom of plate 4 are secured at intervals, corresponding to the intervals between the supporting rods, guides G^3 composed of two upwardly converging rods 1^a and 2^a and a longitudinally elongated ring 3^a , of sufficient dimensions to allow the passage of the heads g , to which the ends of the upwardly converging rods 1^a and 2^a are fastened.

It will be seen that the holes I , I' and I^2 are of oblong shape and of sufficient size to allow the passage of the heads g , while the opening in ring 3 although oblong is not of sufficient width to allow the passage of said heads g . To the ends of the trough-shaped base reflector A^5 are fastened cords or wires L and L' , L being passed through a hole in the end of the casing and above the place of attachment and L' being passed through a hole in the end of the casing directly opposite the point at which it is attached to said trough-shaped base reflector A^5 . There are as many supporting rods as may be needed and each has a check G' and guide G^3 fitted thereon. The number of these has no necessary relation to the number of lights in either trough-shaped base reflector or in both trough-shaped base reflectors combined.

The operation is as follows: To lower the trough-shaped base reflector and accompanying devices pull on cord L' . This shifts the

trough shaped base reflector until the larger part j of the perforations comes to the position which allows the passage therethrough of the heads g when the weight will operate to lower it, the holes I , I' and I^2 being directly vertically in line, until the checks G' engage the heads g of rods G, thus allowing access to both rows of lights. To raise said lights and their accompanying devices pull on either or both of cords L , this will raise it to its normal position, when a pull on the cord L' , not used in the operation of lowering, will shift the devices to the locking position.

We do not claim in this application a pair of curved converging side reflectors, in combination with a casing through the sides of which they transmit light, a lower trough-shaped reflector sliding up and down on rods at will and locked in operative position by catches engaging between said trough-shaped reflector and the head of said rod, the same being shown and claimed in our application #493,943. Also we do not claim a pair of inclined converging reflectors arranged and operating as above in combination with a curved trough-shaped reflector which reflects light on them, a series of headed rods passing through perforations in said trough-shaped reflector and allowing it to move up and down thereon, brace bars connecting said trough-shaped reflector to collars sliding on said rods, means for locking said trough shaped reflector at will in operative position and means for checking the inward and outward movement of said reflector on said rods, these features being shown and claimed in our application #493,944.

Having thus described our invention what we claim as new and desire to secure by Letters Patent is:

A sign-casing adapted to permit the transmission of light through two opposite faces, two series of lamps within said casing, two trough-shaped base reflectors each receiving and supporting one series of said lamps and illuminated thereby, two pairs of downwardly converging reflectors, each pair being above and illuminated by one of said base reflectors and transmitting light through said sides and means of support arranged and adapted to permit the ascent and descent of said base reflectors and of one of said pairs of reflectors substantially as set forth.

In testimony whereof, we have signed our names to this specification in the presence of two subscribing witnesses.

WARREN A. SHERWOOD.
EDWIN L. GARDNER.

Witnesses:
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