Dec. 4, 1923. 1,475,977

C. WEST

ILLUMINATED SIGN

Filed June 25, 1923

Fig. 1.

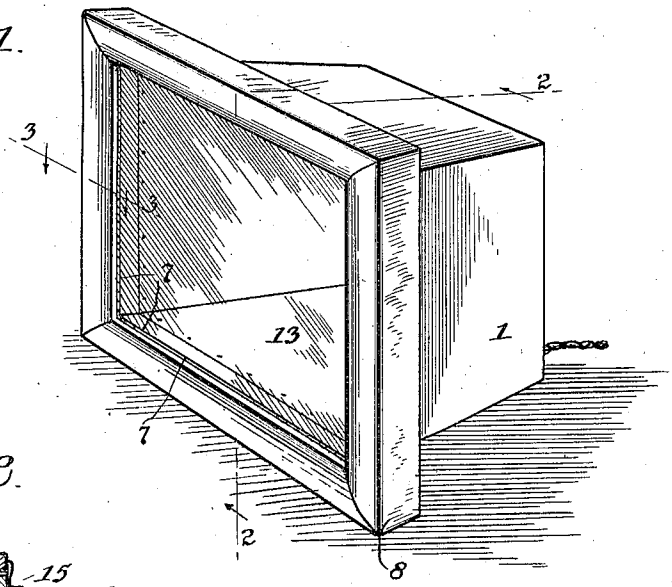


Fig. 2.

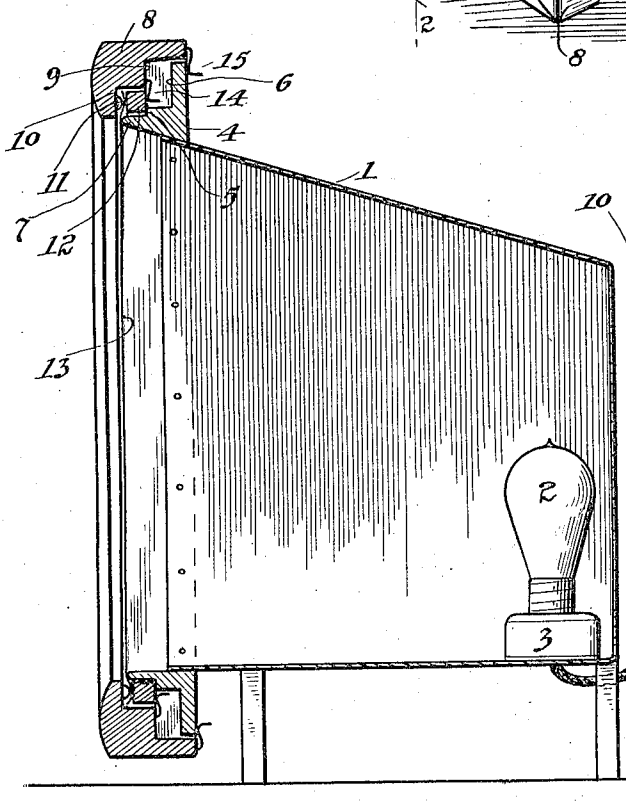
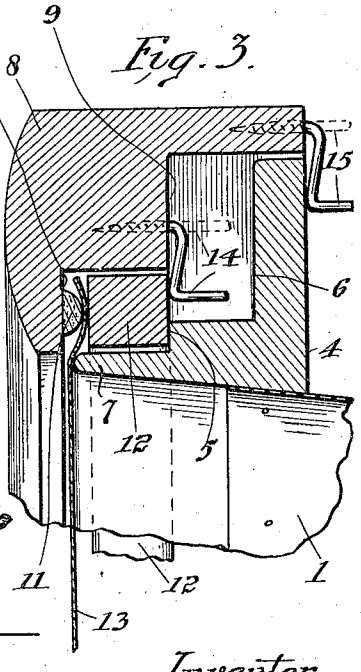


Fig. 3.



Inventor

Charles West

Patented Dec. 4, 1923. 1,475,977

UNITED STATES PATENT OFFICE.

CHARLES WEST, OF CHICAGO, ILLINOIS.

ILLUMINATED SIGN.

Application filed June 25, 1923. Serial No. 647,644.

To all whom it may concern:

Be it known that I, CHARLES WEST, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented new and useful Improvements in Illuminated Signs, of which the following is a specification.

My invention relates to improvements in illuminated signs for window display, advertising, and similar purposes; an object being to provide a device of this character which shall have such mechanical simplicity as to be inexpensive of construction and easy to operate by unskilled persons.

A further object of my invention is to provide an illuminated sign of such construction that thin or transparent paper may be employed in place of the glass front heretofore used in such devices, the paper serving not only as the front wall of the device but having advertising or other matter printed thereon.

And a further object is to provide an illuminated sign with a paper receiving frame of such construction as to compel a stretching of the paper when secured in place, thus imparting a uniform flat surface to even newspaper or other cheap papers which closely resembles glass. Other objects will appear hereinafter.

With these objects in view, my invention consists in the novel construction, combination and arrangement of parts, all as will be described hereinafter and more particularly pointed out in the appended claims.

An embodiment of the invention is shown in the accompanying drawing forming a part of this specification and in which—

Fig. 1 is a perspective view of the device.

Fig. 2 is a vertical section taken on line 2—2 of Fig. 1, showing the novel manner of clamping and stretching a paper diaphragm, and

Fig. 3 is an enlarged horizontal section on line 3—3 of Fig. 1, showing more clearly the frame structure employed in the device.

The preferred form of construction comprises an incandescent lamp housing 1, a lamp 2 in said housing, and a socket 3, preferably of the flash type, for said lamp.

The interior surface of housing 1 serves to reflect the light rays from lamp 2 toward the front of the device for illuminating the sign, which, as before stated, is printed on paper. Housing 1 is preferably formed from sheet metal, and the front edge thereof is secured to a stationary frame 4, as shown in Fig. 3.

Frame 4 is provided with two rabbets 5 and 6, and a forwardly projecting flange 7, the front edge of which serves to stretch the paper diaphragm as will be presently described.

A removable frame 8 is provided with rabbets 9 and 10, the latter having a raised portion 11 against which the paper is pressed. This raised portion may be formed integral with frame 8, but preferably it consists of a bead or strip of leather glued to rabbet 10 as indicated in Fig. 3.

A clamping frame 12 is removable the same as frame 8 and serves to clamp the paper diaphragm 13 against bead 11.

Clamping screws 14 suitably spaced in rabbet 9 serve to lock clamping frame 12 in operative position, and similar screws 15 hold frame 8 to the stationary frame 4.

The operation for inserting a new paper diaphragm is as follows: Assuming that paper 13 is locked in position, as shown in Fig. 3, then, upon turning screws 15 to the dotted position, frame 8 may be removed and placed front side down on a convenient table. Then, upon turning screws 14 to the dotted position, clamping frame 12 and paper 13 may be removed from frame 8. Now the new paper diaphragm is laid on bead 11, over which frame 12 is placed and clamped by turning screws 14. Then frame 8 is placed back on frame 4 and locked by turning screws 15. This last action presses flange 7 against paper 13 and accomplishes the stretching function, the shape of flange 7 being such as to take up all slack in the paper and, in addition, to impart a tightness similar to that of a drum-head.

The stretched diaphragm thus secured resembles glass, and when the flash light is working, the device presents an attractive appearance.

While I have illustrated and described the preferred form of construction for carrying my invention into effect, there might be variations and modifications without departing from the spirit of the invention.

I, therefore, do not wish to be limited to the precise details of construction set forth, but desire to avail myself of such variations and modifications as come within the scope of the appended claims.

Having thus described my invention, what I claim as new is:

1. A device of the character described comprising a lamp housing, a stationary frame secured to said housing having a projecting flange at the inner edge thereof, a removable frame formed to fit over said stationary frame and clamping means therefor, there being a rabbet in said removable frame for the reception of a paper diaphragm, a clamping frame formed to fit in said rabbet, and means for clamping the clamping frame against said diaphragm, said flange being formed to stretch the diaphragm after the same is clamped in position.

2. A device of the character described comprising a lamp housing, a stationary frame secured to said housing having a projecting flange, a removable frame, means for clamping said removable frame to said stationary frame, there being a rabbet in said removable frame, a bead secured to said rabbet, a frame for pressing a paper diaphragm against said bead, and means for clamping said last-named frame in said rabbet, said flange being formed to tighten the diaphragm.

3. A device of the character described comprising a lamp housing and a lamp therein, a stationary frame secured to said housing having a projecting flange, a removable frame and means for clamping the same on said stationary frame, there being a rabbet and bead in said removable frame, and a frame and clamping means therefor for securing a paper diaphragm to said bead, said flange being inside of said bead and adapted to stretch the diaphragm after being secured to said bead.

4. A device of the character described comprising a lamp housing, a stationary frame secured to the exterior of said housing, a removable frame formed to fit over said stationary frame, clamping screws in said removable frame for securing the same on said stationary frame, there being a rabbet and bead in said removable frame, a frame fitted to said rabbet, and clamping screws in said removable frame for pressing said last-named frame against a paper diaphragm placed over said bead, said flange being positioned to stretch the diaphragm.

5. A device of the character described comprising a lamp housing, a stationary frame secured to the outside of said housing, a removable frame having a rabbet to fit over said stationary frame, clamping screws in said removable frame for holding the same on said stationary frame, there being a rabbet and bead formed therein adjacent the inner edge of said removable frame, and means for clamping a paper diaphragm to said bead, said flange projecting slightly beyond said bead for stretching the diaphragm when the removable frame is held in position on the stationary frame.

In witness whereof I affix my signature in presence of two witnesses.

CHARLES WEST.

Witnesses:
W. C. SMITH,
W. W. WARD.