-C. H. SEAWELL. ILLUMINATING SIGNS.

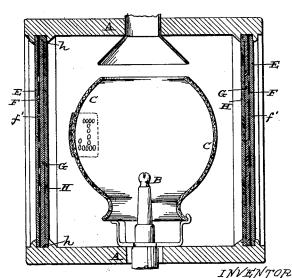
No. 189,796.

Patented April 17, 1877.

FIG.1.



FIG.2.



ATTEST:

Robert Burns. Le Glond Gurdett.

for Knightor

UNITED STATES PATENT OFFICE.

CHARLES H. SEAWELL, OF ST. LOUIS, MISSOURI.

IMPROVEMENT IN ILLUMINATING-SIGNS.

Specification forming part of Letters Patent No. 189,796, dated April 17, 1877; application filed February 13, 1877.

To all whom it may concern:

Be it known that I, CHARLES H. SEAWELL, of the city and county of St. Louis and State of Missouri, have invented a certain new and useful Improvement in Illuminating-Signs, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing, making part of this

specification.

My improvement consists in forming the transparent side or sides of the sign-case with a frame of transparent glass upon the outside, then a sheet of opaque substance, such as metal, card-board, &c., having letters painted or otherwise marked thereon, said letters being perforated, so as to indicate the form of the letter by the light shining through the perforations. Inside the opaque plate is a pane of glass, rendered semi-opaque in any manner, so as to soften and diffuse the light, and inside of the semi-opaque pane is another pane of glass, which is transparent, and whose purpose is to protect the semi-opaque glass beneath it from dust, &c.

In the drawings, Figure 1 is a front view.

Fig. 2 is a transverse section.

A is the case, which may be made of any form or size. B is the burner, which may be made to use coal-oil; or common gas, or any

other suitable light, may be used.

The light is surrounded by a globe, C, as shown in a prior application, and therefore not claimed herein, of semi-opaque glass, on which may be an opaque plate having letters marked thereon, and containing perforations, so as to show the form of letters at night by the light shining through the holes. Thus, the globe C may perform the office of a sign inside the room, and the main face be made to show outside the same as a street-sign, the rear or inner side of the sign being partly or wholly open in such case to exhibit the globe.

The case may have as many illuminated faces as desired. Each face, in its most perfect form, consists of four layers—the outer one, E, of transparent glass, the second one, F, of some opaque substance, such as metal,

pasteboard, wood, or other suitable material, having letters f painted or otherwise marked thereon, so as to make a sign readable by daylight, or by light from the outside of the case.

These letters f have perforations f', through which the light shines, so as to make the sign readable in the dark by the light shining

through the perforations.

Next, inside the plate or board F is a pane or plate, G, of semi-transparent material, such as glass rendered partially opaque by painting or other process. The painted side of such glass is preferably turned away from plate F, and is protected from smoke, fumes, and dust by a plate or pane, H, of transparent glass placed inside of it, and, preferably, connected to it all around the edges by cement or a sealing-strip, h, forming a joint impervious to any fumes, dust, &c., that might otherwise dirty or corrode the paint.

The plate E may be made removable from the outer side; or all the panes, &c., E F G H, may be made removable inward, the panes G and H being fastened and removed together, so that their outer faces may be washed when required; or all the said parts of the face, EF GH, may be tightly sealed in the case, so that only the outer faces of E and H will require

washing.

As a modification, the outer glass E may be dispensed with, leaving the board or plate F exposed upon the outer side; or, where the outer plate E is present, the inner pane H may be dispensed with, and the painted face of plate or pane G turned inward against the back of plate F.

I claim-

The illuminating-sign having the combination in its face or faces of the outer transparent pane E, the lettered and perforated plate F, the semi-transparent pane or plate G, and in-ner transparent pane H, substantially as set forth.

CHAS. H. SEAWELL.

Witnesses:

SAML. KNIGHT, ROBT. BURNS.