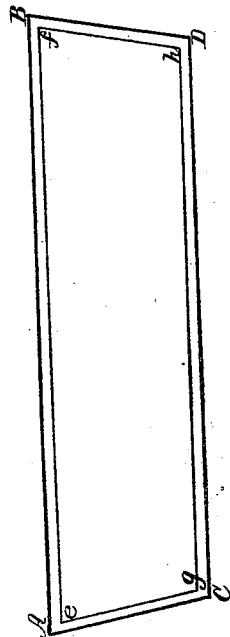
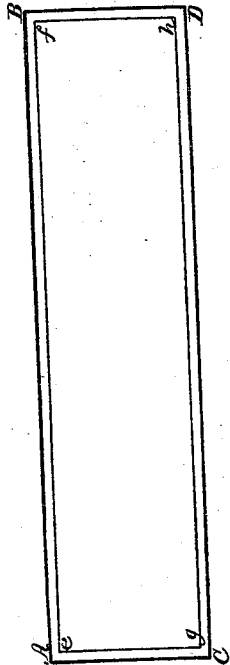


F. L. Hagadorn.
Sign for Street Lamp.
N^o 46,897. Patented Mar. 21, 1865.



Witnesses
Adolphe Aving
Jacob Cohen

Inventor;
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UNITED STATES PATENT OFFICE.

FRANCIS L. HAGADORN, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN TRANSPARENT SIGNS FOR STREET-LAMPS.

Specification forming part of Letters Patent No. **46,897**, dated March 21, 1865.

To all whom it may concern:

Be it known that I, FRANCIS L. HAGADORN, of the city of Brooklyn, in the county of Kings and State of New York, have invented a new and improved method of making transparent printed water-proof signs for street-lamps and for other purposes; and I do hereby declare that the following is a full and exact description thereof.

The nature of my invention consists in providing a cheap, neat, legible, and durable substitute for the painted glass signs now in use in the cities of New York, Baltimore, and other places, at the street-crossings, to resist the action of the weather and the vicissitudes of temperature and of fracture, by accident or design.

To enable others skilled in the arts to make and use my invention, I will proceed to describe it particularly, as follows:

I construct my signs of glass and of paper, combined in the following manner:

First. Printing with fine printers' ink, sizing, or gilt, and type, prepared in the usual manner, the name of a street or any other given word or words upon paper, *e f g h*, of sufficient texture and firmness to bear the ink, sizing, or gilt.

Second. Prepare strips of glass, A B C D, corresponding in shape with the paper so printed.

Third. With a strong solution of bleached shellac and alcohol, or their equivalents, size the face of the printed sheets or strips of paper, in order to prevent the ink from spreading, (this sizing may be omitted when the ink

has had sufficient time to set otherwise, or when gilt is used, but I prefer to use it in all cases,) and, as soon as dry, coat over the same with a composition formed of two parts of Canada balsam and three of spirits of turpentine. Then lay the face of the printed sheet or strip of paper upon the glass, taking care to press it out smoothly, and cut off the edges so that they shall be about one-eighth of an inch from the edge of the glass. Then, with a composition of equal parts of Canada balsam and spirits of turpentine, coat over the back of the printed sheet, taking care to fill it well in at the edges of the sheet.

Fourth. Lay aside the sign to dry, in an apartment of about the temperature of 60°, twenty-four hours, and then add another coat of the composition, allowing the same to dry thoroughly, when the sign will be fit for use.

In general, I make my composition of the above proportions, but leave myself free to vary the same according to temperature.

What I claim as my invention, and desire to secure by Letters Patent, is—

The application of printed lettering, or its equivalent, to the glass plates of street-lamps, or their equivalents, in combination with paper, which performs with the said glass plates the function of ground glass, substantially in the manner and for the purpose herein set forth.

F. L. HAGADORN.

Witnesses:

HENRY C. BAIRD,
R. M. GRAY.