

(No Model.)

2 Sheets—Sheet 1.

R. S. WRIGHT & H. C. BRADFORD.
STREET SIGN FOR ELECTRIC LIGHTS.

No. 535,933.

Patented Mar. 19, 1895.

Fig. 1.

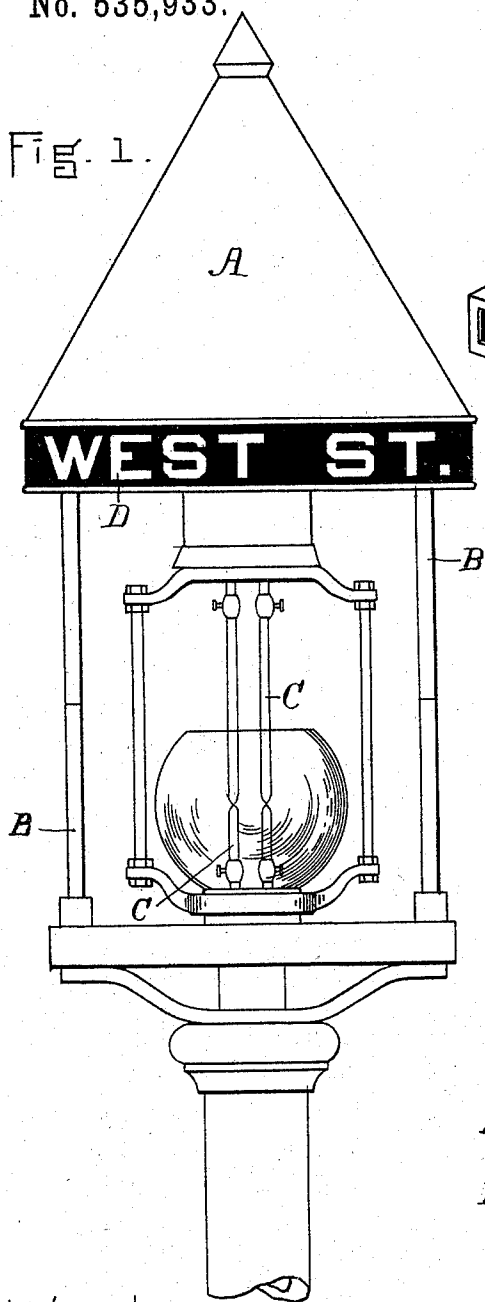


Fig. 2.

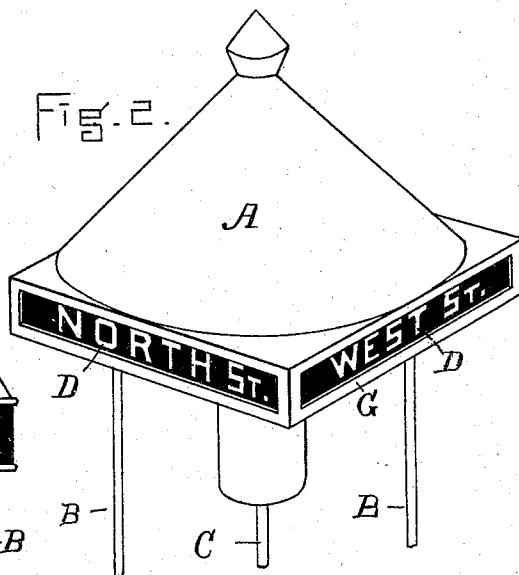


Fig. 3.

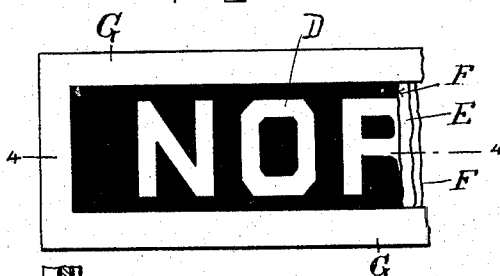
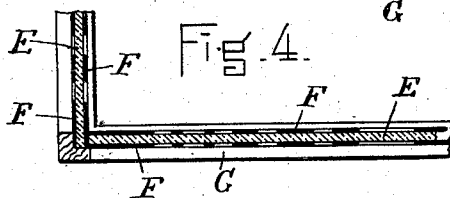


Fig. 4.



WITNESSES.

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Robert S. Wright.
Henry C. Bradford.
by A. J. Russell
att'y.

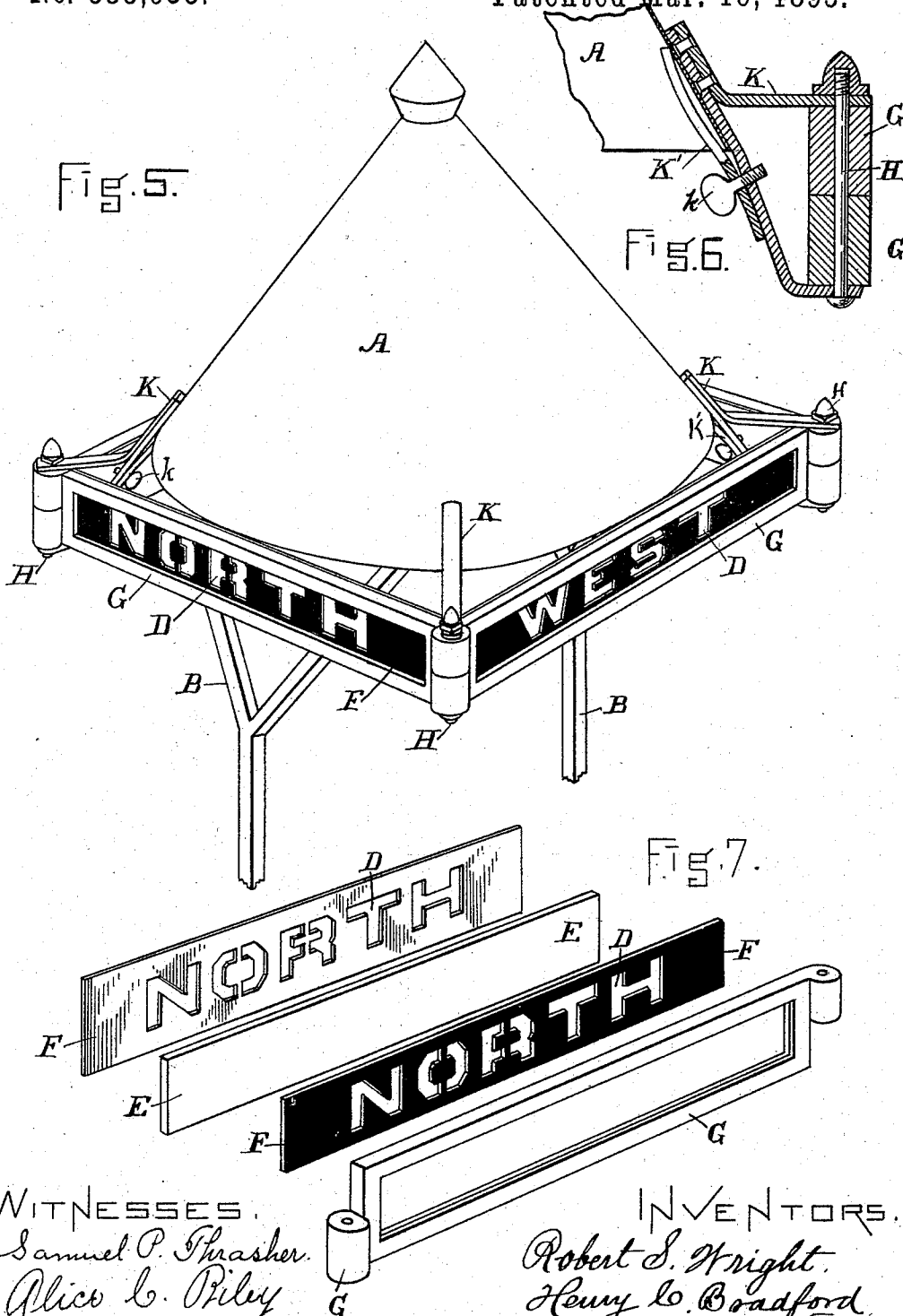
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WITNESSES.

Samuel P. Thrasher.
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UNITED STATES PATENT OFFICE.

ROBERT S. WRIGHT AND HENRY C. BRADFORD, OF SOMERVILLE,
MASSACHUSETTS.

STREET-SIGN FOR ELECTRIC LIGHTS.

SPECIFICATION forming part of Letters Patent No. 535,933, dated March 19, 1895.

Application filed February 23, 1894. Serial No. 501,078. (No model.)

To all whom it may concern:

Be it known that we, ROBERT S. WRIGHT and HENRY C. BRADFORD, of Somerville, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Street-Signs for Electric Lights, of which the following, taken in connection with the accompanying drawings, is a specification.

10 The object of this invention is to furnish with the ordinary electric arc lights, street signs or numbers, or other signs illuminated by such lights and visible at very considerable distances.

15 Arc lights as now commonly used are, owing to their blinding brilliancy, mounted twenty-five or thirty feet in the air and provided with a sheet metal hood usually of conical form above the light and its magnet.

20 We affix to the lower edge of this hood the various signs to be illuminated, by attaching to the hood an angular frame having vertical or oblique sides constituting open panels with grooves or ways to receive the signs, which
25 may be thin metallic plates with the letters cut through them, and with a transparent or translucent material, such for instance as porcelain or opal glass, which the light will permeate interposed between them. The letters thus brilliantly outlined by the opaque
30 plates may be unusually large, since these hoods are at base nearly two feet in diameter, and the frame sides or sign strips may consequently have a corresponding length.
35 By passing through the translucent material, such as the opal glass, the light is softened and diffused, the letters are rendered more legible, and may be read with less strain of the eye than if plain glass were employed.

40 The sign frames are united at the corners by vertical bolts and connected with the hood by clamp-brackets which extend from said bolts and are pressed against the surfaces of the lower portion of the hood, thus being
45 readily attached to and removed from the hood without perforating it. These devices constitute parts of our invention.

We do not limit ourselves to signs or other devices cut through metal or like plates, as
50 most excellent results are obtained by employing the translucent plates painted or

otherwise covered with opaque material except as to the letters, which are illuminated by the brilliant light shining from within through the uncovered part of the glass. In
55 this case the illuminable material is the glass plate, upon the surfaces of which the opaque coating is applied.

In the drawings, Figure 1 is an elevation of an arc lamp furnished with our improved
60 sign. Fig. 2 is a perspective view. Fig. 3 is an enlarged elevation of one of the signs and its frame, broken away to illustrate the construction. Fig. 4 is a horizontal section on line 4—4 of Fig. 3. Fig. 5 is an enlarged
65 perspective view, and Fig. 6 a vertical section illustrating the preferred means of uniting the sign frames and securing them to the hood. Fig. 7 shows in perspective, the parts of the sign detached.

70 A represents the usual conical hood which surmounts arc-lights as commonly arranged. B B are metallic rods on which the hood is supported, and C C the carbons. The hoods are lined as usual with a reflecting surface to
75 throw the light downwardly.

We connect to the hood street signs D, which are illuminated by the direct and the reflected rays of light. These signs are mounted in angular frames suitably supported and
80 connected. Each sign has an opal-glass or other illuminable body E permeated by the light rays, and a contrasting, opaque, exterior body or surface F, on both sides thereof. Through the openings in such opaque sur-
85 faces the illuminated letters are brilliantly outlined. Figs. 3, 4 and 7 show the opaque body or surface F on both sides of the glass body. Fig. 7 shows the letters cut through duplicate sheets, distinct from the glass, while
90 Fig. 4 may indicate coatings applied on its opposite surfaces.

We have devised rectangular frames G to receive the signs, having at the corners a
95 half hinge formation and joined by a vertical bolt H, as in Figs. 5, 6 and 7, so that they can be readily united around the arc-light post and secured to the hood. The clamp-bracket K shown in Figs. 5 and 6 is
100 connected by the bolts H to the corners of the complete frame, and extends upwardly and along the outer portion of the hood. Another

member K' of the clamp extends along its inner portion and is furnished with a thumb-screw k , by which the parts may be tightened upon the hood. By these or by equivalent devices the four signs for a street corner may all be quickly and securely applied to the hood of an existing lamp without perforating it or requiring much labor in that elevated position.

10 We are aware that prior to our invention street signs have been applied to electric and other lights in various forms; but the plans proposed have differed materially from ours, and have been impractical for one reason or 15 another, largely because so complicated and expensive, or for their interference with the ascent to or trimming of the lamp, or the radiation of its rays downwardly. In some cases the signs were arranged radially so that 20 the light scarcely reached them, or they were placed far below it and in the way. Others had permanent sign frames and could not be applied to existing lamps, and none were clamped removably to the hood or made illuminable as ours are if the same light illuminated the street.

By our invention straight and legible signs in a rectangular sign frame are readily and removably clamped to and around the base 30 of the conical hood, without perforating it and in a position where the direct and reflected rays strike through each sign above the light, so that no shadows are cast downwardly and no interference with the street light occurs.

The several signs are united cornerwise by the bolts which connect them to their supporting brackets. The outer member of each bracket rests upon the inclined outer surface of the hood, and gives support to the corner of the sign frame before the clamp is tightened. 40

We claim as our invention—

1. The combination with an electric arc-light and its overhanging hood, of illuminable signs mounted in sign frames hinged to each other cornerwise, so as to be brought together around an existing lamp hood, and with clamping brackets adapted to connect such sign frames to the hood, removably, without perforating it, substantially as set forth. 45

2. The combination of an electric arc-light and its overhanging hood with illuminable signs inclosed in open sign frames united to each other cornerwise, and with clamping brackets having inner and outer fingers adapted to grip the skirts of the hood and provided with a connecting bolt serving to pivot to it two adjacent sign frames, substantially as set forth. 50 55

In testimony whereof we have signed our names to this specification, in the presence of two subscribing witnesses, on this 22d day of January, A. D. 1894. 60

ROBERT S. WRIGHT.
HENRY C. BRADFORD.

Witnesses:

A. H. SPENCER,
E. A. BROWN.