

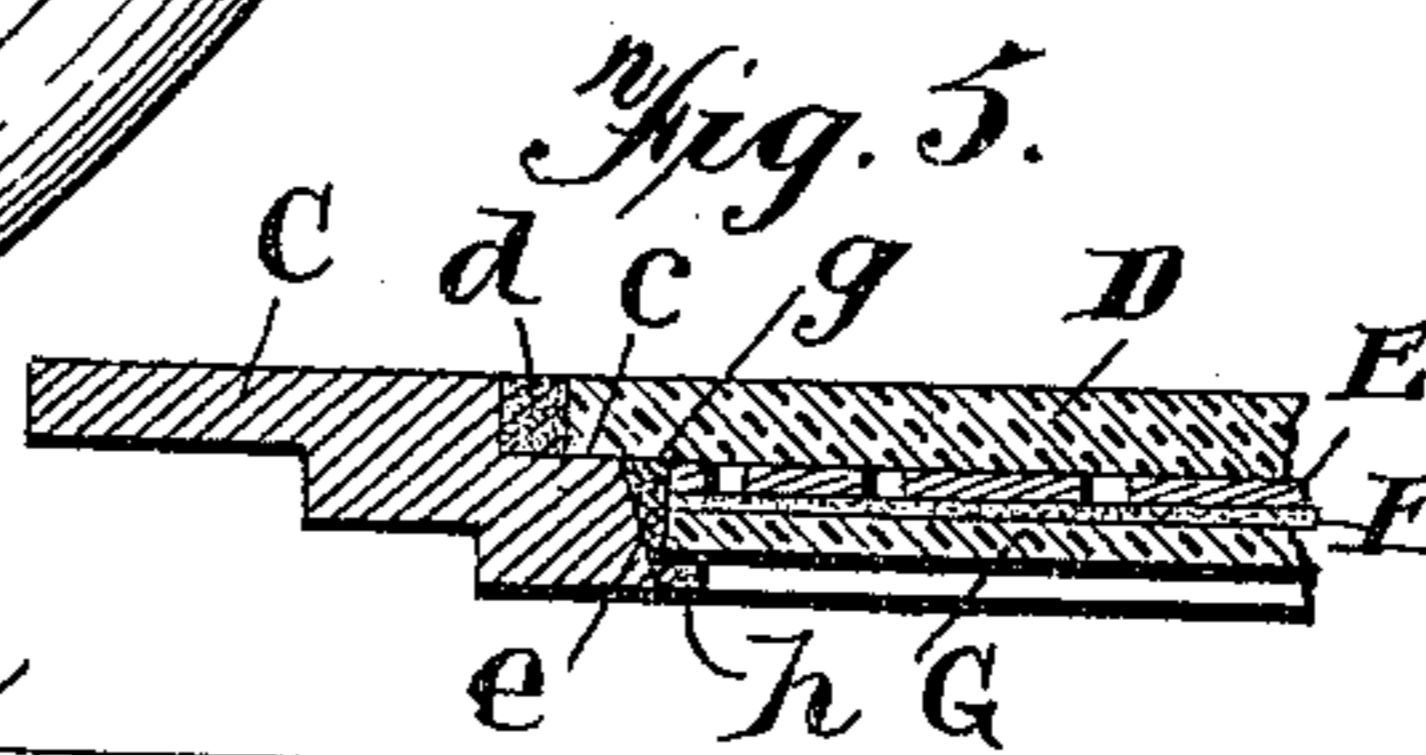
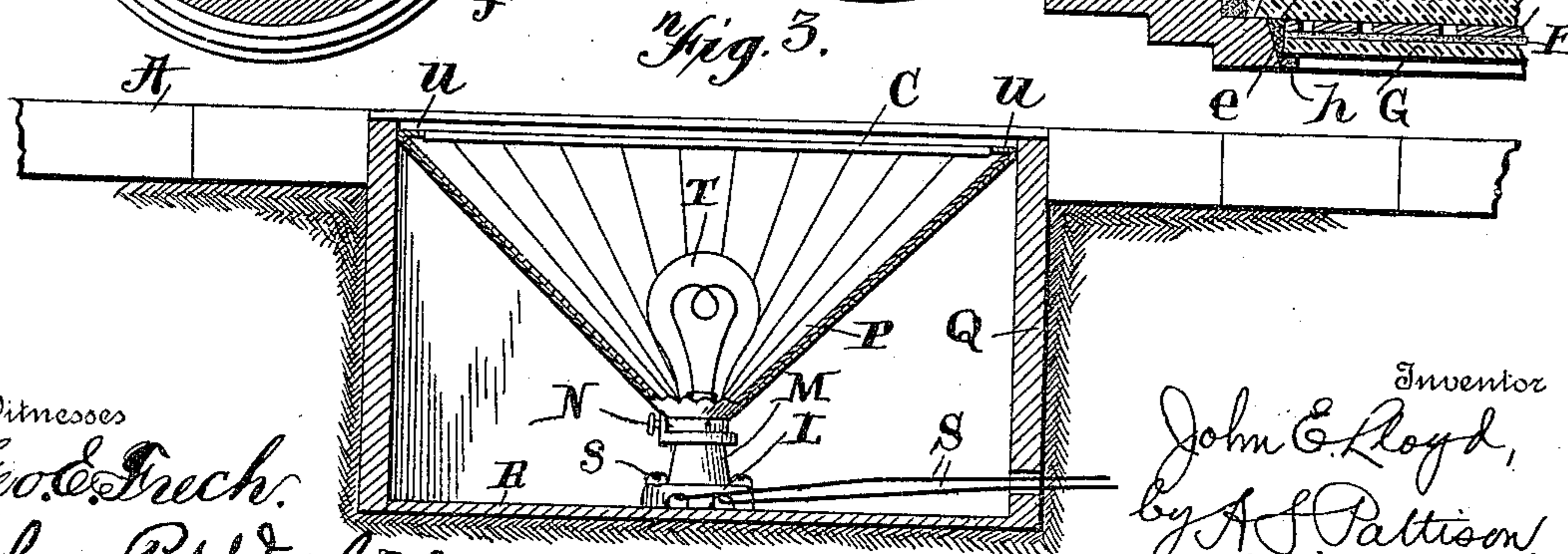
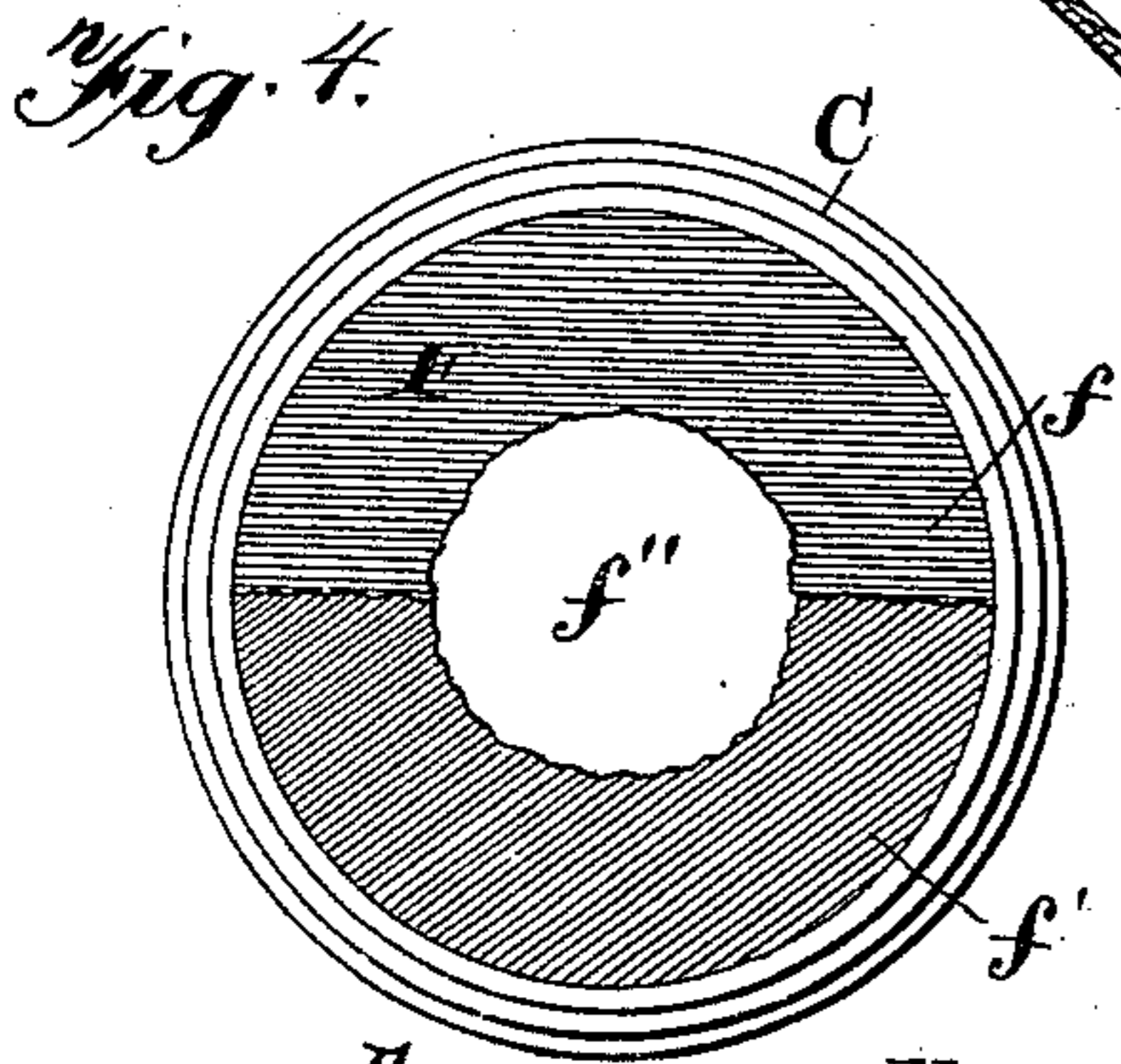
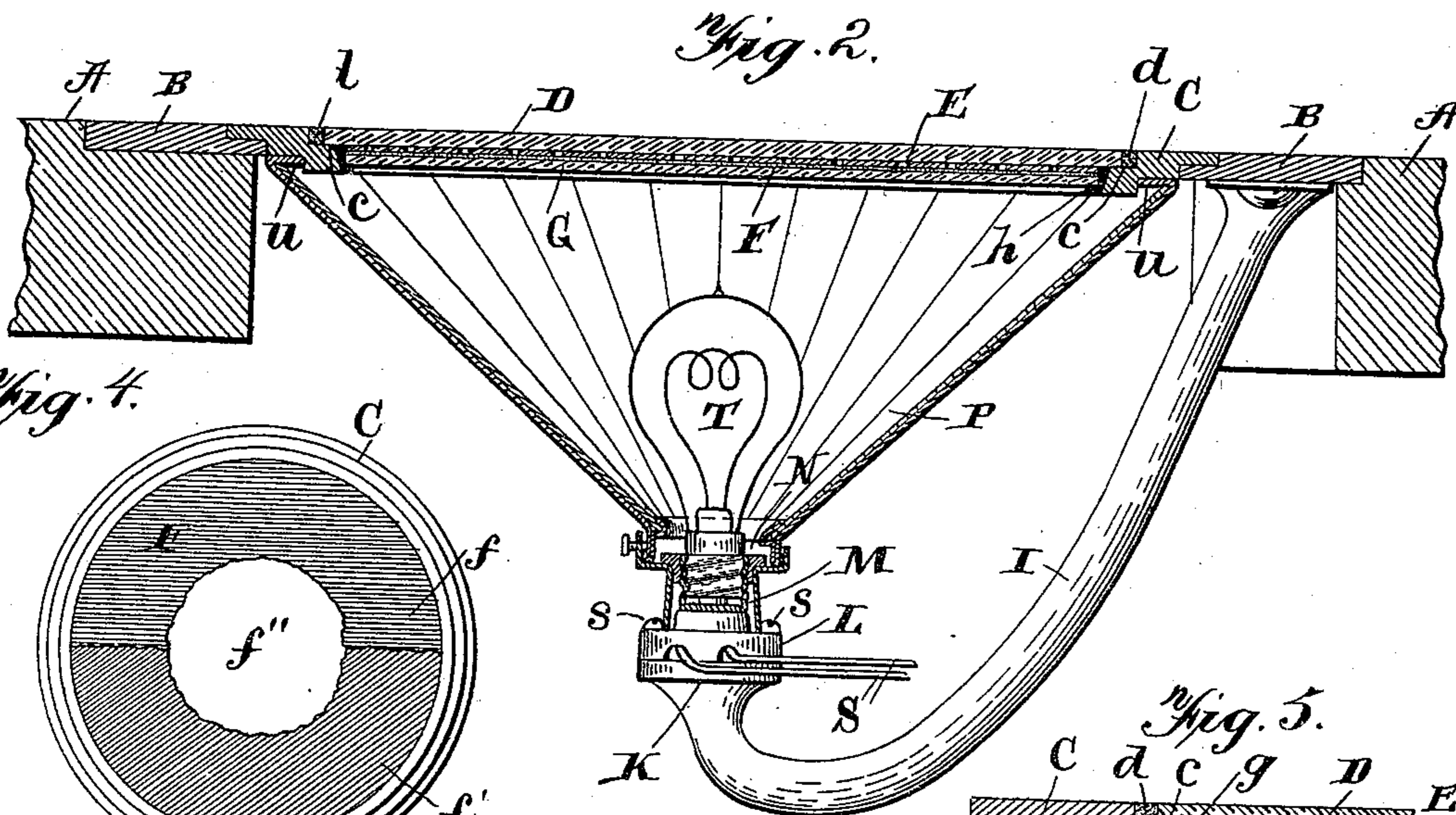
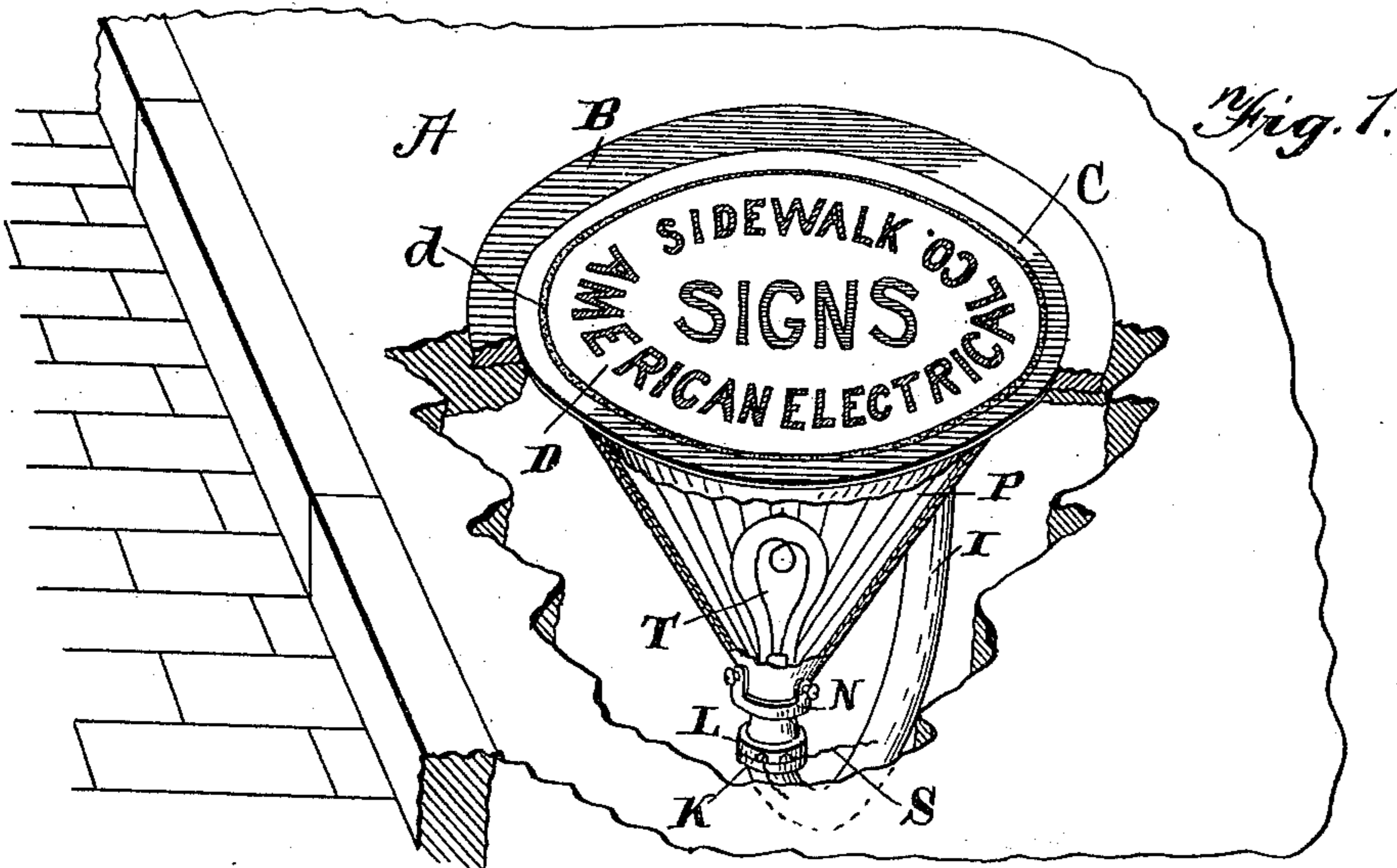
No. 640,140.

Patented Dec. 26, 1899.

J. E. LLOYD.
ELECTRICALLY ILLUMINATED SIGN.

(Application filed Oct. 13, 1899.)

(No Model.)



Witnesses
Geo. C. Trech.
Chas. P. Wright.

Inventor
John E. Lloyd,
by A. J. Pattison,
Attorney

UNITED STATES PATENT OFFICE.

JOHN E. LLOYD, OF CLEVELAND, OHIO.

ELECTRICALLY-ILLUMINATED SIGN.

SPECIFICATION forming part of Letters Patent No. 640,140, dated December 26, 1899.

Application filed October 13, 1899. Serial No. 733,529. (No model.)

To all whom it may concern:

Be it known that I, JOHN E. LLOYD, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented new and useful Improvements in Electrically-Illuminated Signs, of which the following is a specification.

My invention relates to improvements in electrically-illuminated signs, and pertains to a sign and an electrical lamp adapted to be arranged in a sidewalk, all of which will be fully described hereinafter.

In the accompanying drawings, Figure 1 is a perspective sectional view of my invention, showing it applied to a sidewalk over a cellar. Fig. 2 is an enlarged central vertical sectional view of Fig. 1. Fig. 3 is a vertical central sectional view showing my invention applied to an opening in a sidewalk where there is no cellar beneath it. Fig. 4 is a diagrammatical view of the transparent sheet for enabling me to give the letters of the sign different colors. Fig. 5 is an enlarged vertical sectional view through one side of the metal ring which carries the sign.

Referring now to the drawings, A is the sidewalk, in which there is an opening provided with the usual metal ring B, and fitting in this ring B is a ring C, which is constructed to carry the sign. The upper face of this ring C is provided with an annular recess forming an annular shoulder *c*, and resting upon this shoulder *c* is a thick glass D. This glass D is smaller in diameter than the recess forming the flange *c*, leaving a space around the edge of the glass for the reception of a suitable cement *d* for the purpose of making a water-tight joint between the glass and the plate C. Beneath the flange *c* the plate C is provided with a beveled edge *e*, preferably slightly inclined outward, as illustrated, and this additional thickness of the plate formed by the said beveled edge *e* is adapted to receive the sign and a retaining glass plate G.

The sign is composed of a sheet of cardboard E, which preferably has a black upper surface, thus making it practically opaque, and a transparent sheet of paper F, the cardboard E and the sheet F being shown in exaggerated thickness in Fig. 5 to more clearly show their relative arrangement in their operative positions. The cardboard E has cut in it the

letters constituting the sign, as illustrated in Fig. 1, and the transparent sheet F is situated under it, and these two are held in position by the glass G, the glass G in turn being held in position by means of putty *g*. By reference to Fig. 5 it is clearly shown that the glass, the cardboard, and the transparent sheet are preferably smaller in diameter than the annular space formed by the flange *c*, whereby there is a space for the reception of the putty *g* for the purpose of still further insuring the sign against any leak, and the putty is then extended outward horizontally, as shown at *h* in Fig. 5, for holding the glass, and consequently the cardboard and the transparent sheet, in position.

By reference to Fig. 4 it will be seen that the transparent sheet F is colored, as shown at *f* and *f'*, into any desired colors by a water or other transparent paint, and *f''* indicates the original color (white) of the transparent sheet. Applying this sheet in Fig. 4 to Fig. 1, it will be seen that the letters constituting the sign at the upper side thereof would be one color and the lower side another color, and at the center they would be white when a light is placed below the sign, as I will now explain.

Projecting from a suitable support is a supporting-arm I, here shown with its upper end attached to the plate B; but it may be attached to any other desired point of the under side of the sidewalk A when there is a cellar beneath. This support I is here shown in the form of a gooseneck, with its lower end K constructed to receive a porcelain base L of an incandescent-electric-lamp socket M, and which base L is secured thereto in any suitable manner, here shown by means of screws *s*. This porcelain base L supports the lamp-socket M, which in turn receives the incandescent lamp T, and the porcelain base L also supports a reflector-collar N, adapted to receive and support a reflector P. This reflector P is in the form of a truncated cone with its upper edge turned inward, as shown at *u*, and resting against the under side of the plate C, but which is supported entirely independent thereof. The wires S, which are electrically connected with the incandescent lamp T, are also connected in any desired manner to an electrical source, and when the

current is turned on the light is strongly reflected through the sign, which is clearly shown upon the sidewalk.

When it is desired to change the sign, it is only necessary to remove the plate G and the putty at the point *h*, which will then permit the cardboard and the transparent sheet to be removed and another cardboard with a different sign and the same or a differently-colored transparent sheet placed in position and the plate G again secured by putty.

When my invention is applied to a sidewalk where there is no cellar beneath it, an opening is cut therein, and inserted in this opening is preferably a box Q, as shown in Fig. 3, to the bottom R of which the porcelain base L of the lamp is secured, the porcelain base in turn supporting the lamp-socket and the reflector. The glass D is made sufficiently thick to support the weight of pedestrians, while it is yet transparent, and to permit the free passage therethrough of light passing through the openings in the cardboard E.

While I have here shown the sign round in form, it will be readily understood that in some cases it will be made of a rectangular or diamond shape or any other desired contour without departing from the spirit of my invention. So, also, if desired, the sign may be made a permanent one by painting it directly upon the glass instead of using the cut-out cardboard and transparent sheet heretofore described.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. An improved electrically - illuminated sign comprising a ring carrying a transparent sign adapted to be supported by the wall of an opening in a sidewalk, a burner supported at a point below the sign and project-

ing toward it, a support for said burner independent of the sign, and an upwardly-diverging reflector supported by the burner, the diverging end of the reflector of a size to practically fill the opening in the sidewalk and to completely embrace the said sign, substantially as described.

2. An improved electrically - illuminated sign for sidewalks comprising a burner and sign-supporting ring B supported by the wall of the opening in the sidewalk, a sign-supporting ring C supported by the ring B, a burner situated below the sign and projecting toward it, a support I having its upper end secured to and supported by the ring B and its lower end extending inward and upward toward the sign for supporting said burner, and a reflector supported by the said burner with its diverging end practically inclosing the opening in the sidewalk and completely inclosing the said sign, substantially as described.

3. A sidewalk-sign comprising a sidewalk having therein an opening for a burner and a reflector, a transparent sign closing the upper end of said burner and reflector opening, a burner situated within the opening, a reflector also situated within the opening and supported by the burner, the reflector diverging upwardly inclosing the upper end of the burner and reflector opening and completely embracing the transparent sign, and a support for the said burner, substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

JOHN E. LLOYD.

Witnesses:

K. H. HETTER,
GLENN E. GRISWOLD.