

No. 812,525.

PATENTED FEB. 13, 1906.

J. M. RATHSAM.
TRANSPARENT SIGN.
APPLICATION FILED AUG. 16, 1905.

FIG. 1.

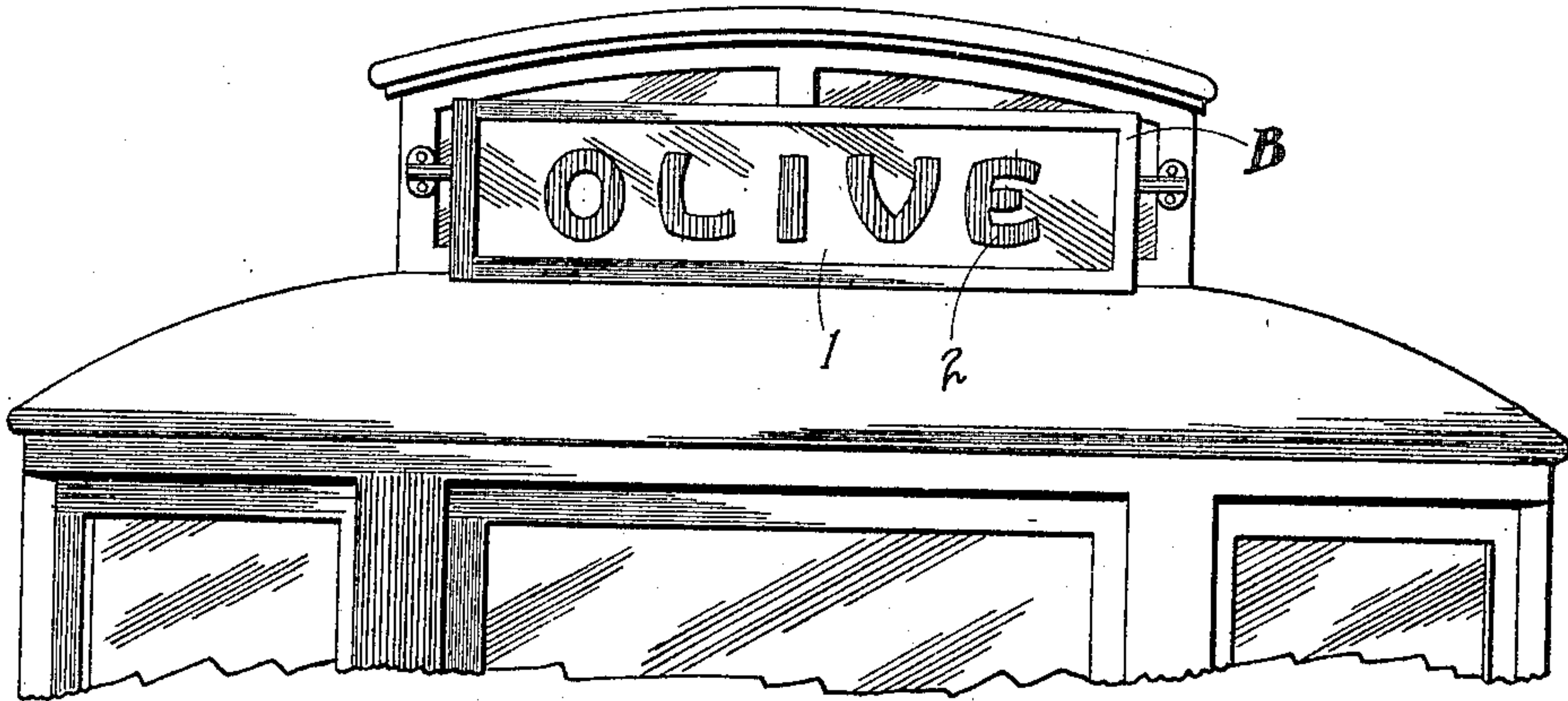


FIG. 2.

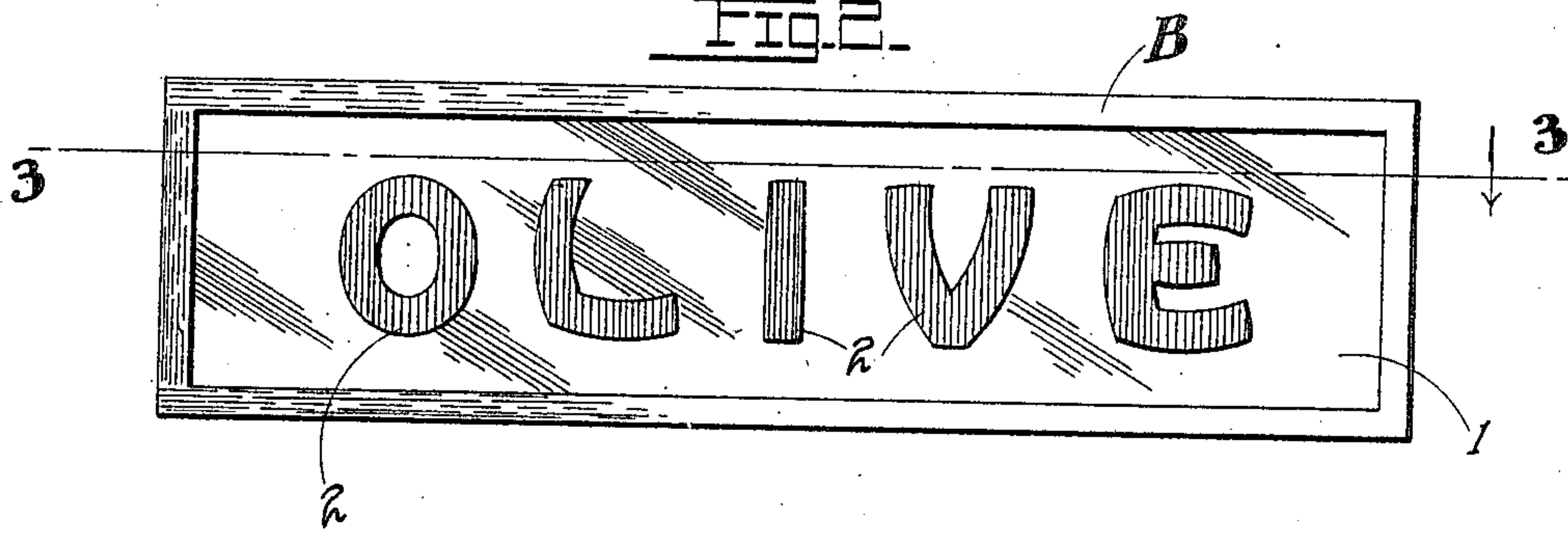


FIG. 3.

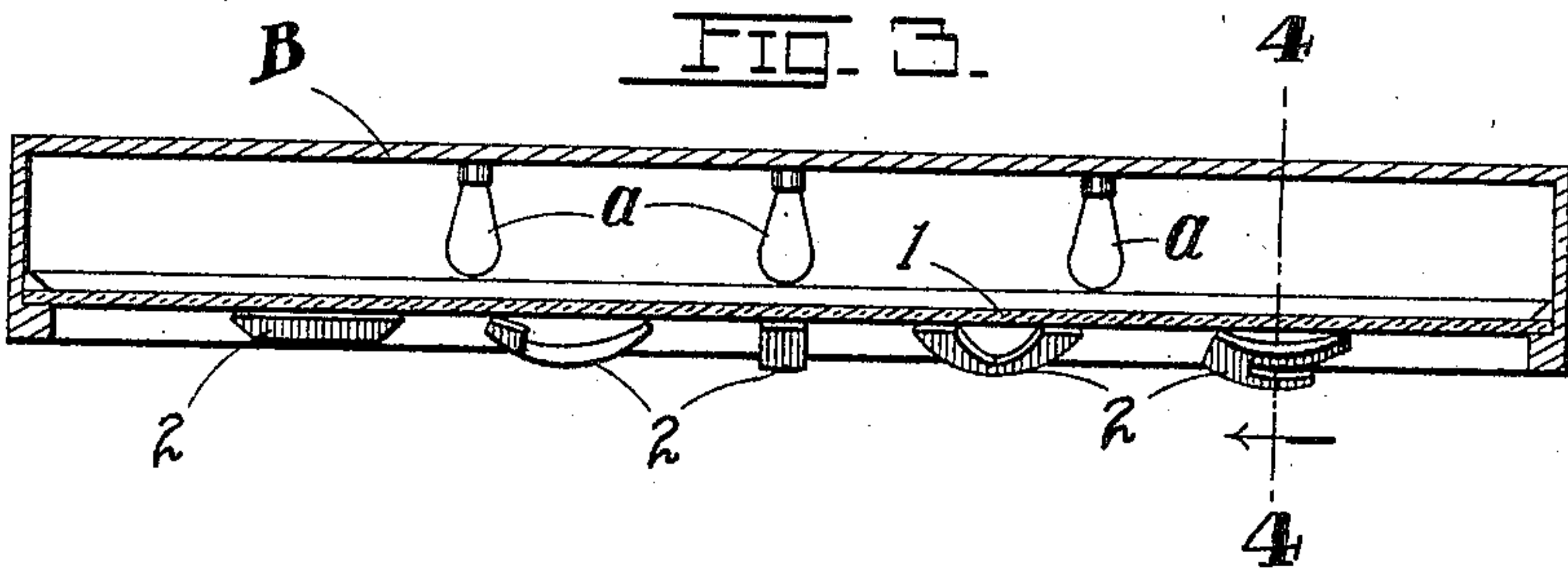


FIG. 4.

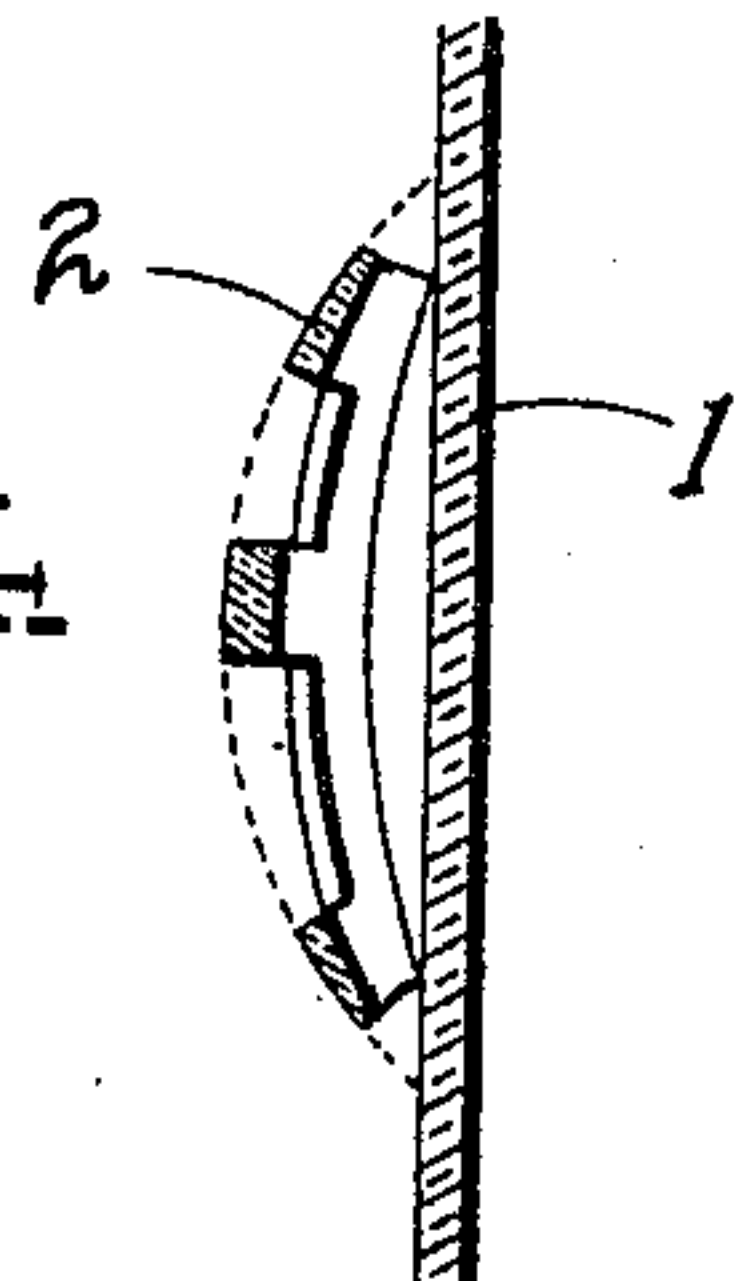


FIG. 6.

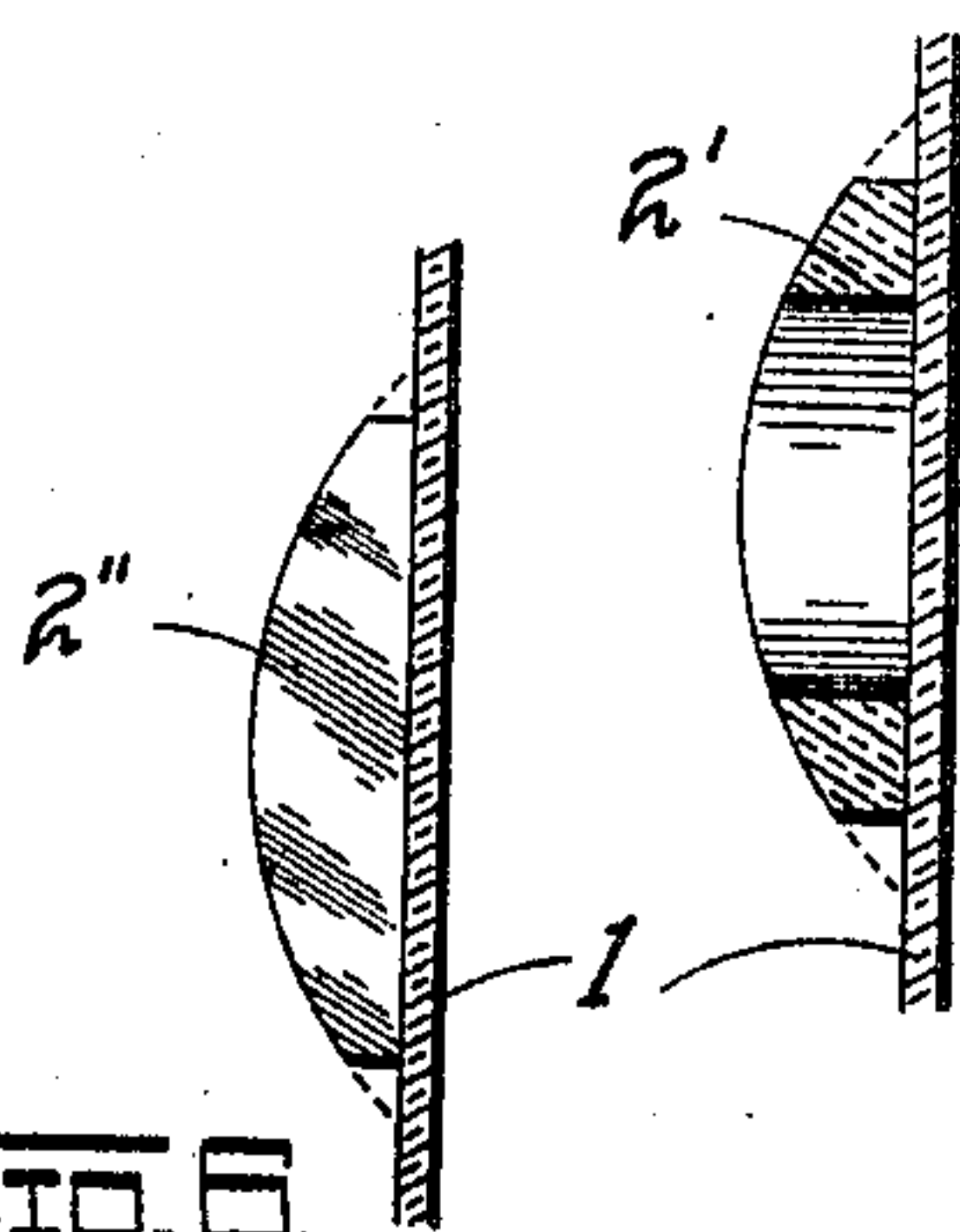
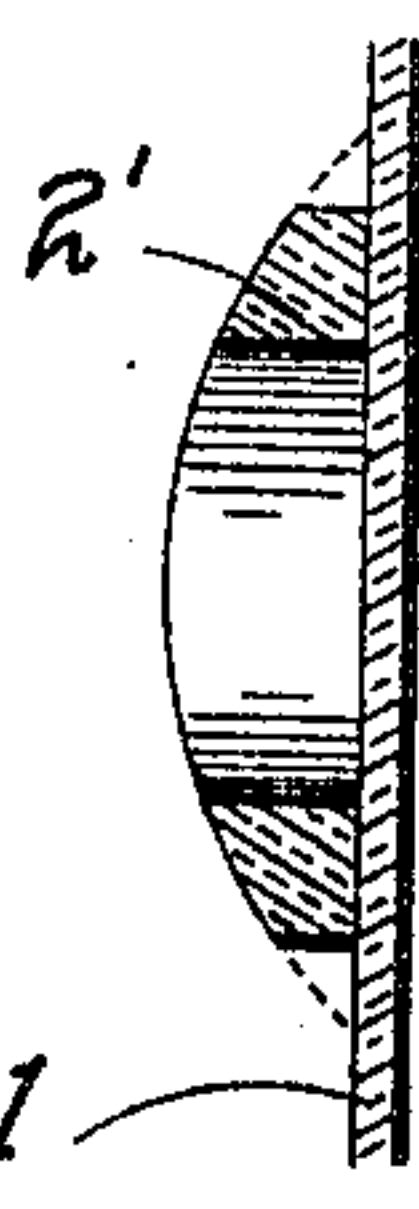


FIG. 5.



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TRANSPARENT SIGN.

No. 812,525.

Specification of Letters Patent.

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Application filed August 16, 1905. Serial No. 274,452.

To all whom it may concern:

Be it known that I, JOHN M. RATHSAM, a citizen of the United States, residing at St. Louis, State of Missouri, have invented certain new and useful Improvements in Transparent Signs, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention has relation to improvements in illuminated transparent signs; and it consists in the novel construction of sign more fully set forth in the specification and pointed out in the claims.

In the drawings, Figure 1 is an elevation of one end of a street-car, showing my invention applied thereto. Fig. 2 is a front elevation of the sign. Fig. 3 is a horizontal section on the line 3 3 of Fig. 2. Fig. 4 is a transverse vertical section on the line 4 4 of Fig. 3. Fig. 5 is a vertical sectional detail of the letter "O," showing a modified form of lettering; and Fig. 6 is a side elevation of the letter "I," showing a like modification.

The object of my invention is to construct a sign with glass letters or equivalent characters mounted on a transparent background of glass or equivalent diaphanous, translucent, or transparent material, the color of the characters not only to contrast with that of the background, but having imparted thereto a lens-shaped formation whereby they may readily be distinguished and readable at great distances.

In detail the invention may be described as follows: Referring to the drawings, and particularly to Figs. 1 to 4, inclusive, B represents a suitable box, and *a a* series of incandescent lights to produce the illumination. The front panel 1 of the box is composed of a transparent, frosted, or equivalent plate of glass or equivalent diaphanous material, to the outer face of which are welded or otherwise secured the glass or equivalent diaphanous characters 2, which are of a contrasting color from that of the plate 1. In the present instance they are shown red, though of course any available or desirable color may be substituted. The opposite faces of each character or letter are disposed along the faces of a lens, the complete outline of which

is indicated by dotted lines in Fig. 4, the species of lens to which the present characters belong being the concavo-convex. In the section shown in Fig. 4 the letter "E" of the sign is shown in vertical section. The characters may, however, belong to any other species of lens formation—as, for example, the plano-convex, as shown in the section of the character 2', representing the letter "O" in Fig. 5, and in the corresponding section of the character 2'', representing the letter "I" in Fig. 6. Each character thus becomes a lens of a species depending on the curvature of its opposite faces, or at least it constitutes a character excised from a lens-shaped body belonging to a species which the curvatures of its reflecting faces determine for it. Each character, therefore, acting as a lens will serve to disperse its rays to a great distance, and being of a color which contrasts with the transparent background it follows that the sign may be read at a great distance.

While I have shown my improvement as applied to street-cars, it is obvious that it may be used in any connection where illuminated signs are employed.

Having described my invention, what I claim is—

1. A sign comprising a suitable background, and readable lens-shaped characters disposed in front of the same, substantially as set forth.

2. A sign comprising a suitable diaphanous background, and readable lens-shaped diaphanous characters of a contrasting color disposed in front of the same, substantially as set forth.

3. A sign comprising a suitable box, a diaphanous plate forming a wall thereof and constituting a suitable background, means for introducing artificial light behind said plate, and a series of diaphanous readable lens-shaped characters of a contrasting color disposed on the outer face of the background, substantially as set forth.

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

JOHN M. RATHSAM.

Witnesses:

EMIL STAREK,

MARY D. WHITCOMB.