

No. 793,948.

PATENTED JULY 4, 1905.

P. McDONALD.
ILLUMINATED SIGN.
APPLICATION FILED AUG. 31, 1904.

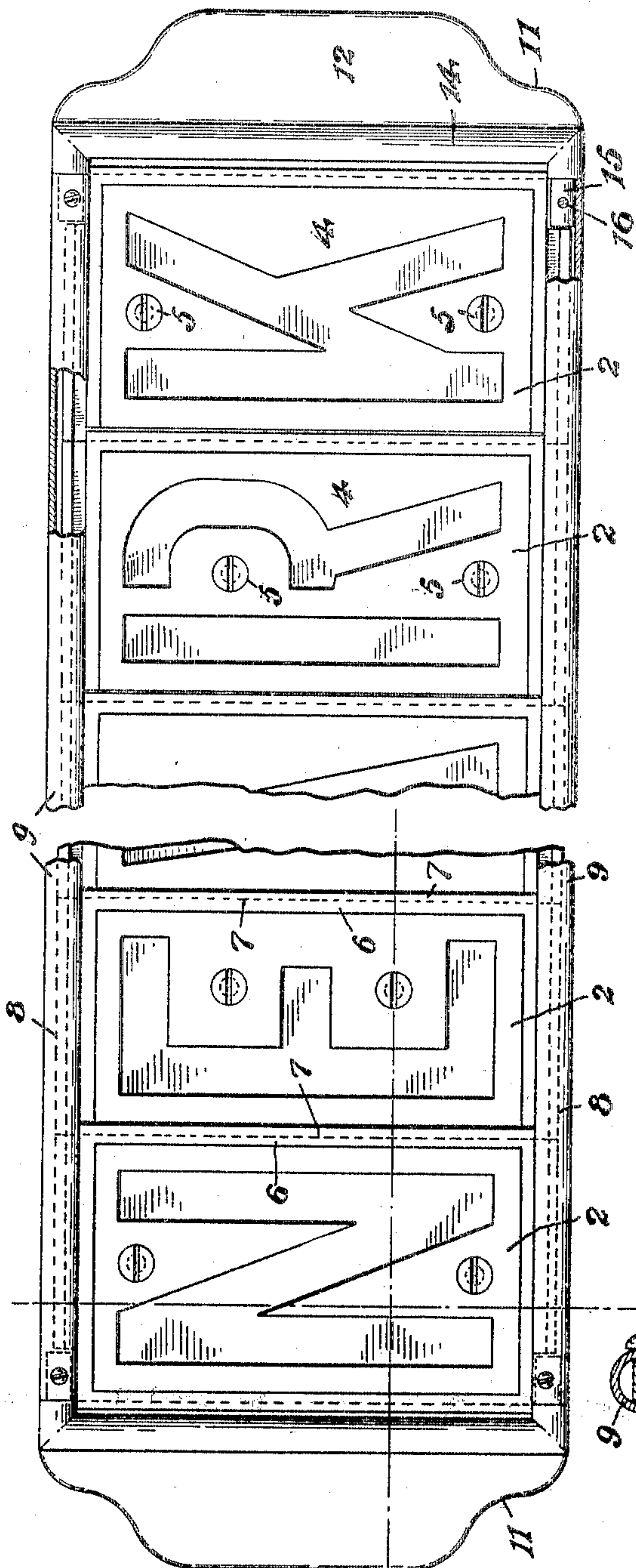


Fig. 1.

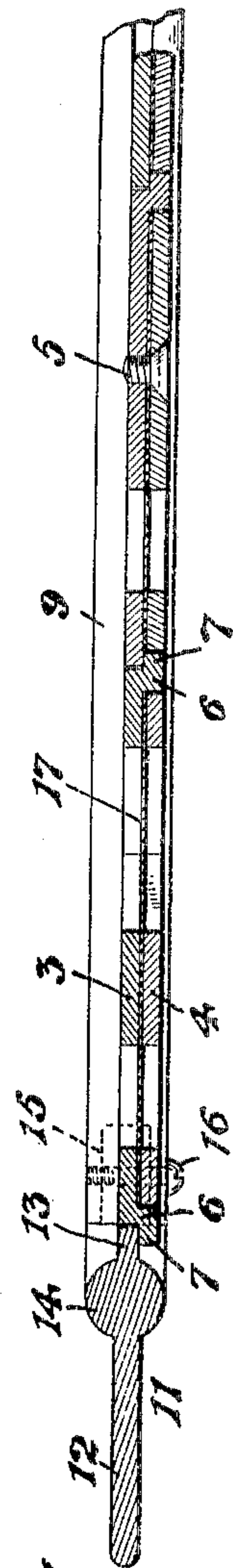


Fig. 2.

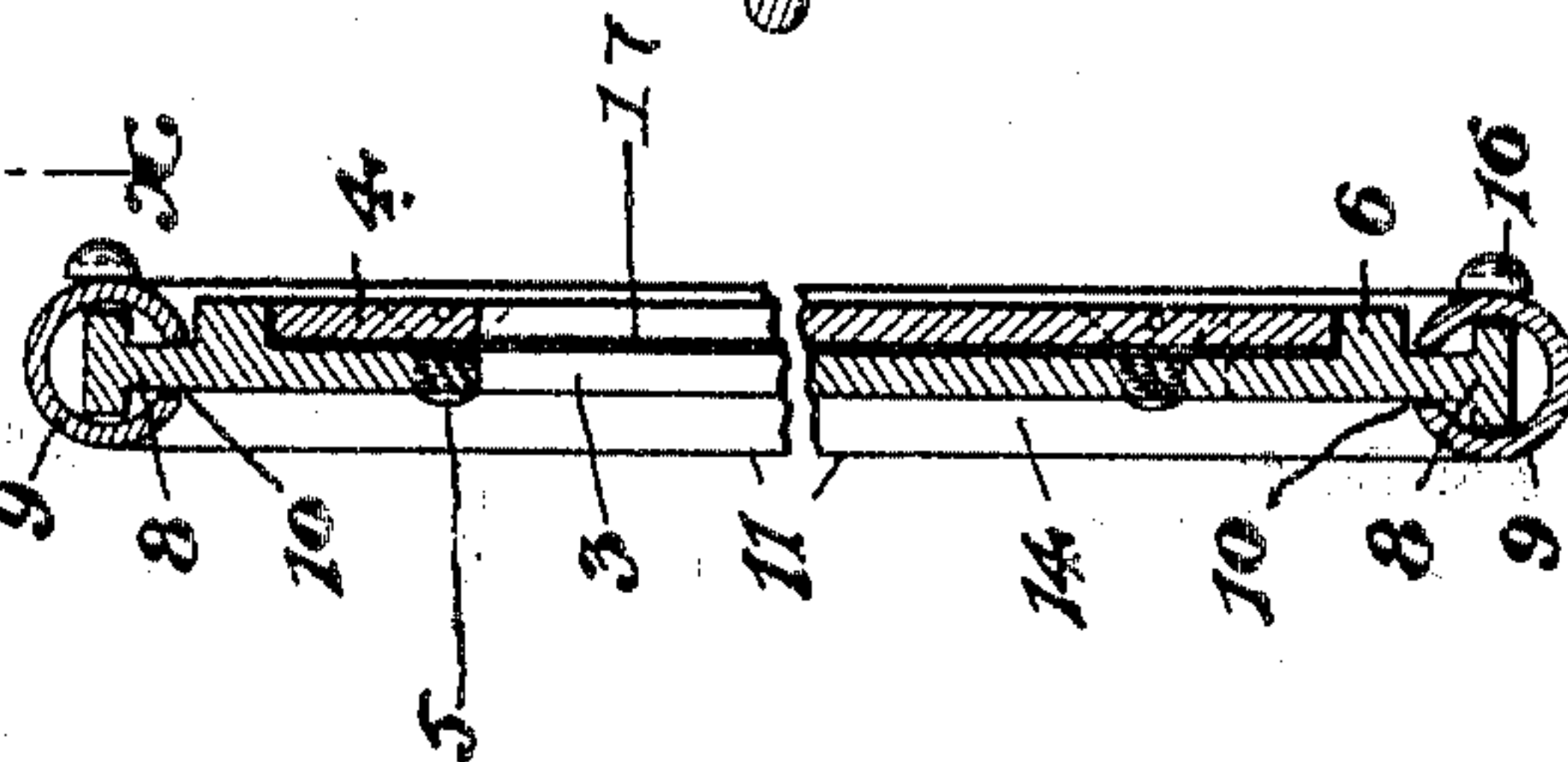


Fig. 3.

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PETER McDONALD, OF HARRISON, NEW JERSEY.

ILLUMINATED SIGN.

SPECIFICATION forming part of Letters Patent No. 793,948, dated July 4, 1905.

Application filed August 31, 1904. Serial No. 222,805.

To all whom it may concern:

Be it known that I, PETER McDONALD, a citizen of the United States, residing at Harrison, in the county of Hudson and State of New Jersey, have invented certain new and useful Improvements in Illuminated Signs; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to numerals of reference marked thereon, which form a part of this specification.

This invention relates to illuminated destination-signs for street-cars of the class represented by the one shown in my prior application for patent, filed March 29, 1904, Serial No. 200,542; and the objects of the present improvements are to secure an improved construction of such signs, to render possible the making up of larger signs than could be cast in a single piece under my prior application, to secure a sign which can be made up from units, to provide an improved frame for locking said units together, and to secure other advantages and results, some of which may be hereinafter referred to in connection with the description of the working parts.

The invention consists in the improved illuminated sign and in the arrangements and combinations of parts of the same, all substantially as will be hereinafter set forth, and finally embraced in the clauses of the claim.

Referring to the accompanying drawings, in which like numerals of reference indicate corresponding parts in each of the several figures, Figure 1 is a front elevation of a sign of my improved construction. Fig. 2 is a vertical cross-section of the same on line *x*, Fig. 1, and Fig. 3 is a longitudinal section taken upon line *y*, Fig. 1.

In said drawings, 2 2 2, &c., indicate the units of my improved sign, each shown as representing a single letter, although it is obvious that anything whatever might be displayed upon a unit. Each unit comprises a back piece or plate 3 and a front plate 4, both having the letter or other symbol to be displayed cut therein so as to exactly coincide.

Between said back and front plates is placed a piece 17 of celluloid or other material adapted to permit to some extent the passage of light, the plates being held together by means of screws 5. Furthermore, the back plate is provided at its margins with a rib 6, equal in thickness to the front plate 4, and said front plate is sufficiently smaller than the back plate to lie within said rib 6.

Preferably each unit has at its lateral up-right edges flanges 7, adapted to overlap on the corresponding flanges of the adjacent units and prevent the passage of light through the joints between the units. At its top and bottom edges the back plate 3 has T-ribs 8, and thus when several units have been placed together to form a sign top and bottom tubular connecting-rods 9, having longitudinal slots 10 at one side, are slid upon the upper and lower edges of the sign to hold said units together. The heads of the T-shaped ribs 8, it will be understood, lie within the tubular rods 9 and their necks in the slots 10 of said tubes. Preferably this construction is secured, as shown in the drawings, by longitudinally grooving the rib 6 adjacent to the edge of the units, so as to reduce the thickness thereat and provide the second or marginal rib 8 outside said groove. The slot 10 of the connecting-rod then receives such reduced portions of the units, an edge of the tube lying in the grooves and the marginal ribs 8 of the units being inclosed within the said tube or connecting-rod. For connecting the said tubes 9 at their ends, and thus completely surrounding the units by fastening means, end pieces 11 are employed, each comprising a fin or finger-piece 12, adapted to lie in the plane of the sign and extend across its end. The opposite edge 13 of the end piece 11 is arranged to overlap with the adjacent unit, and next to said edge is a rib 14, which simulates in appearance the top and bottom rods 9. In line with this rib and at the ends of the edge 13 of the end piece are projections or plugs 15, adapted to enter the ends of the top and bottom tubular rods 9 and receive fastening pins or screws 16.

Any suitable means common in the art may be employed for supporting my improved sign.

Obviously by the construction herein described a sign can not only be made sectional, but, furthermore, my construction shown in the prior application above referred to can be extended to the making of large signs. Unless, however, a sectional construction is provided, as shown, the limit of casting the thin front and back plates would prevent anything but small signs being made.

Having thus described the invention, what I claim as new is—

1. In an illuminated sign, the combination of units each comprising front and back plates having coinciding apertures of any desired design formed in themselves, a middle plate comprising a single integral piece lying between said front and back plates and adapted to permit the passage of light through itself, screws passing through the front and middle plates and screwing into the back plate to bind all three of said plates together and form a single sign while permitting their ready separation for repairs or renewal of the middle plate, and means for holding said units together.

2. In an illuminated sign, the combination of units each comprising correspondingly-apertured front and back plates one of which provides a lateral recess at its side next the other, a middle plate seated in said recess between the front and back plates and adapted to permit the passage of light through itself, clamping-screws binding all three of said plates together to form a single sign while permitting their ready separation for repairs or renewal of the middle plate, and means for holding said units together.

3. In an illuminated sign, the combination of units each comprising correspondingly-apertured plates one of which provides a lateral recess forming a seat for the other, a middle plate arranged in said recess between the front and back plates and adapted to permit the passage of light through itself, clamping-screws binding all three of said plates together to form a single sign while permitting their ready separation for repairs or renewal of the middle plate, and means for holding said units together.

4. In a sign, the combination with display units each being reduced in thickness near its edge to form a groove with a marginal rib beyond, of a tubular rod longitudinally slotted at its side to receive the said reduced portion of the units, the marginal ribs of the units being contained within the tubular rod and an edge of said tube at its slot lying in the groove of the units.

5. In an illuminated sign, the combination with an opaque supporting part having translucent portions forming a design thereon, said

supporting part having an enlargement or rib at its edge coextensive with said edge, of a tubular rod longitudinally slotted at its side and adapted to receive and inclose the said rib of the supporting part, whereby a light-tight joint is provided.

6. In an illuminated sign, the combination with a plurality of units each having an opaque supporting part with translucent portions forming a design thereon, said supporting part having an enlargement or rib at its edge coextensive with said edge, of a tubular rod longitudinally slotted at its side and adapted to receive and inclose the said rib of the supporting part, and an opaque end piece adapted to connect to the said rod and overlap the end unit, whereby a light-tight mounting of the units is secured.

7. In an illuminated sign, the combination with a plurality of units each having an opaque supporting part with translucent portions forming a design thereon, said supporting part having at two of its opposite edges enlargements or ribs coextensive with said edges, of opposite tubular rods each slotted longitudinally at one side and adapted to receive and inclose the said ribs or enlargements of the units, and opaque end pieces adapted to overlap the end units and having at the opposite ends of such overlapping portions projections adapted to enter the tubular bore or passage of the said rods, and means for preventing withdrawal of said projections from said rods.

8. In an illuminated sign, the combination of units each comprising an apertured back plate having a lateral recess in one face and flanges at its side edges, a middle plate adapted to permit the passage of light and a front plate apertured to correspond to the back plate, both said middle and front plates lying in said recess of the back plate and the flanges of one unit overlapping those of the next adjacent units, and a frame holding said units together.

9. In a sign, the combination with units having T-ribs at two opposite edges, and tubular rods longitudinally slotted at one side to receive said ribs and inclose the heads thereof, of end pieces each having projections or plugs adapted to fit the tubular bore or passage of the said rods, and means for preventing longitudinal withdrawal of said plugs or projections.

In testimony that I claim the foregoing I have hereunto set my hand this 25th day of August, 1904.

PETER McDONALD.

Witnesses:

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