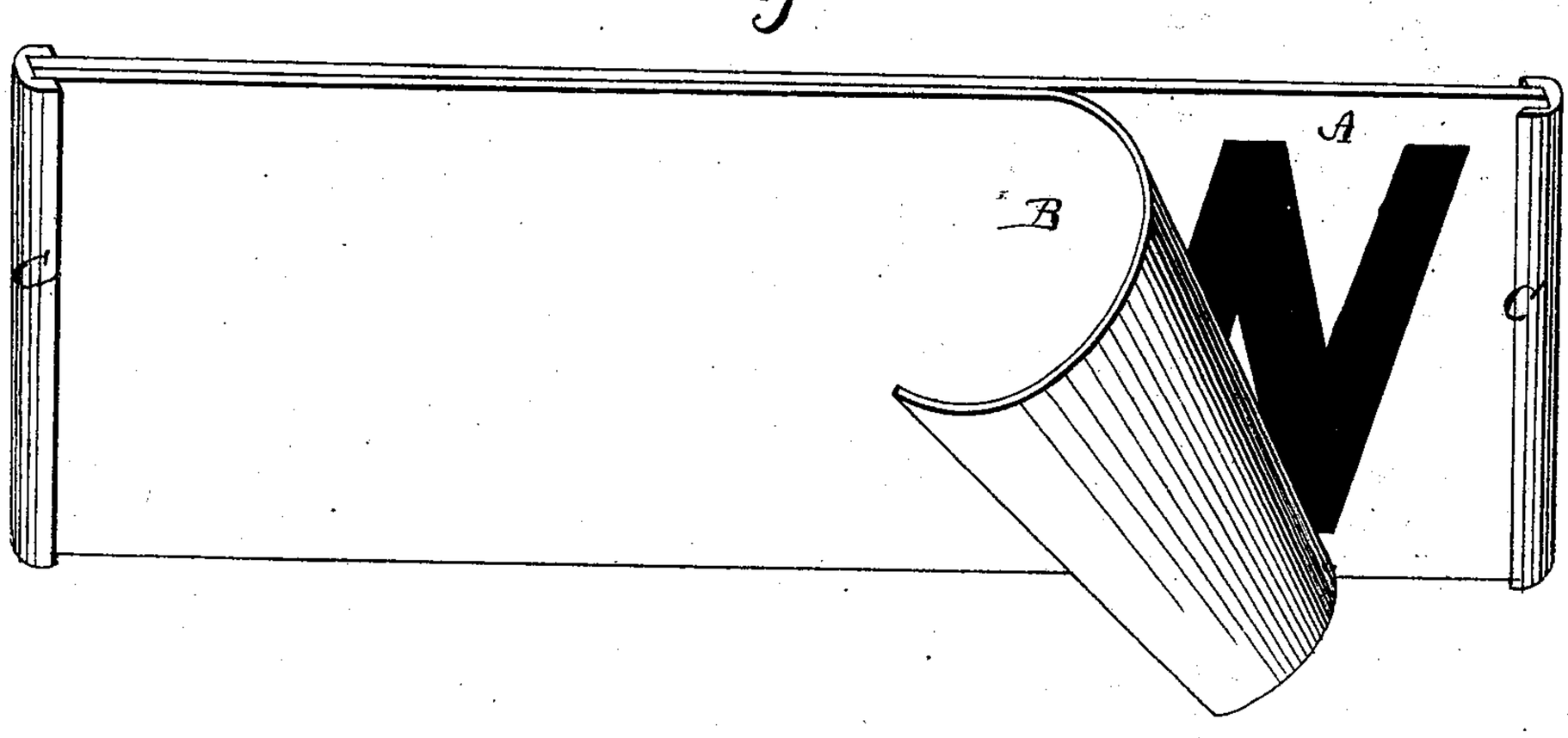
J. C. WALL.
Signs.

No. 197,431. Patented Nov. 20, 1877.

Fig. 1.

Fig. 2.



WITNESSES
H. Aubrey Boutwin
C. L. Ewert.

INVENTOR
John C. Wall.
By Alexander Hudson
Attorneys

UNITED STATES PATENT OFFICE.

JOHN C. WALL, OF WASHINGTON, DISTRICT OF COLUMBIA, ASSIGNOR OF ONE-THIRD OF HIS RIGHT TO ARTHUR E. MILEY, OF SAME PLACE.

IMPROVEMENT IN SIGNS.

Specification forming part of Letters Patent No. **197,431,** dated November 20, 1877; application filed August 2, 1876.

To all whom it may concern:

Be it known that I, JOHN C. WALL, of Washington, in the county of Washington, and in the District of Columbia, have invented certain new and useful Improvements in Signs; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

In my improved sign the letters are formed upon a sheet of mica, which being transparent, the sign can be read from either side. To insure the durability of such sign, however, I seal the lettered side of the sheet by a second sheet of mica, the union of the two mica sheets being made by a suitable transparent cement, so that practically the two sheets will be so closely and compactly united as to be integral, thereby preventing the separation along the line of the letters or at other points, and effectually excluding dampness and rain, the entrance of which between the sheets would render the letters liable to be defaced by discoloration, and the contiguous surfaces of the sheets to become marred by streaks of dust, which would be liable to be blown in between the sheets were they simply held together by the border clasps or strips of metal clamping the edges. The important advantage, however, of the sealing element is to render the junction of the mica sheets water and air tight, and to prevent surface-puckering. The two sheets being united solidly, moreover, allows the sign to be curved, to adapt it, for instance, to globe lamps, and in such case to prevent the abrasion of the letters, which would be liable to occur if the sheets were separate and held together by edge-clamp strips only.

I find in practice that the re-enforcing edge-clamps are not sufficient to seal the junction of separate sheets, nor to exclude moisture, water, or dust, as the joining of such strips cannot be made sufficiently tight, and particularly when the sign is bent or curved, because the metallic border will pucker at points sufficient to allow water and dust to enter between the separate sheets, and I simply use the metal edge-clamps to give sufficient stiffness to the sign, and to form a binding for the edges of the sheets. By this sealed-surface union of the mica sheets I am also enabled to frost the inner surface of one or both the sheets before solidifying them, and by this means give greater prominence to the letters, and effectually protect the frosting.

In the drawings, Figure 1 represents my improved mica sign; Fig. 2, a view, showing a portion of one of the sheets turned out at one end to expose the interior lettered surface of the other sheet.

The sign is adapted for street-lamps, door-transoms, tags for botanical gardens, and for other purposes.

The letters are formed upon the interior surface of one or two sheets, A B, of mica or isinglass, in transparent signs. I then prepare these sheets by transparent cement, washed on the surfaces to be joined and over the letters thereon, and unite them by pressing them together, so as to exclude the air and solidify them as of a single sheet, and prevent the entrance of air, water, or dust to the lettered surface, and avoid all the disadvantages which would result therefrom. The two sheets thus made integral preserve the letters as long as the sign will last, and allow it to be bent to suit different uses without springing or puckering the sheets, and without abrading the letters.

For ordinary signs I use the frosting for the purpose of bringing out more prominently the letters. The same protection given the letters also protects the frosting and renders it equally durable, as neither the letters nor the frosting are affected by the elements or by cleaning.

I use the metallic binding to protect the edges of the sign, and to give it sufficient stiffness with the necessary flexibility. The binding-strips may extend around all the sides, or be applied only at the ends or corners, as they serve no function in uniting or holding the sheets together.

The letters and the frosting may be of any desired color.

I claim—

1. A sign composed of separate mica sheets, solidified or made integral by tranparent ce-

ment, having the letters on the inner surface of such mica sheet, for the purposes stated.

2. A sign composed of separate mica sheets, solidified or made integral by transparent cement with the letters on the inner surface of such mica sheet, and with frosting between them for isolating the letters, whereby the letters may be made more prominent, as herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 1st day of August, 1876.

JOHN C. WALL.

Witnesses:
M. L. STOWELL,
C. L. EVERT.