(Specimens.)

## D. MACDONALD.

STGN PLATE

No. 396,704.

Patented Jan. 22, 1889.

Fig. 1

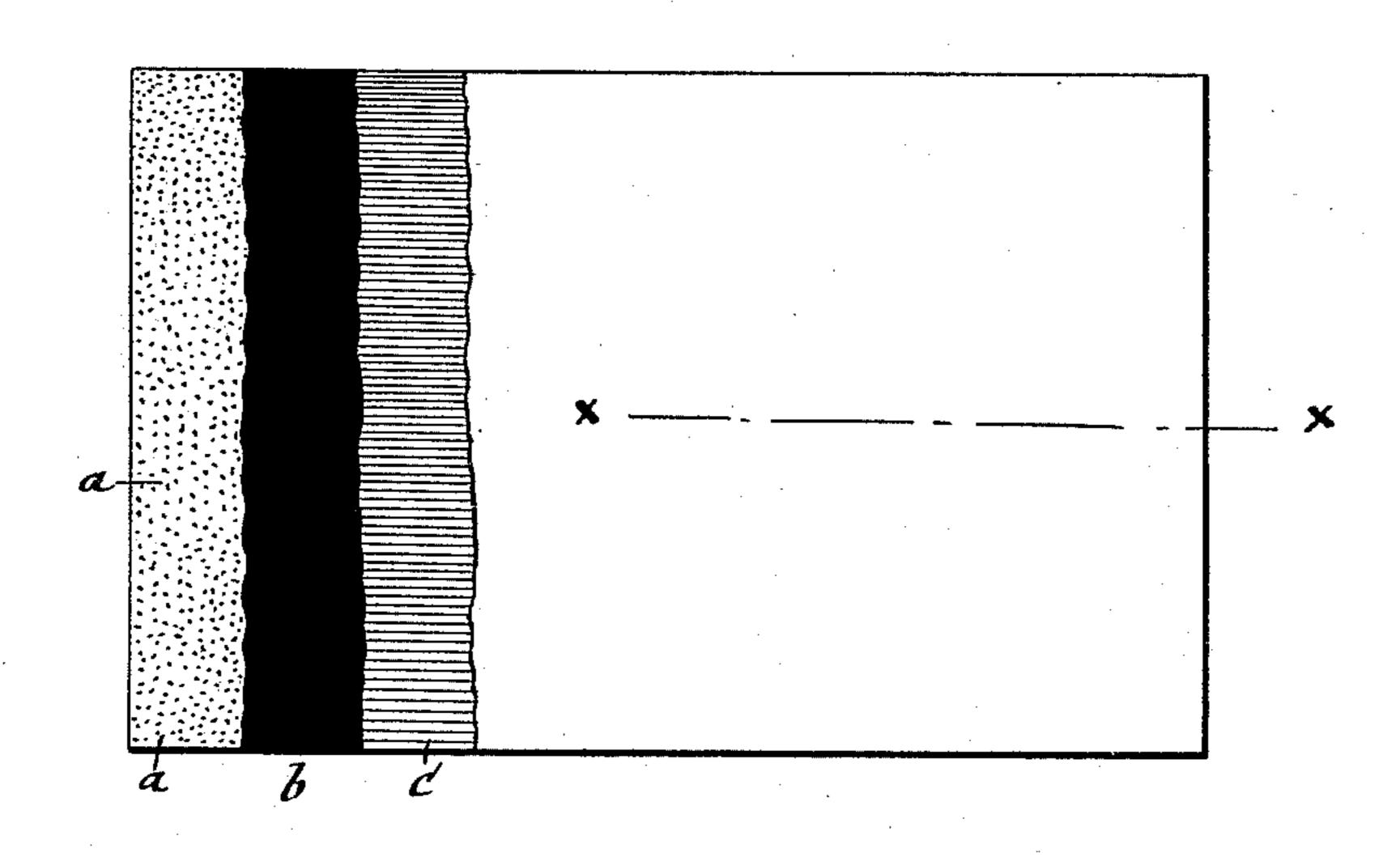


fig. 2.

 $\frac{c}{b} = \frac{c}{a}$ 

WITNESSES:

Fr. N. Rosenbaum.

INVENTOR,

Savid Macdonald

ATTODNEVS

## United States Patent Office.

DAVID MACDONALD, OF TORONTO, ONTARIO, CANADA, ASSIGNOR TO WIL-LIAM STONE, OF SAME PLACE.

## SIGN-PLATE.

SPECIFICATION forming part of Letters Patent No. 396,704, dated January 22, 1889.

Application filed April 11, 1888. Serial No. 270,261. (Specimens.)

To all whom it may concern:

Be it known that I, DAVID MACDONALD, of Toronto, in the Province of Ontario and Dominion of Canada, have invented certain new 5 and useful Improvements in Sign-Plates, of

which the following is a specification.

This invention relates to an improved signplate in which a metal foundation plate or backing is combined by an intermediate layer 10 of cement with a face layer of paper, said paper being sized and varnished, said signplate being specially adapted for lithographic work, such as show-eards, advertising-pictures, and the like; and the invention consists 15 of a sign-plate composed of a metal foundation plate or backing having a porous or roughened surface, an intermediate layer of cement, and a face layer of sized and varnished paper united with said foundation-20 plate by pressure.

In the accompanying drawings, Figure 1 represents a front view of my improved signplate with the parts of the different layers successively broken away; and Fig. 2 is a 25 vertical transverse section on line x x, Fig. 1.

Similar letters of reference indicate corre-

sponding parts.

In the drawings, a represents a metal foundation plate or backing, the surface of which is 30 made porous by treating it with a suitable acid. On this porous surface a layer, b, of cement, consisting, preferably, of a mixture of fine varnish—such as used by coach-builders—and zinc-white, is uniformly spread, and 35 then a layer, c, of paper printed in suitable |

colors placed thereon and embodied therewith by strong pressure in a suitable press. To protect the surface of the face layer, it is sized, and finally coated with varnish. By the pressure exerted on the different layers 40 the paper is thoroughly amalgamated by the intermediate layer of cement with the porous or prepared surface of the plate, so that it is impossible to peel it off. The sizing and varnishing protects the surface, so that it can 45 be handled, shipped, and exposed to moisture in the same manner as the metal sign-plates on which the pictures have been painted or otherwise fixed.

Having thus described my invention, I claim 50 as new and desire to secure by Letters Patent-

1. A sign-plate composed of a metal foundation plate or backing having a porous or roughened surface, an intermediate layer of cement, and a face layer of paper united with 55 the foundation-plate by pressure, substantially as set forth.

2. A sign-plate composed of a metal foundation plate or backing having a porous or roughened surface, an intermediate layer of 60 cement, and a face layer of sized and varnished paper united with the foundation-plate by pressure, substantially as set forth.

In testimony that I claim the foregoing as my invention I have signed my name in pres- 65 ence of two subscribing witnesses.

DAVID MACDONALD.

Witnesses:

ANDREW ALLAN, W. A. MITCHELL.