

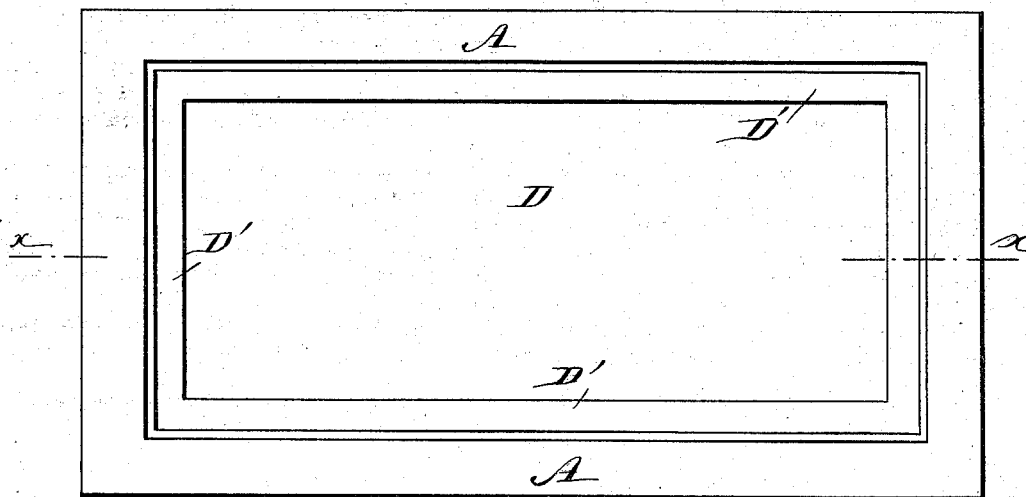
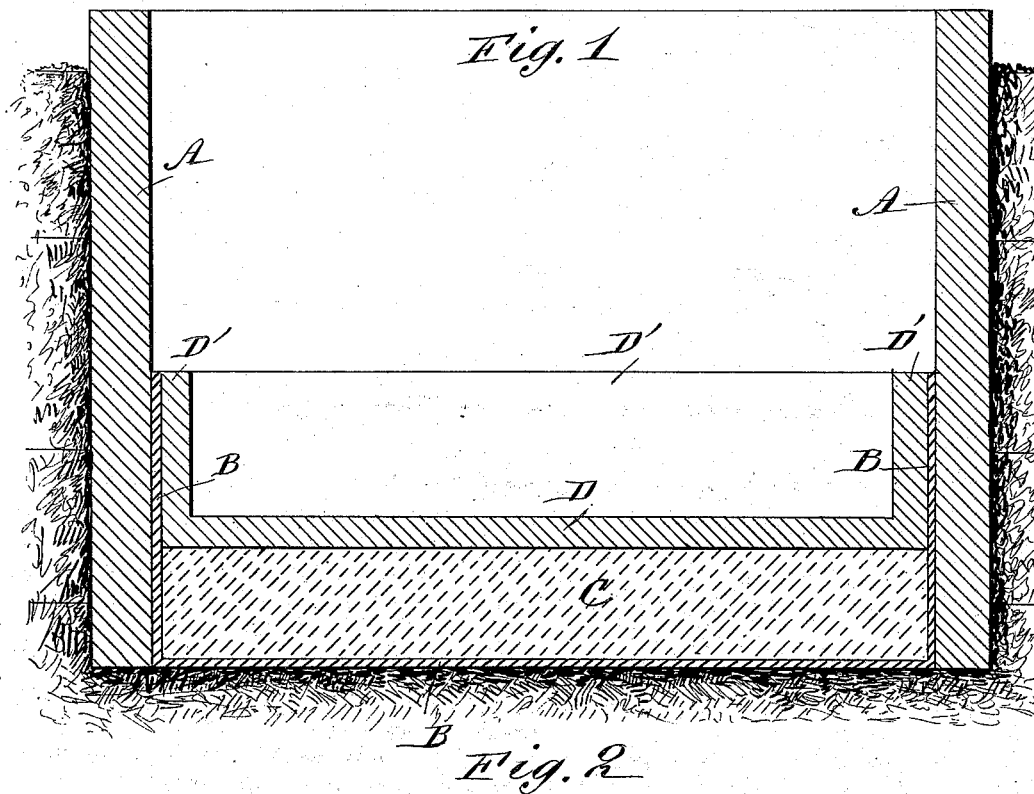
(No Model.)

F. J. DE BORGER.

RENDERING CELLARS WATER PROOF.

No. 385,103.

Patented June 26, 1888.



WITNESSES:

C. Xerox
to Bedgwick

INVENTOR:

F. J. DeBorger
BY *Munn & Co*

ATTORNEYS.

UNITED STATES PATENT OFFICE.

FRANK JOHN DE BORGER, OF BABYLON, ASSIGNOR OF ONE-HALF TO TIMOTHY F. NEVILLE, OF NEW YORK, AND SAMUEL MORAN, OF BABYLON, NEW YORK.

RENDERING CELLARS WATER-PROOF.

SPECIFICATION forming part of Letters Patent No. 385,103, dated June 26, 1888.

Application filed May 6, 1886. Serial No. 201,393. (No model.)

To all whom it may concern:

Be it known that I, FRANK JOHN DE BORGER, of Babylon, in the county of Suffolk and State of New York, have invented a new and
5 Improved Water-Proof Metallic Lining for Cellars, &c., of which the following is a full, clear, and exact description.

Reference is to be had to the accompanying drawings, forming a part of this specification, in
10 which similar letters of reference indicate corresponding parts in both the figures.

Figure 1 is a sectional elevation of a cellar or other excavation having my invention applied thereto, taken on the line *xx* of Fig. 2;
15 and Fig. 2 is a plan view of the same.

The invention will first be described in connection with the drawings, and then pointed out in the claims.

A A represent cellar walls of masonry built
20 at the side of an excavation in the ground. At the bottom of the excavation is placed a water-tight casing, B, composed of plates of metal united to form a continuous bottom, and vertical side walls to fit against the walls, A, of
25 masonry. Upon the bottom of the metal casing B is placed the layer or bed, C, of gravel, sand, or dry earth, and upon this is the floor D, of cement, wood, or brick, formed with
30 vertical walls D' to the height of the walls of the metal casing B.

In some cases the metal casing B may be placed beneath and outside of the masonry A, as indicated in dotted lines in Fig. 2.

My invention is applicable also to mines and tunnels, but more particularly to cellars
35 and engine-rooms beneath pavements and in analogous situations.

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

1. The combination, with an excavation or cellar and the walls, A, of masonry, of a water-tight metallic casing, B, formed with a continuous bottom and vertical walls which fit
40 against the walls of masonry, substantially as described.

2. The water-tight metallic casing B, fitted at the bottom of the excavation and against the walls, A, of masonry, in combination with the bed, C, of gravel, and the floor D and vertical
50 walls D', built upon the bed C, substantially as described.

Dated at Babylon, Suffolk county, and State of New York, this 29th day of April, 1886.

FRANK JOHN DE BORGER.

Witnesses:

JOHN BOELKER,
ROBERT HARWOOD.