

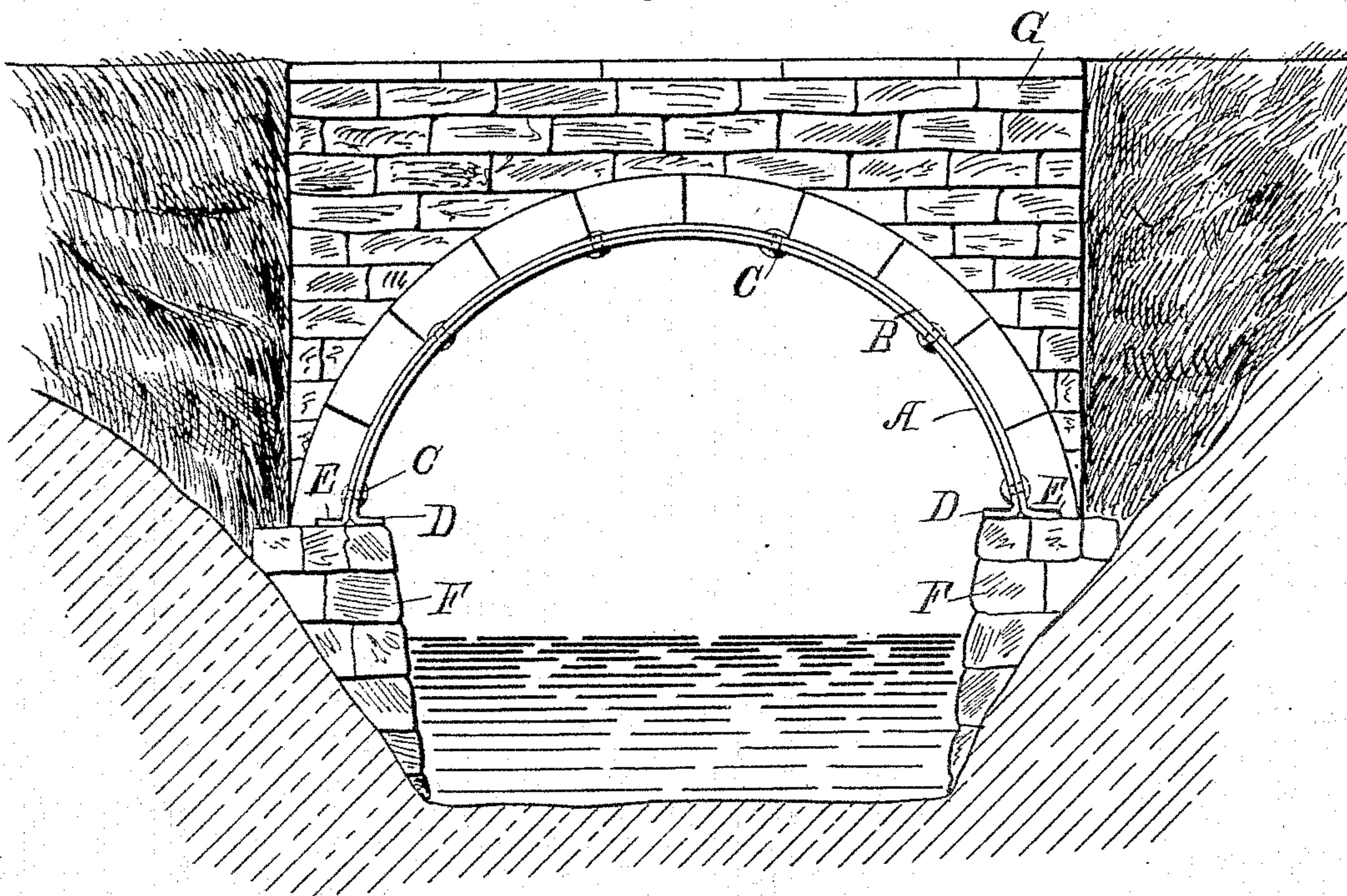
(No Model.)

C. B. DAVIS.  
CULVERT.

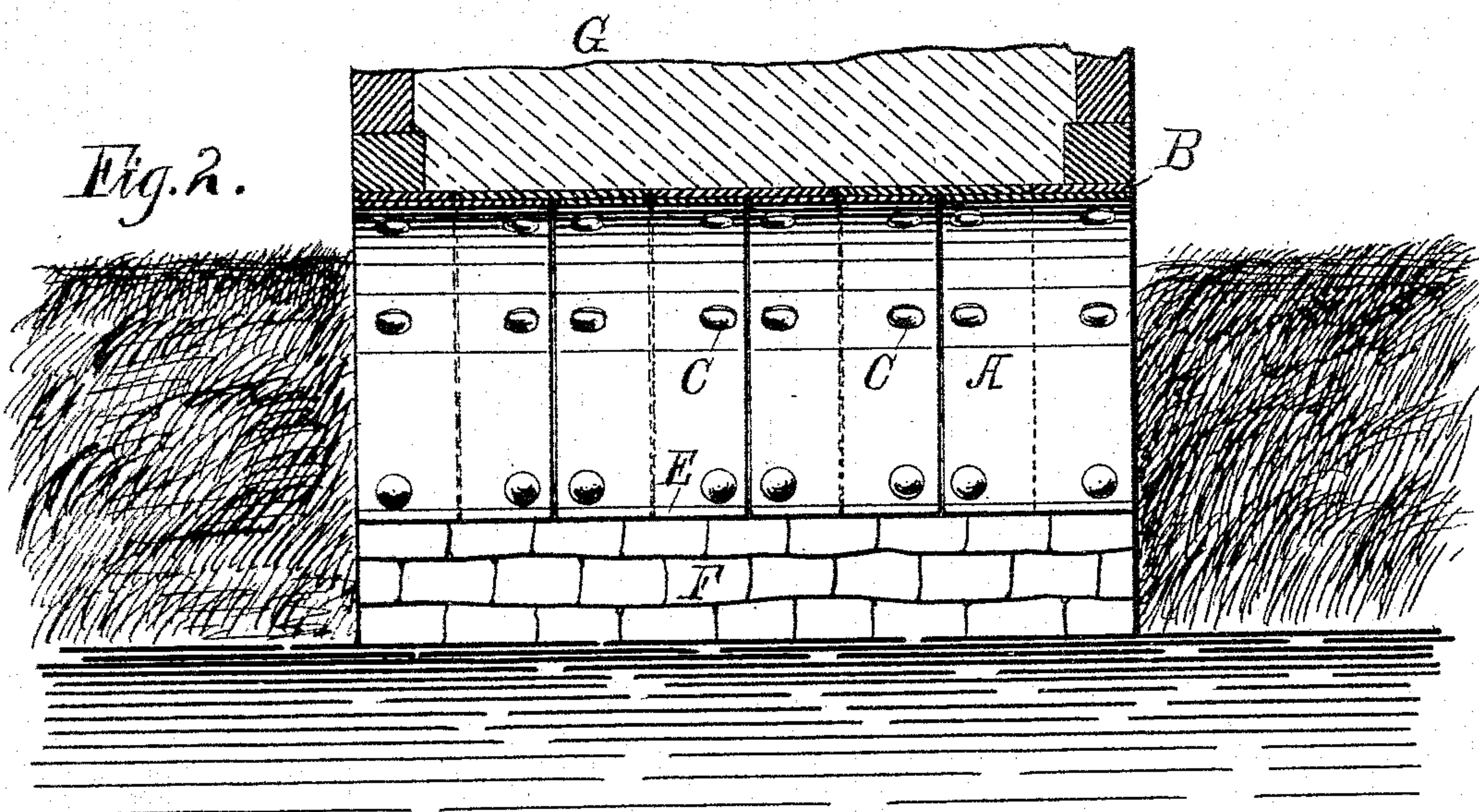
No. 491,408.

Patented Feb. 7, 1893.

*Fig 1*



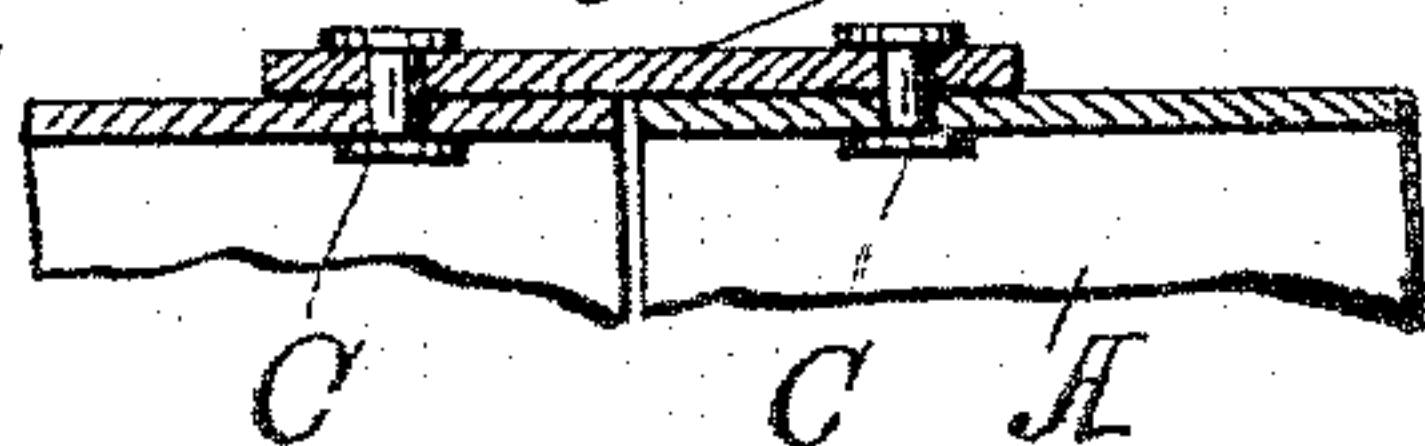
*Fig. 2.*



WITNESSES:

*P. M. Little,*  
*C. Sedgwick*

*Fig. 3. B*



INVENTOR

*C. B. Davis*  
BY *Munn & Co*  
ATTORNEYS.



# UNITED STATES PATENT OFFICE.

CHARLES B. DAVIS, OF SAVONA, NEW YORK, ASSIGNOR TO HIMSELF AND  
DAVID A. CRANDALL, OF SAME PLACE.

## CULVERT.

SPECIFICATION forming part of Letters Patent No. 491,408, dated February 7, 1893.

Application filed November 5, 1892. Serial No. 451,028. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES B. DAVIS, of Savona, in the county of Steuben and State of New York, have invented a new and Improved Culvert, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved culvert, which is simple and durable in construction, readily set up in place, and cheaply manufactured.

The invention consists of two series of curved metallic plates placed one on top of the other to break joints, and riveted together to form a double-walled arch.

The invention also consists of certain parts and details, and combinations of the same, as will be fully described hereinafter and then pointed out in the claims.

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

Figure 1 is a front elevation of the improvement as applied; Fig. 2 is a longitudinal section of the same; and Fig. 3 is a sectional plan view showing the plates riveted together and breaking joints.

The improved culvert is provided with two series of metallic plates A and B, curved to correspond to the shape of the arch to be built, the said series of plates A and B being placed one upon the other and the several plates being arranged so as to break joints, as will be readily understood by reference to Figs. 2 and 3. The series of plates A and B are fastened together by means of suitable rivets C or other devices, and a desired number of plates are joined in the manner described so as to form an arch of the desired length; that is, corresponding to the width

of the culvert to be built. The plates A are formed at their ends with inwardly bent flanges D, and corresponding flanges E are formed on the outer plates B and extend in an opposite direction, that is outwardly, to the flanges D, as will be readily understood by reference to Fig. 1. The flanges D and E form a foot for the arch composed of the metallic plates, and rest on a suitable foundation F built in the banks of the culvert. Stones or other suitable materials are placed on top of the metallic arch to build the culvert in the usual manner. As shown in the drawings a stone facing is set on the ends of the metallic arch, and the space between the facings is filled in with earth or other material to the desired height. A culvert built in this manner is very durable, and the arch can be quickly set up and the facings and fillings put in position without requiring much skill.

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

1. A culvert provided with a metallic arch composed of curved plates placed one on top of the other to break joints, and riveted together, substantially as shown and described.

2. A culvert provided with a metallic arch comprising two sets or series of metallic plates placed one on top of the other to break joints, rivets for fastening the two series of plates together, and flanges formed on the ends of the said sets of plates and bent on opposite directions to form a foot for the arch, substantially as shown and described.

CHARLES B. DAVIS.

Witnesses:

J. C. MALLORY,  
WM. B. MALLORY.