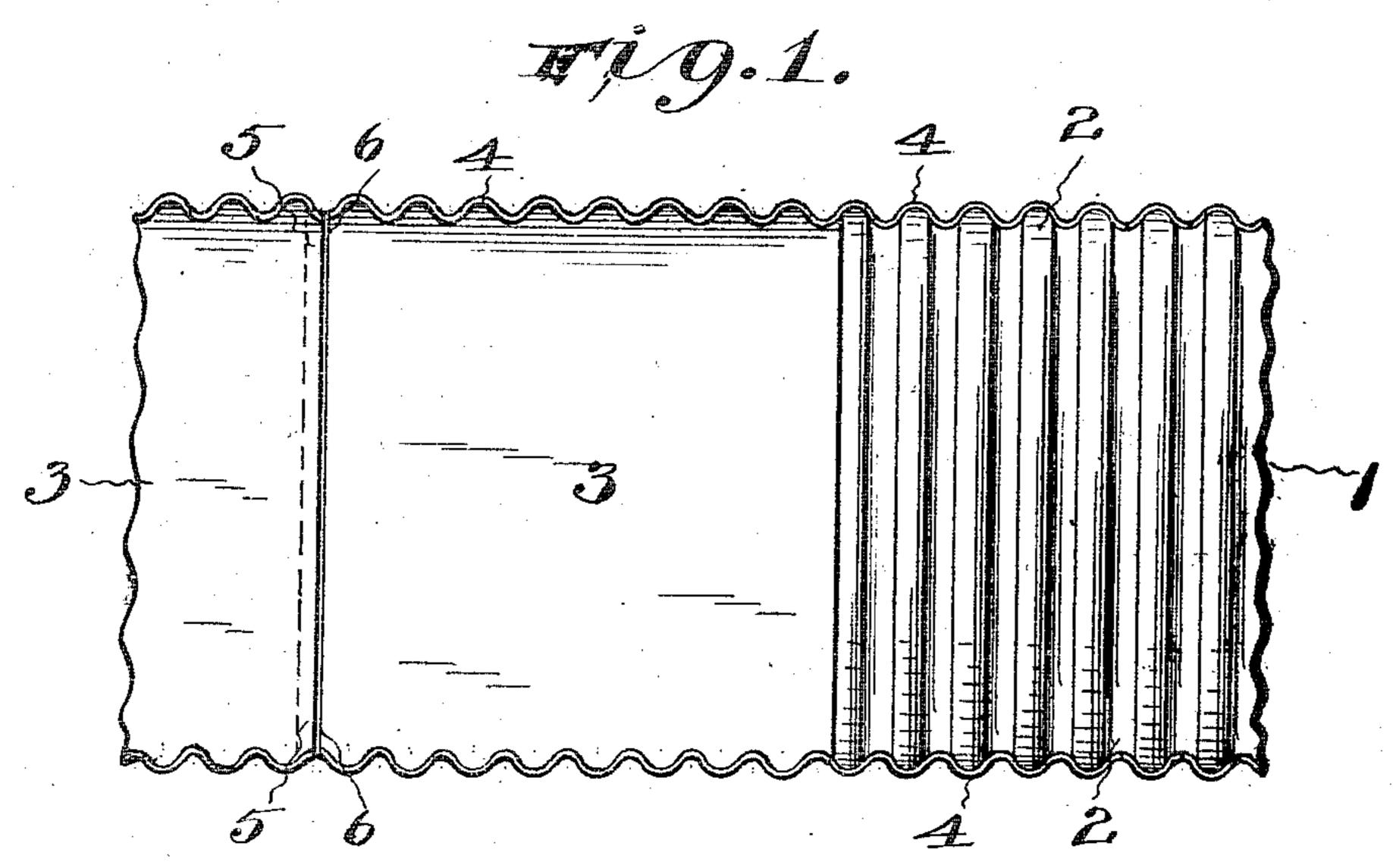
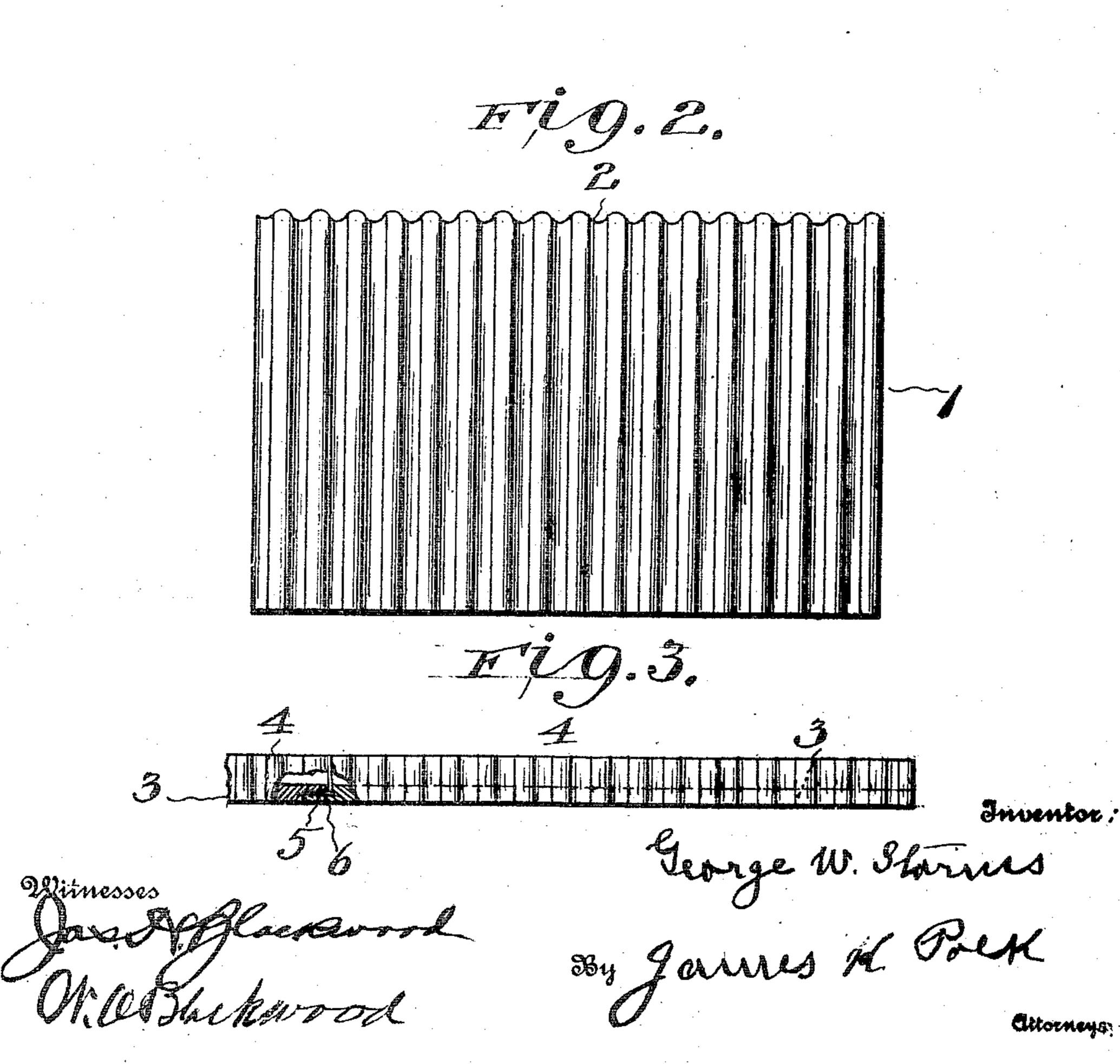
## G. W. STORMS. CULVERT. APPLICATION FILED NOV. 7, 1910.

995,200.

Patented June 13, 1911.





## NITED STATES PATENT OFFICE.

GEORGE W. STORMS, OF LOUISVILLE,

995,200.

Specification of Letters Patent. Patented June 13, 1911.

Application filed November 7, 1910. Serial No. 591,176.

To all whom it may concern:

Be it known that I, George W. Storms, a citizen of the United States, and a resident of Louisville, in the county of Jeffer-5 son and State of Kentucky, have invented certain new and useful Improvements in Culverts, of which the following is a specification.

My invention relates to culverts used for 10 drains, and particularly to the type of coupler made of corrugated sheet metal, and has for its object the provision of a culvert formed in two main horizontal portions, of which the top portion is formed of sheet 15 metal and semi-cylindrical to form an archto uphold the weight of the earth when in position, while the bottom portion is formed of cast iron and may be flat or curved in cross-section, as desired, with upstanding 20 flanges along its side edges and formed with corrugations to receive the lower edges of the top section.

My invention will be described in detail hereinafter and illustrated in the accom-

25 panying drawings, in which—

Figure 1 is a view in perspective of my improved culvert, partly laid, and showing the bottom portion flat; Fig. 2, a side view of a top-section; and Fig. 3, a side view of 30 a flat bottom section.

In the drawings similar reference characters indicate corresponding parts through-

out all of the views.

My improved culvert is constructed of 35 two horizontal portions. The top portion 1 is formed of sheet-metal with transverse corrugations 2 and made in sections of any suitable length, and when in position the ends overlap to form the joints. The bot-40 tom portion is made of cast-iron or other suitable material, and, as shown in Figs. 1 and 3, is formed of sections 3, equal in length to the full length sections of the top portion and provided with upstanding 45 flanges 4 that are corrugated to fit snugly the corrugations in the top sections when in

position. One end of each section 3 is formed with an overhanging lip 5, while the other end is reduced in thickness, as shown at 6, so that when laid end to end 50 the lip 5 and reduced part 6 overlap to form atight joint that may be cemented, if desired, to form a water-tight joint, though the use of cement is not essential to satisfactory operation of my culvert in ordinary 55 circumstances.

As it is usually desirable to have the top portion and the base or bottom portion break joints, I form the sections comprising the said top portion in half and full lengths, 60 so that by beginning and ending the culverts with half-sections I succeed in forming the two portions with broken joints.

It will be apparent that by my construction the more weight is placed on the top 65 portion the more securely will the two portions be held together at the joints formed by the side flanges of the base sections.

Having described my invention, what I

claim is—

A culvert comprising two horizontal portions, the bottom or base portion being flat and formed of sections made of rigid material, one end of each section formed with an overhanging lip and the other end with 75 a portion reduced in thickness to engage the overhanging lip on the end of the adjoining section, upstanding corrugated flanges on the side edges of said base portion, and the top portion formed of sections of trans- 80 versely corrugated sheet-metal bent into arched conformation and engaging the corrugated flanges on the base sections, substantially as shown and described.

In witness whereof, I have hereunto set 85 my hand in presence of two subscribing wit-

nesses.

## GEORGE W. STORMS.

Witnesses: Augereau Gray, .... WM. C. CAWTHON.