

W. B. STAMBAUGH.
 CULVERT.
 APPLICATION FILED JUNE 8, 1912.

1,040,046.

Patented Oct. 1, 1912.

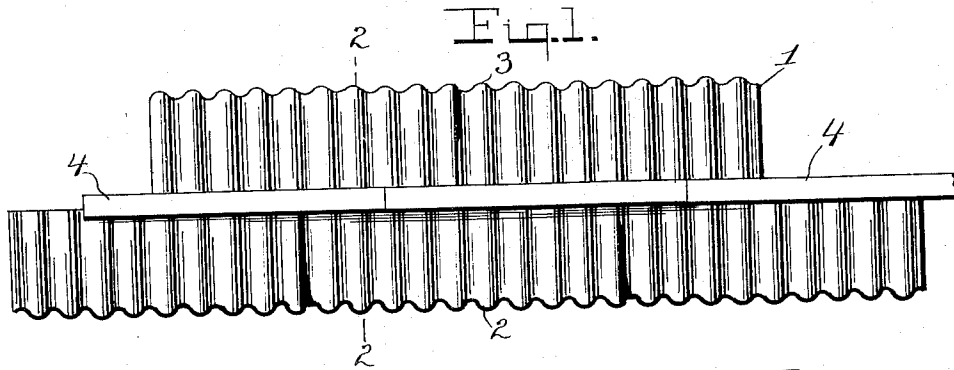


Fig. 2.

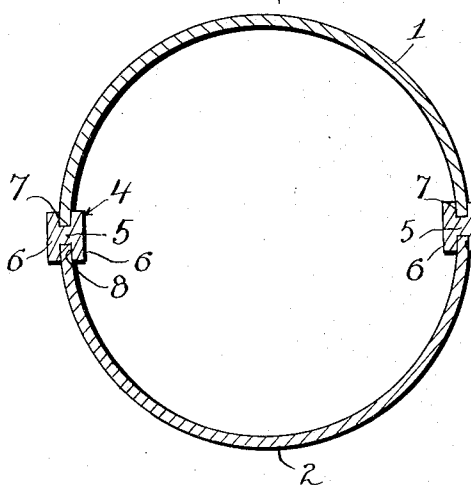


Fig. 5.

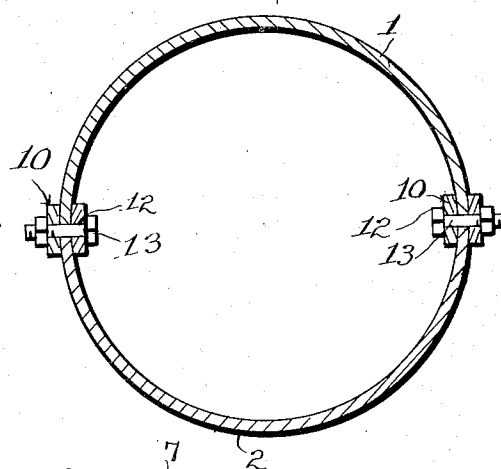


Fig. 3.

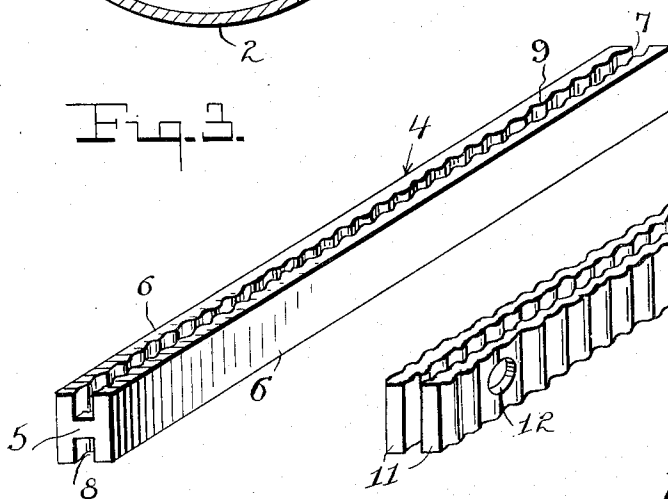
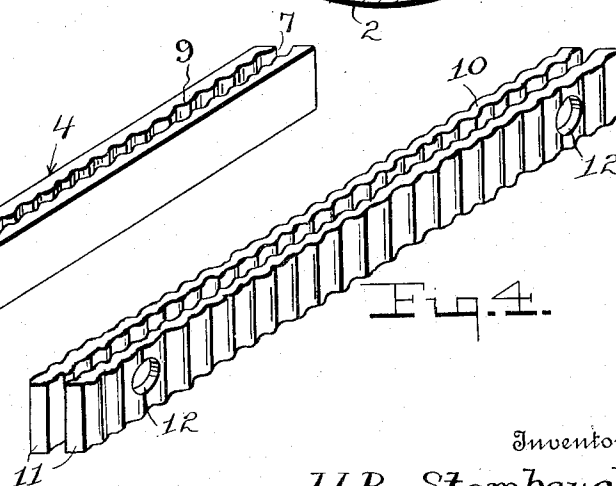


Fig. 4.



Witnesses
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UNITED STATES PATENT OFFICE.

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CULVERT.

1,040,046.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, WILLIAM B. STAMBAUGH, a citizen of the United States, residing at Woodsboro, in the county of Frederick, State of Maryland, have invented certain new and useful Improvements in Culverts; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The present invention is directed to improvements in sheet metal culverts.

The invention has for its object to provide a simple and practical connection for the longitudinal edges of the semi-cylindrical sections.

A further object of the invention is to so construct a connection of this type which is simple in construction, durable, and one which may be manufactured at a minimum cost.

With these and other objects in view, this invention resides in the novel features of construction, formations, combinations and arrangements of parts to be hereinafter more fully described, claimed and illustrated in the accompanying drawing, in which:—

Figure 1 is a side elevation of a portion of a culvert showing the sections connected in accordance with the invention. Fig. 2 is a transverse sectional view. Fig. 3 is a detail perspective view of the connection. Fig. 4 is a similar view of a slightly modified form of connection. Fig. 5 is a transverse sectional view through the culvert showing the modified form of connection applied thereto.

Referring to the drawing, the numerals 1 and 2 designate upper and lower sections, respectively, said sections being constructed of sheet metal and are semi-cylindrical in cross section. Each section is transversely corrugated, as indicated at 3, said corrugations being arranged annularly and extend the entire width of the section.

Adapted to secure the meeting longitudinal edges of the respective sections 1 and 2 are connections 4 which consist of a horizontally disposed web 5 having formed integral with the sides thereof plates 6, said plates being arranged in spaced parallel relation to form open grooves 7 and 8. The opposing faces of the plates 6 are formed

with vertically arranged corrugations 9, 55 which conform to the corrugated formation of the longitudinal edges of the sections 1 and 2 so that said edges will fit snugly within the grooves 7 and 8, thus securely connecting the sections and preventing both relative 60 lateral and longitudinal movement thereof.

In practice the lower sections 2 are first laid with their meeting ends arranged in overlapping relation and the connections 4 are placed upon the longitudinal edges of 65 the thus laid sections with the grooves 8 engaging said edges, whereupon the upper sections 1 are placed with their longitudinal edges engaging in the grooves 7 and resting upon the upper surface of the web 5 of each 70 connection, thus securely holding the meeting longitudinal edges of the respective sections. The meeting ends of the sections 1 and 2 are arranged so as to break joints, and the meeting ends of the connections are like- 75 wise arranged with respect to the meeting ends of the sections, thus producing a thoroughly water-tight culvert.

In the modified form of the invention, as shown in Fig. 4 the connections 10 consist of 80 a pair of plates 11, both faces of which are corrugated to conform to the corrugations of the sections, said plates being provided with perforations 12 near their opposite ends, said plates being connected by bolts 85 13 which hold said plates in clamping engagement with the longitudinal meeting edges of the respective sections.

What is claimed is:—

1. A culvert comprising semi-cylindrical 90 upper and lower metal sections formed with annularly arranged corrugations throughout their width, a connection consisting of a horizontal web having formed integral therewith vertical plates arranged in spaced 95 parallel relation to form oppositely disposed open grooves for receiving the respective longitudinal edges of the sections, said plates having their opposing faces formed with corrugations to engage the corresponding 100 corrugations of said sections, as and for the purpose set forth.

2. A culvert comprising transversely arched and corrugated sections having their corresponding longitudinal edges opposed in 105 spaced relation, retaining members disposed respectively against the inner and outer faces of the longitudinal edge portions of the sec-

tions and fitting the corrugations thereof, and connecting means between the retaining members extending through the spaces between the longitudinal edges of the section.

- 5 3. A culvert comprising transversely corrugated sections having their longitudinal edges opposed in spaced relation, retaining members having open grooves fitting the cor-

rugated edges, as and for the purpose set forth.

In testimony whereof, I affix my signature, in presence of two witnesses.

WILLIAM B. STAMBAUGH.

Witnesses:

FRANCIS BOYLE,
GEO. H. CHANDLEE.