J. B. JARMIN.

ROUND CULVERT.

APPLICATION FILED OCT. 25, 1909.

951,123. Patented Mar. 8, 1910.

Fig. 1.

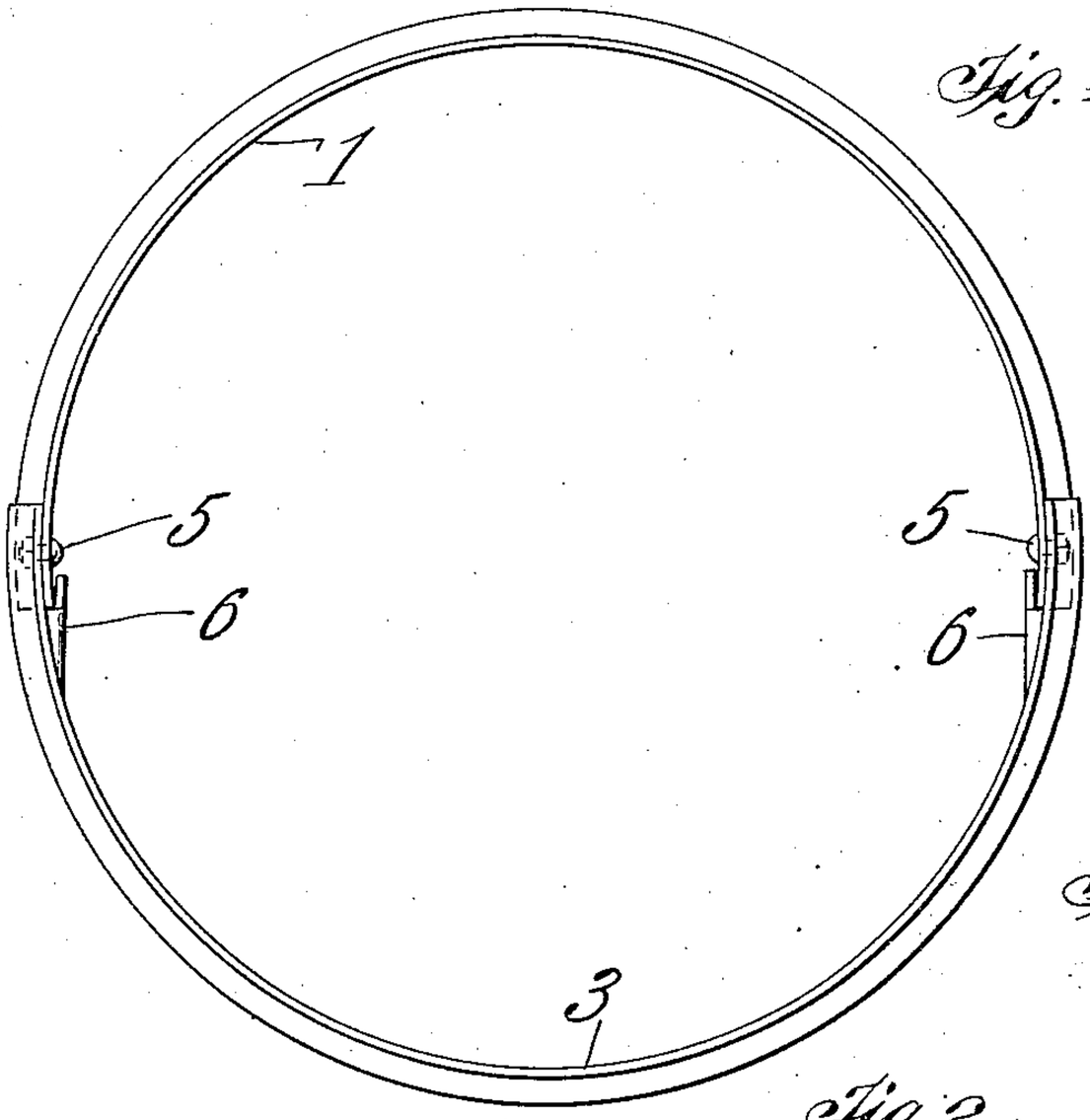


Fig. 2.

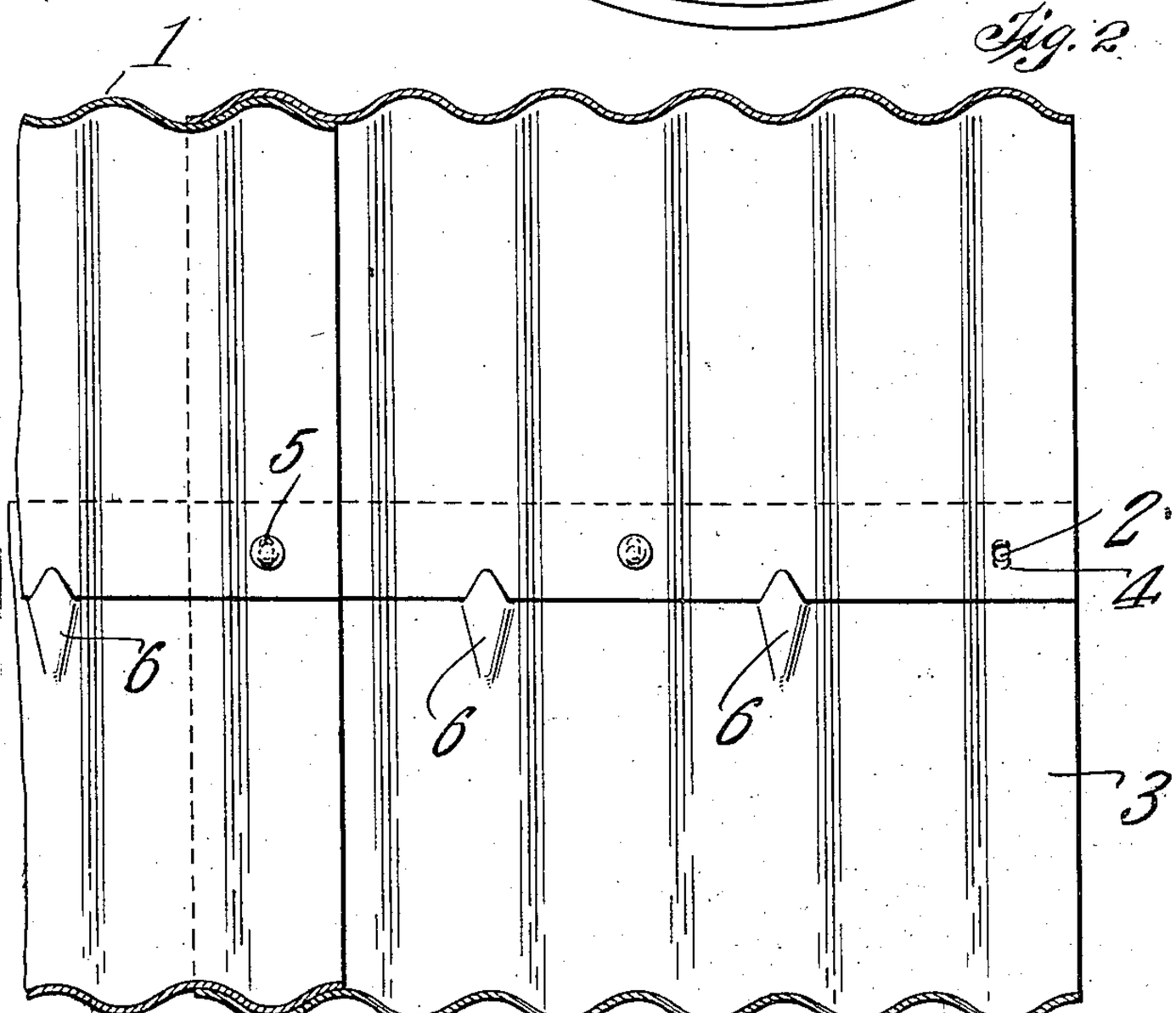


Fig. 3.

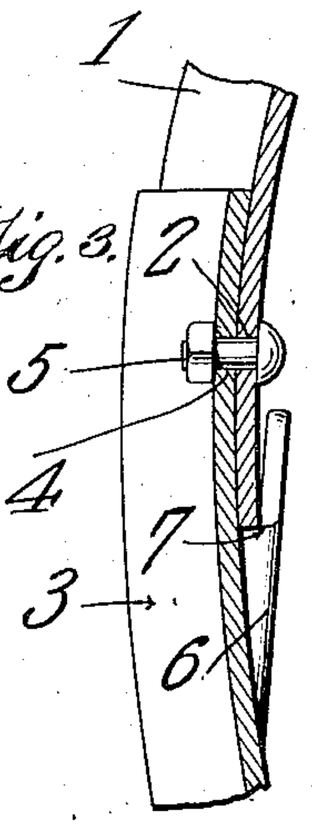
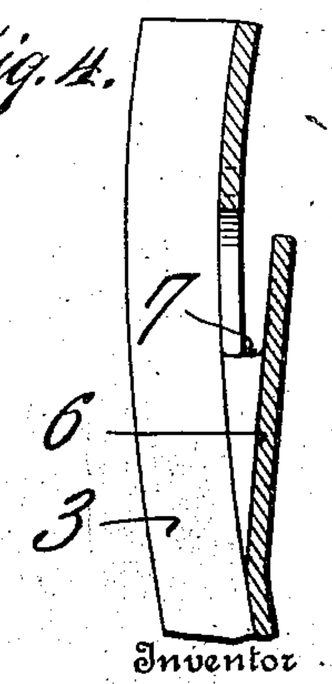


Fig. 4.



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UNITED STATES PATENT OFFICE.

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ROUND CULVERT.

951,123. Specification of Letters Patent. **Patented Mar. 8, 1910.**

Application filed October 25, 1909. Serial No. 524,438.

To all whom it may concern:

Be it known that I, JAMES B. JARMIN, a citizen of the United States, residing at Spokane, in the county of Spokane and State of Washington, have invented a new and useful Round Culvert, of which the following is a specification.

This invention relates to improvements in culverts and has special reference to sheet metal sectional culverts, the object of the invention being to provide a simple and efficient fastening between the sections of the culvert whereby the said sections will be securely held together and leakage into the culvert will be prevented. This object is attained by the use of the device illustrated in the accompanying drawings, and the invention consists in certain novel features of the same which will be hereinafter described and claimed.

In the said drawings, Figure 1 is an end view of a culvert embodying my present invention. Fig. 2 is a longitudinal section of a portion of the same. Figs. 3 and 4 are detail transverse sectional views.

The culvert is constructed of sections of transversely corrugated sheet metal which are semi-circular in cross section, as shown most clearly in Fig. 1. The upper section 1 is provided near its lower edge at intervals with suitable openings 2 to which fastening bolts may be inserted while the lower section 3 is provided at intervals near its upper edge with similar openings 4 through which the fastening bolts 5 are inserted to secure the two sections together, the upper edge of the lower section projecting above and being arranged outside of the lower edge of the upper section. At intervals along the lower section and below the edge of the same I provide off-sets or tongues 6 which are formed by striking up a portion of the metal, as clearly shown in Figs. 3 and 4, the said tongues projecting inward and providing a ledge 7 upon which the edge of the upper section registers when the sections are assembled to form the culvert. It will be noticed upon reference to Fig. 2 that the upper end of the off-set or tongue 6 is tapered or given a triangular shape so that it will project upward behind the upper section and consequently aid in holding the head of the said section in close contact with the lower section, thereby relieving the strain on the fastening bolts so that the nuts are not liable to strip therefrom. The tongues or supporting lips are cut from the body of the lower section in such a way that the semi-cylindrical form of the section is not changed and the strength of the section is not impaired.

The culvert is made in sections which may be nested and shipped in such nested or knock down condition and may be put together on the ground before the culvert is put in place. When the sections are assembled so as to form a culvert the outside of the culvert will be smooth so that it may be readily placed in position and will not require any peculiar form of trench for its reception or any expensive method of banking. The provision of the inwardly projecting tongue or supporting shoulder furnishes the positive support for the upper section of the culvert so that the weight placed thereon in the use of the device will not crush the culvert.

Having thus described my invention, what I claim is:

1. A sheet metal culvert composed of upper and lower sections bolted together, the lower section being provided on its inner side below its upper edge with projections adapted to engage the edge of the upper section and support the same.

2. A sheet metal culvert consisting of upper and lower sections secured together, the lower section being provided at intervals near its edge with inwardly projecting struck-up tongues having tapered upper ends engaging behind the edge of the upper section.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

JAMES B. JARMIN.

Witnesses:
W. W. HINDMAN,
FRED R. WRIGHT.