

F. OTTNEY.  
CULVERT.

APPLICATION FILED MAY 7, 1910.

985,539.

Patented Feb. 28, 1911.

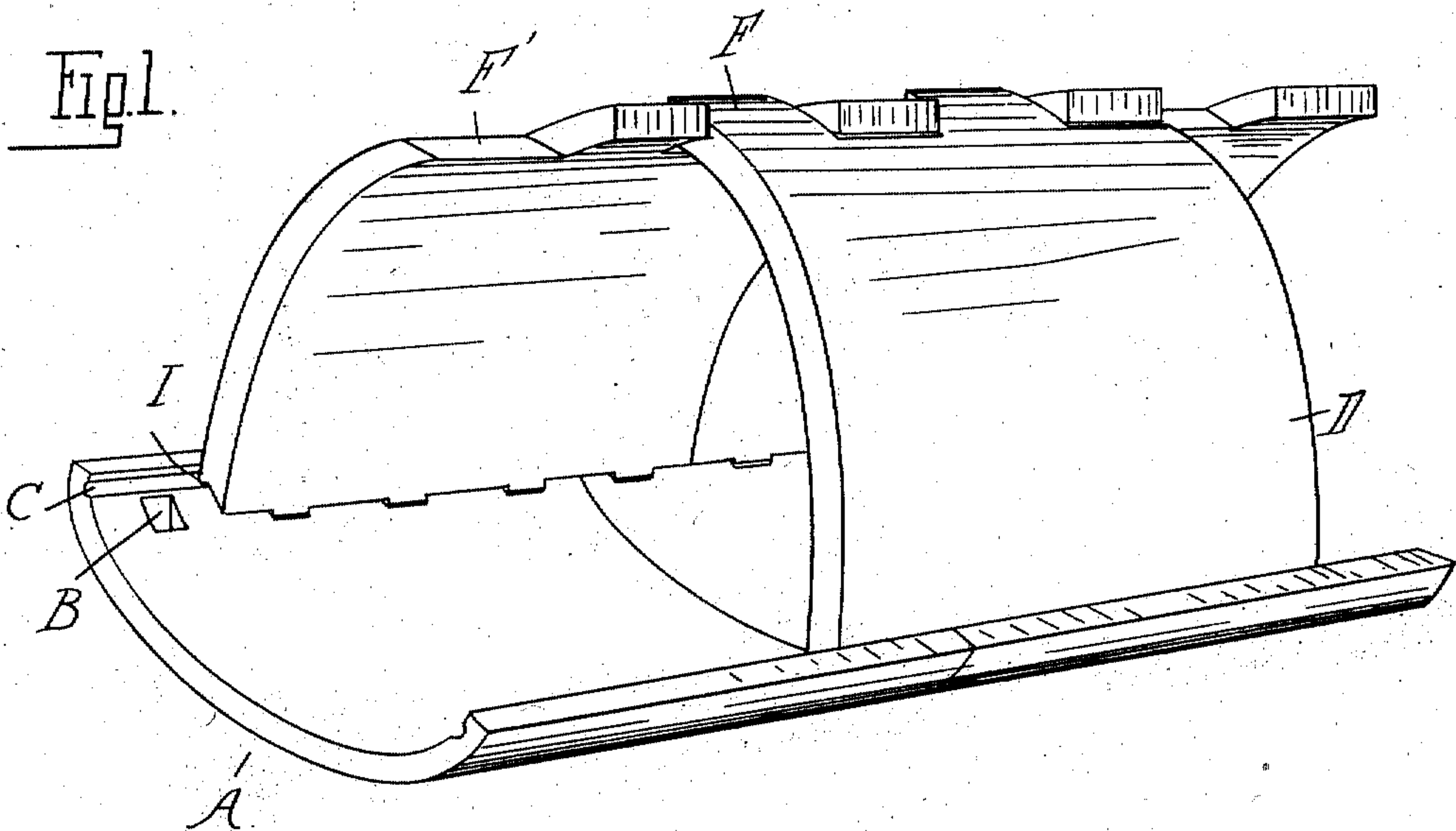


Fig. 2.

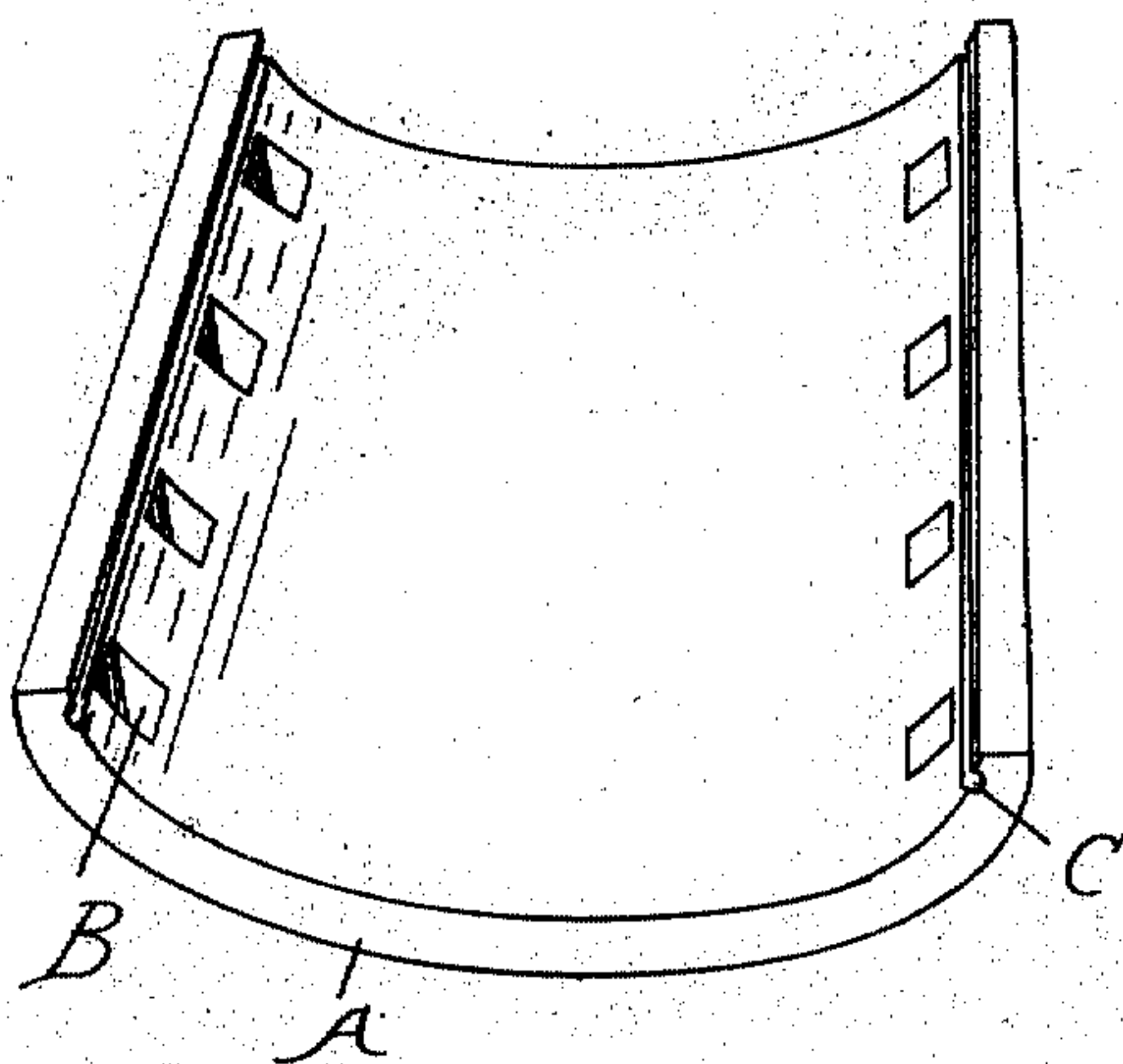
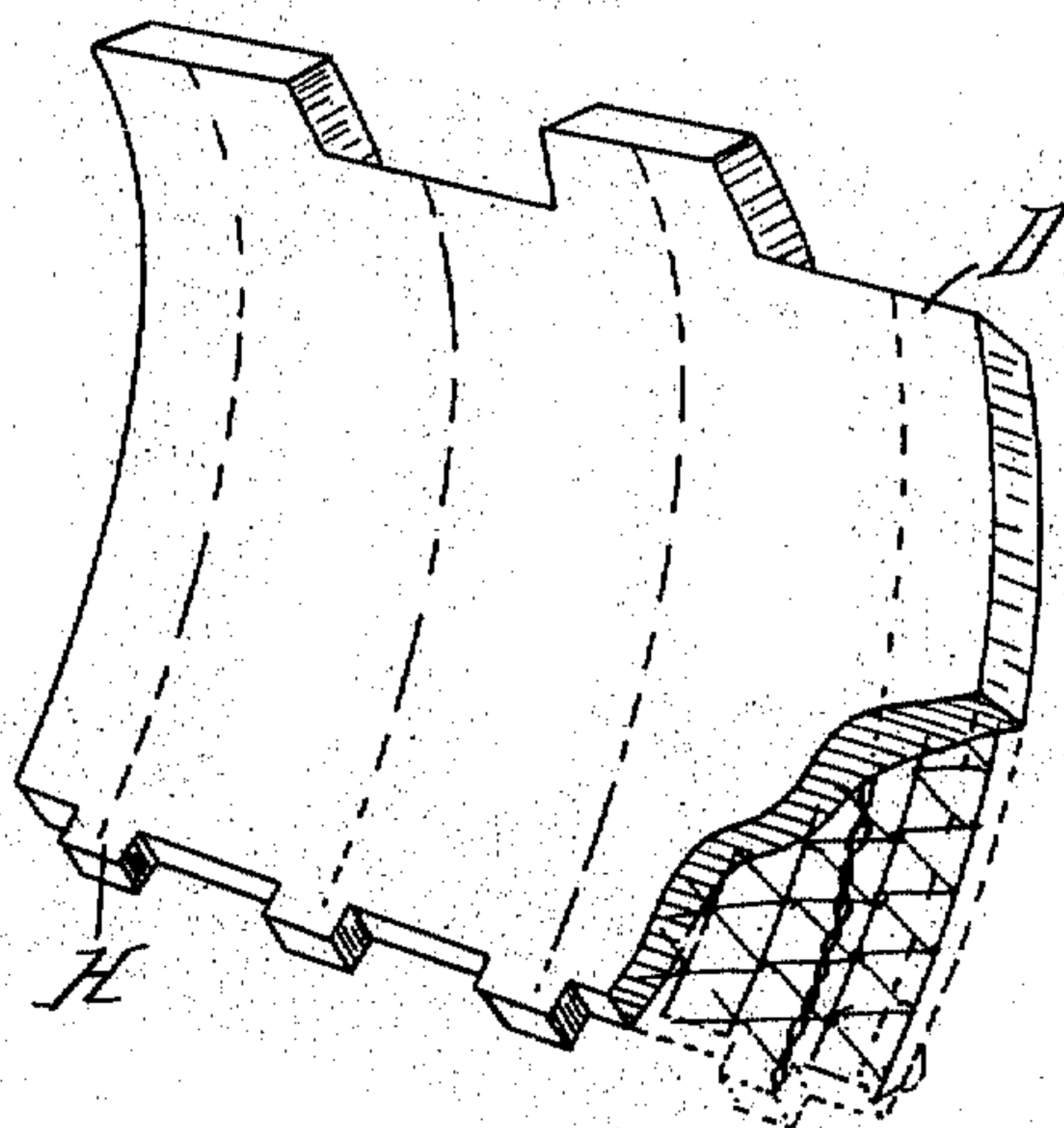


Fig. 3.



Witnesses  
H. B. Ford  
C. B. Knapp

Inventor  
Frank Ottney  
By Whittemore Hubbs & Whittemore  
Attys



# UNITED STATES PATENT OFFICE.

FRANK OTTNEY, OF CHARLOTTE, MICHIGAN.

CULVERT.

985,539.

Specification of Letters Patent.

Patented Feb. 28, 1911.

Application filed May 7, 1910. Serial No. 560,028.

*To all whom it may concern:*

Be it known that I, FRANK OTTNEY, a citizen of the United States of America, residing at Charlotte, in the county of Eaton and State of Michigan, have invented certain new and useful Improvements in Culverts, of which the following is a specification, reference being had therein to the accompanying drawings.

The invention relates particularly to a sectional culvert composed of complementary members having preferably an interlocking engagement, as will be hereinafter set forth, whereby the assembled sections will be held from disengagement and at the same time the assembling may be readily effected.

The invention consists in the novel construction of the culvert, in the peculiar arrangement and combination of parts, and in certain details of construction, as will be more fully hereinafter set forth and claimed.

In the drawings,—Figure 1 is a perspective view of a culvert embodying my invention; Fig. 2 is a perspective view of the bottom section of the culvert; and Fig. 3 is a sectional perspective view of one of the side sections.

In its preferred form, the culvert is preferably triangular as illustrated, and the several sections are so arranged in relation to each other as to break joints in the well known way.

The reference-letter A represents a bottom or base section, a series of which—arranged end to end in the usual manner—constitute the culvert bottom. Along each of its longitudinal edges the section is provided with a series of spaced apertures B, and beyond these apertures and extending lengthwise the marginal portions are provided with longitudinal grooves C.

D represents the side sections, which are preferably curved and provided at their upper edges with spaced projections F F' adapted in the assembled relation of the parts to interengage, as illustrated. Projecting from the lower edge of each side section are a plurality of lugs H adapted to engage the corresponding series of apertures in the base, the lugs being adapted to loosely fit within the openings to permit the upper edges of the sides to be spread a considerable distance. A tongue or-rib I is formed upon each side member along preferably its lower outer edge, as plainly shown in Fig. 1, which

tongue is adapted to engage the locking groove provided therefor in the base section.

In assembling the parts, the base members are first laid, and the side sections subsequently placed. Each side is first positioned, so that the lugs upon its lower edge engage the openings in the base. The section is then rocked upwardly until an engagement is effected between the tongue on the side and the base groove, the upward or backward movement of the section being continued to bring the side member beyond the position occupied in the assembled relation of the parts. The complementary side is then applied to the base in a similar manner, this being permitted by reason of the extreme backward movement that the complementary side section is capable of. After the sides have been united to the base portion, they are brought together at their upper edges until the lugs or fingers interengage. The parts being assembled in the manner set forth, the tongue-and-groove engagement between the side sections and the base constitutes a lock between the parts; further, the locking means between the sides and the base are so positioned as to shield the interlocking portions of the members.

What I claim is:—

1. A sectional culvert, comprising a base section having a plurality of apertures along each of its longitudinal marginal edges, side sections provided with lugs at their lower ends for engaging said apertures and at their upper ends with interlocking projections, said base section and each of said side sections being provided with a tongue and groove engagement for locking the side sections to the base in the assembled relation of the parts, one of the cooperating portions of the tongue and groove engagement being formed upon the base intermediate the longitudinal marginal edge of the latter and said apertures, and the other upon the side section above said lugs.

2. A sectional culvert, comprising a base section having a plurality of apertures along each of its longitudinal marginal edges, side sections provided with lugs at their lower ends for engaging said apertures and at their upper ends with interlocking projections, said base section and each of said side sections being provided with a tongue and groove engagement for locking the side sections to the base in the assembled relation of

the parts, one of the coöperating portions of the tongue and groove engagement being formed upon the outer face of the side and above said lugs, and the other upon the inner face of the base intermediate the longitudinal marginal edge of the latter and said apertures.

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

FRANK OTTNEY.

Witnesses:

ELMER N. PETERS,

LEWIS A. STRICKLAND.

---

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."

---