A. A. CUMMINGS & D. S. DEMPSEY.

SLUICE.

APPLICATION FILED JUNE 18, 1908.

905,290.

Patented Dec. 1, 1908.

Fig. 1.

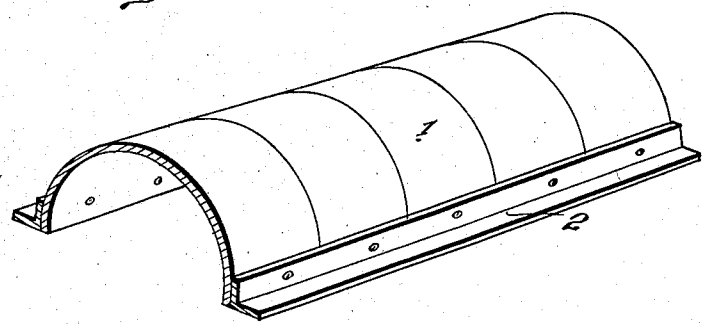
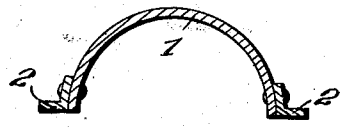


Fig. 2.



Witnesses

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UNITED STATES PATENT OFFICE.

ANDREW A. CUMMINGS, OF LITTLE GENESEE, AND DANIEL S. DEMPSEY, OF BOLIVAR, NEW YORK.

SLUICE.

No. 905,290. Specification of Letters Patent. Patented Dec. 1, 1908.

Application filed June 18, 1908. Serial No. 439,263.

To all whom it may concern:

Be it known that we, ANDREW A. CUMMINGS and DANIEL S. DEMPSEY, citizens of the United States, residing at Little Genesee and Bolivar, respectively, in the county of Allegany and State of New York, have invented certain new and useful Improvements in Sluices, of which the following is a specification.

The present invention provides a sluice, culvert, or like water-way of novel construction, the same being formed with a view to economize in material, provide a simple construction and to devise an article of the character aforesaid which will not become deranged either by settling or by frost.

The invention consists of a sluice or culvert deflected intermediate of its longitudinal edges and having flanges at said longitudinal edges to form supporting means to prevent settlement and to provide anchoring means to overcome the action of frost and prevent lifting of the sections in cold weather by the frost penetrating the ground and reaching the device, said flanges being provided by angle strips equal in length to that of the culvert and attached thereto by one of their wings, the other wings projecting outward to form flanges, all as set forth hereinafter, claimed and shown in the accompanying drawing, in which:

Figure 1 is a perspective view of a sluice or culvert embodying the invention; and Fig. 2 is a transverse section thereof.

Corresponding and like parts are referred to in the following description and indicated in both views of the drawings by the same reference characters.

The sluice, culvert or like device may be constructed of any material, metal being preferred, and is deflected between its longitudinal edge portions into any desired form. The sections may be of any length or width and their ends may be formed either to abut or interlock, as may be found most advantageous. The body 1 of the sluice or culvert is provided at its longitudinal edges with flanges 2. These flanges consist of angle strips equal in length to the length of the culvert, each angle strip being secured to a longitudinal edge portion of the culvert by one of its wings, the other wing extending outward to form the flange. The angle strips reinforce the edge portions of the culvert, besides forming anchoring means to prevent frost lifting the culvert and supporting means to prevent the culvert from settling.

It is to be understood that the sluice is open at the bottoms and being of arch form provides ample space for the flow of water therethrough. The flanges 2 obtain an extended bearing upon the ground and prevent the sluice from settling or from being lifted by the action of frost, thereby preserving the alinement of the sections and adding materially to the efficiency and serviceability of the structure.

Having thus described the invention, what is claimed as new is:

A sluice comprising a sheet metal body deflected between its longitudinal edge portions into a substantially U-form, and angle strips equal in length to the said body, each attached by a wing to an edge portion of said body and having the other wing projected outward therefrom.

In testimony whereof we affix our signatures in presence of two witnesses.

ANDREW A. CUMMINGS. [L. S.]
DANIEL S. DEMPSEY. [L. S.]

Witnesses:
WILLIAM HOGAN,
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