

J. H. SCHLAFLY.
METALLIC FLUME.
APPLICATION FILED DEC. 11, 1911.

1,087,325.

Patented Feb. 17, 1914.

Fig. 1.

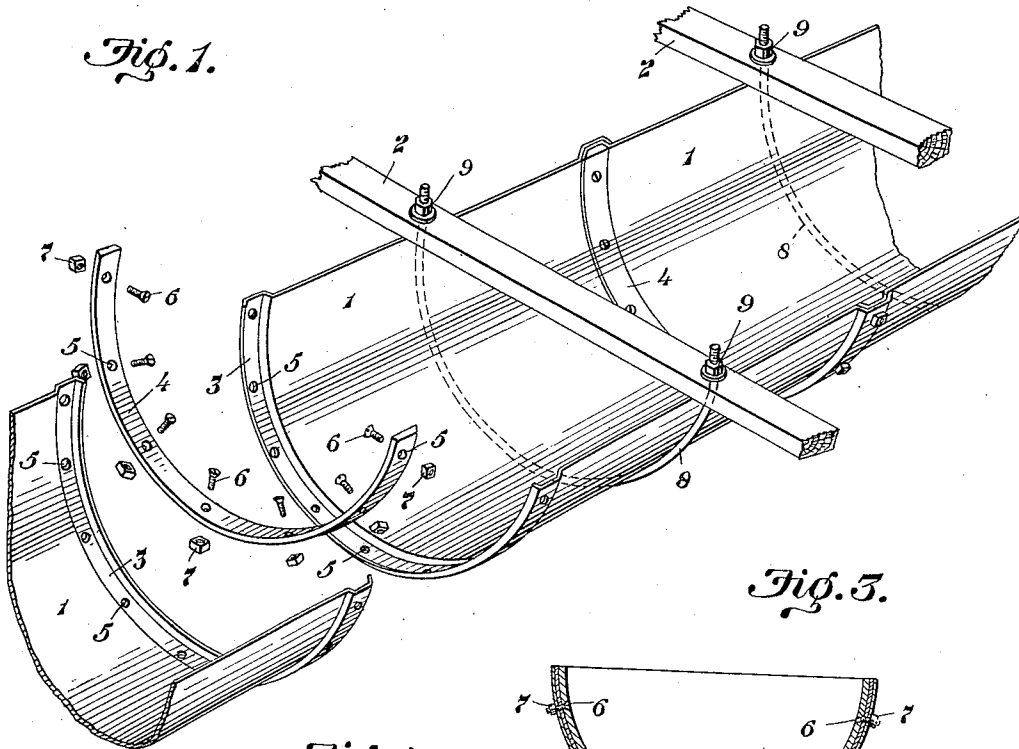


Fig. 3.

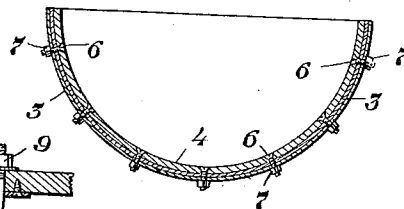


Fig. 4.

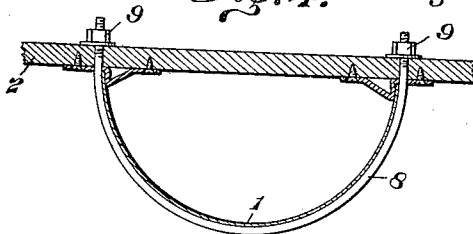
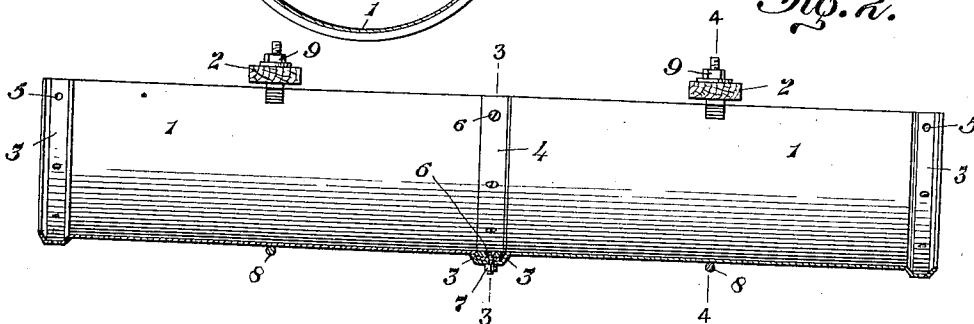


Fig. 2.



Witnesses

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UNITED STATES PATENT OFFICE.

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METALLIC FLUME.

1,087,325.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JULIUS H. SCHLAFLY, a citizen of the United States, residing at Canton, in the county of Stark and State of Ohio, have invented certain new and useful Improvements in Metallic Flumes; and I do hereby declare that the following is a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same.

The present invention relates to flumes especially designed for water troughs used for irrigation and other purposes.

The objects of the present invention are, first, to provide a flume made up of sections of such a length or lengths that can be conveniently handled, shipped and placed in position, second, to provide means for connecting the sections together so that the entire length of the trough or flume will present an even or smooth surface, third, to provide means for securely joining the ends of the sections together and in such a manner that they will not be liable to become detached when placed in position and used.

With these objects together with other objects, the invention consists in the construction and arrangement of parts as will be hereinafter more fully described.

In the accompanying drawings—Figure 1 is a perspective view, showing one full section and portions of two other sections, one completed joint and detached parts going to make up a joint, also showing a hanger and its yoke in proper location. Fig. 2 is a longitudinal section. Fig. 3 is a transverse section on line 3—3, Fig. 2. Fig. 4 is a transverse section on line 4—4, Fig. 2.

Similar numerals of reference indicate corresponding parts in all the figures of the drawing.

In the accompanying drawing, 1 represents the sections which are preferably formed of sheet metal and as shown are semi-circular in cross section, but the objects above pointed out can be realized without any specific reference to the exact formation of the sections, except that said sections should be formed to produce a suitable trough. The sections may be formed of any desired length or size, reference being had to convenience.

In use especially for irrigation it is frequently necessary to construct a trough or flume of considerable length and to support

the various sections going to make up the completed structure above the ground; if, for instance it is desired to conduct water across a valley or depression and at the same time maintain the proper grade or inclination so that water may if necessary be carried over elevations. In order to accomplish this purpose it is frequently necessary to construct trestle work or other frame work of considerable height and at other points such trestle or frame work may be comparatively low, but as a rule, the trough or flume is supported throughout its entire length by suitable cross bars or hangers 2, which cross bars or hangers are supported by the frame work or wall as the case may be.

As shown the trough or flume sections 1 are preferably formed without corrugations, so that the bottom of the trough or the surface upon which the water flows is smooth, thereby offering the least resistance to the flow of water. The ends of the sections 1 are provided with the channels 3, which are lapped one upon the other as best illustrated in Fig. 2 within the inner channel is located, the bar 4, which bar is formed of a size and shape to correspond substantially with the size and the shape of the channel into which said bar is to be seated. The bar 4 and the channels 3 are provided with a series of bolt or rivet apertures 5, through which bolt or rivet apertures are located the bolts 6 or their equivalents and when bolts such as shown are used ordinary nuts 7 are provided and are located in the usual manner upon the bolt 6. I prefer to use bolts, owing to the fact that the sections 1 can be more easily connected together and can be separated with less difficulty than when rivets are employed.

It will be understood that by interlocking the channels 3 or in other words lapping the channeled portions of the pipe or flume sections 1 and seating the bar in one of the channels, the ends of two adjacent sections will be snugly and securely joined together when the clamping bolts 6 are placed in proper position. It will also be understood that by seating the bars 4 in the channels and forming said bars of a size and shape to correspond with the size and shape of the channels, little or no resistance will be offered to the flow of water through the trough or flume.

For the purpose of suspending the trough

or flume sections cross bars or hangers 2 are provided, to which cross-bars or hangers are connected the yokes 8 by means of the nuts 9. In use I prefer to locate the cross-bars 5 or hangers 2 and the yokes 8 intermediate the joints of the trough or flume sections.

It will be understood that by forming the channels at the ends of the trough or flume sections and interlocking said channels the 10 adjacent ends or connected ends will be braced longitudinally by reason of the interlocking action not only of the channel portions, but by means of the bars 4, said bars being snugly clamped in the inner 15 channels.

Having fully described my invention what I claim as new and desire to secure by Letters Patent, is—

1. In a flume of the class described, the 20 combination of a series of sections, the ends of the sections provided with channels, said channels adapted to be interlocked, bars located in the uppermost interlocked channel and clamping bolts located through the bars 25 and interlocked channels and adapted to clamp the interlocked channel portions and bars together.

2. In a flume of the character described, the combination of a series of flume sections,

the lapped ends of the sections provided 30 with channel portions, said channel portions adapted to interlock with each other, bars located in the uppermost channels, said channels and bars provided with apertures, and means located through said apertures 35 adapted to secure said bars and lapped sections together, cross-bars adapted to support the flume sections and yokes connected to said bars and the flume sections adapted 40 to rest upon said yokes, substantially as and for the purpose specified.

3. In a flume of the class described, the combination of a series of sections, the ends 45 of the sections provided with channel portions, said channel portions adapted to be interlocked, bars located in the uppermost channels, cross-bars, and yokes connected to said cross bars and adapted to carry the flume sections, said cross bars and yokes located intermediate the joined ends of the 50 sections.

In testimony that I claim the above, I have hereunto subscribed my name in the presence of two witnesses.

JULIUS H. SCHLAFLY.

Witnesses:

WM. RANGENBACH,
CHAS. W. KING.