

G. M. GILLETTE.

FLUME.

APPLICATION FILED JULY 20, 1911.

1,049,698.

Patented Jan. 7, 1913.

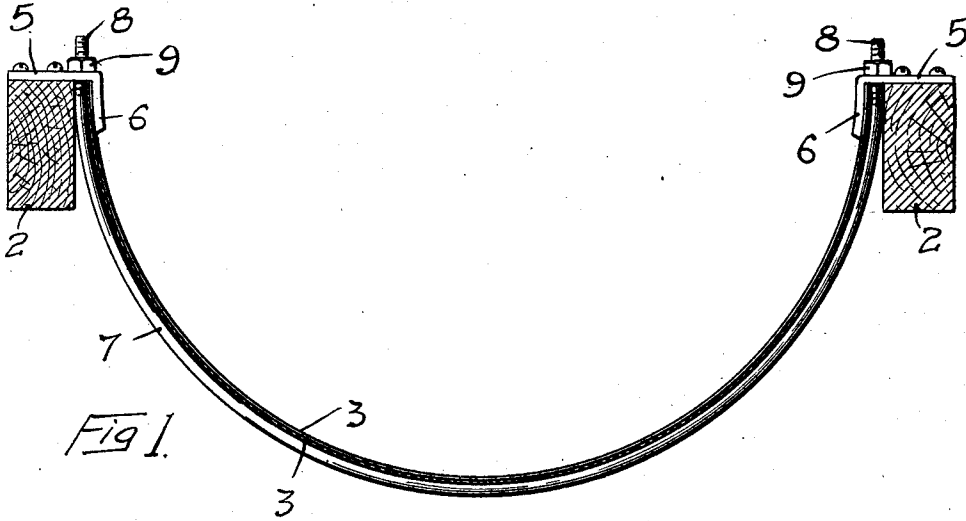


Fig 1.

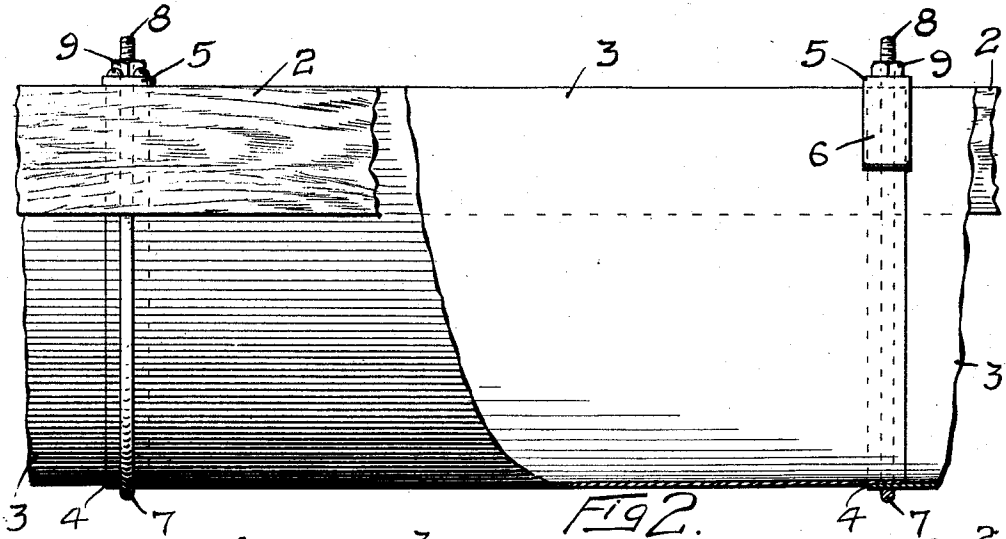


Fig 2.

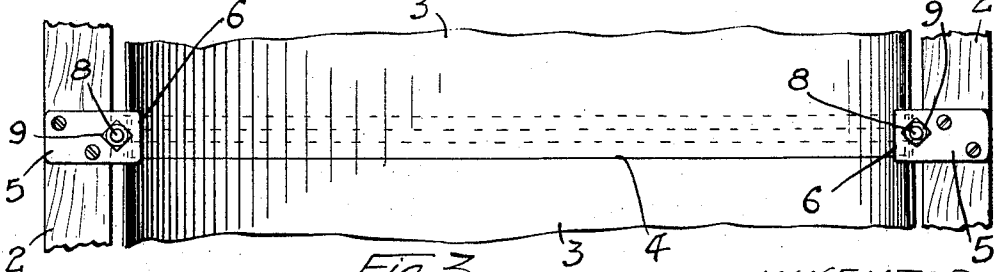


Fig 3.

WITNESSES

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UNITED STATES PATENT OFFICE.

GEORGE MAHLON GILLETTE, OF MINNEAPOLIS, MINNESOTA, ASSIGNOR TO MINNEAPOLIS STEEL & MACHINERY COMPANY, OF MINNEAPOLIS, MINNESOTA, A CORPORATION.

FLUME.

1,049,698.

Specification of Letters Patent.

Patented Jan. 7, 1913.

Application filed July 20, 1911. Serial No. 639,594.

To all whom it may concern:

Be it known that I, GEORGE M. GILLETTE, of Minneapolis, Hennepin county, Minnesota, have invented certain new and useful

Improvements in Flumes, of which the following is a specification.

My invention relates to metal flumes and the object of the invention is to provide a flume of simple, economical construction and one which can be shipped in knock-down form from the factory to the point where the flume is to be used.

A further object is to provide a metal flume which will present a smooth, unobstructed surface to the flow of the liquid therein.

A further object is to provide a metal flume which can be easily set up and will be extremely strong and durable.

My invention consists generally in various constructions and combinations, all as hereinafter described and particularly pointed out in the claim.

In the accompanying drawings forming part of this specification, Figure 1 is a transverse sectional view of a metal flume embodying my invention, Fig. 2 is a side elevation with a portion of the wall of the flume broken away, illustrating the lapping ends of the flume sections, Fig. 3 is a top view showing the manner of supporting the flume sections.

In the drawing, 2 represents sills or timbers arranged in parallel relation to one another and between which the flume is supported.

3 represents the metal sections of the flume, made substantially semi-circular in cross section, of galvanized or other suitable metal, the ends of the sections being arranged to lap by one another, as indicated at 4.

5 represents plates or brackets secured by suitable means to the tops of the sills 2 and having downwardly turned ends 6 that are preferably spaced, as indicated in Fig. 1, from the vertical inner faces of the sills. Into these spaces the lapping edges of the sections 3 are inserted and I prefer to support the sections by means of rods 7 bent to conform to the curvature of the flume

sections and having threaded ends 8 which are thrust through holes in the plates 5 and provided with nuts 9. The edges of the flume sections will be clamped and held securely between the rods 7 and the ends 6 and when the nuts of the rods are tightened the edges of the sections will be drawn securely against the plates 5 so that the flume sections and the plates will be readily clamped together. The flume sections may be made of suitable length and any desired gage of metal, according to the size of the flume and the strain to which it is likely to be subjected. In case of comparatively long sections the rods may be arranged intermediate to the joints of the flume, if desired.

From the foregoing description it will be noted that the supporting rods are all located on the outside of the flume so that the inner surface thereof will be smooth and unobstructed and will not collect sand or other material carried along by the water, as a flume constructed with inside bands or ribs is likely to do. Furthermore, the strain of the rods on the plates 5 tends to draw the ends 6 against the surface of the flume sections and thereby aid in clamping the sections and throwing the strain of the load outwardly against the supporting timbers. In various ways the details of construction may be modified without departing from the scope of my invention.

I claim as my invention:—

A metallic flume comprising metal sections, substantially semi-circular in cross section and having their ends lapping by one another, supports provided on each side of said flume, brackets mounted on said supports, rods curved to conform to the curvature of said sections and having threaded ends fitting into holes in said brackets, and nuts for said threaded ends, the longitudinal edges of said flume sections contacting with said brackets and the tightening of said nuts clamping said sections against said brackets.

In witness whereof, I have hereunto set my hand this 17th day of July 1911.

GEORGE MAHLON GILLETTE.

Witnesses:

LEWIS SEVERANCE,
A. C. SWIFT.