J. H. LANE.

FLUME.

APPLICATION FILED SEPT. 1, 1915.

1,220,519. Patented Mar. 27, 1917.

Fig. 1.

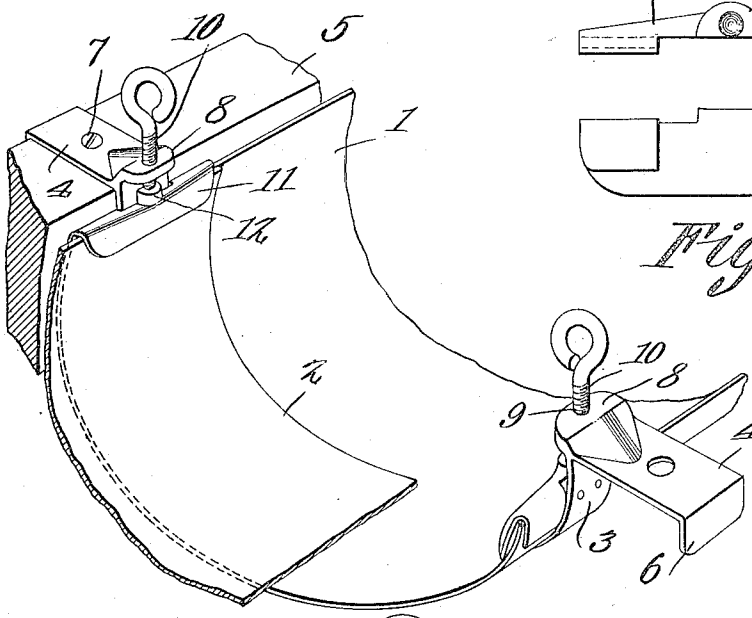


Fig. 3.

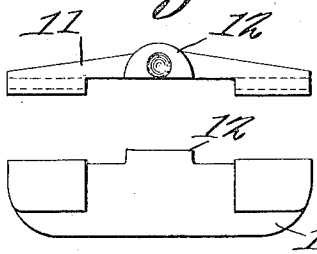


Fig. 4.

Fig. 5.

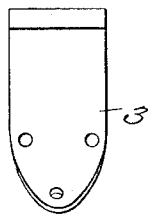


Fig. 2.

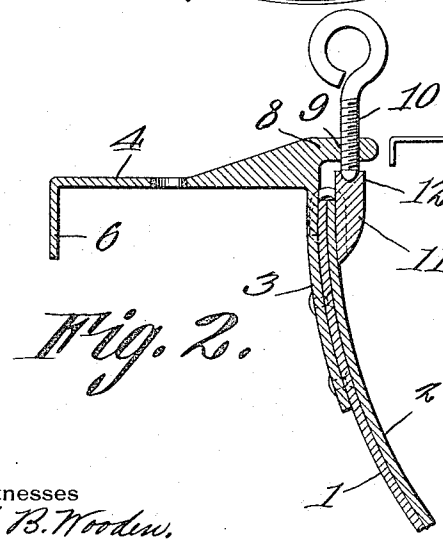
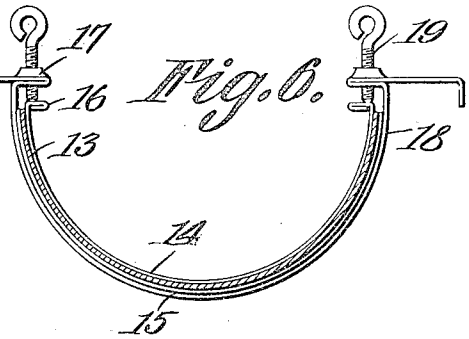


Fig. 6.



Witnesses

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FLUME.

1,220,519. Specification of Letters Patent. Patented Mar. 27, 1917.

Application filed September 1, 1915. Serial No. 48,464.

To all whom it may concern:

Be it known that I, JAMES H. LANE, a citizen of the United States, residing at Grand Junction, in the county of Mesa and State of Colorado, have invented a new and useful Flume, of which the following is a specification.

This invention relates to flumes such as used in irrigating systems, the principal object of the invention being to provide simple and efficient means whereby the interfitting trough-like members of the flume can be fastened securely together and at the same time be properly supported in position.

A further object is to provide a flume the parts of which are so assembled as to permit expansion and contraction due to the climatic changes.

A further object is to provide a flume which can be set up readily and easily taken down.

With the foregoing and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed, can be made within the scope of what is claimed, without departing from the spirit of the invention.

In the accompanying drawings the preferred form of the invention has been shown.

In said drawings:—

Figure 1 is a perspective view of the meeting portions of two sections of a flume and showing the means provided for supporting the same and binding them together.

Fig. 2 is a transverse section through a portion of the structure shown in Fig. 1.

Fig. 3 is a plan view of one of the saddles.

Fig. 4 is a front elevation thereof.

Fig. 5 is an inner elevation of the hanger.

Fig. 6 is a transverse section through a modified form of structure.

Referring to the figures by characters of reference 1 and 2 designate outer and inner substantially semi-cylindrical troughs or flume sections. Secured to opposite sides of the outer section 1 are hangers 3 each in the form of a broad tongue. Each of these hangers extends downwardly from a top plate 4 adapted to rest upon a supporting beam 5, said plate being provided at its outer end with a depending flange 6 adapted to lap the beam 5 and thus hold the plate against lateral displacement in one direction. The plate may be secured to the beam 5 in any desired manner, as by means of a bolt 7.

A boss 8 is preferably formed upon the plate and extends inwardly beyond tongue 3. This boss has an opening 9 engaged by a binding screw 10 which extends downwardly through the boss.

The inner flume section 2 is adapted, when in position within the flume section 1, to fit snugly in said section 1 and to project a short distance above the sides thereof. Each of these upwardly projecting sides is engaged by a saddle 11 having an integral seat 12 lying under the opening 9 in the adjacent boss 8. This seat is adapted to be engaged by the binding screw 10 so that by adjusting said screw downwardly, the saddle will be caused to press downwardly on the side of the flume section 2 and thus cause said flume section to bind tightly upon the flume section 1. By constructing a flume of sections 1 and 2, the sections 1 being spaced apart a distance somewhat less than the length of the sections 2, and said sections 1 being supported at both sides of each end by the specific means herein described, it will be apparent that a continuous practically water-tight flume will be produced, said flume being capable of expanding and contracting under the action of climatic changes.

Obviously by loosening the screws 10, the saddles 11 can be removed and the flume sections 2 detached from the sections 1. By unfastening the bolts 7 the outer flume sections 1 can be detached readily from the supporting means 5.

Instead of providing a structure such as shown in Figs. 1 to 5 inclusive, an arcuate strip 13 may be placed upon the upper flume section 14 where it rests upon the lower flume section 15, this strip being provided at its end with inwardly projecting heads 16 supported directly under the overhanging bosses 17 corresponding with the bosses 8. Furthermore instead of providing tongues 3 which are riveted to the section 1 as disclosed in Figs. 1 and 2, a supporting strip 18 may be formed integral with the boss 17 and extended under the lapping portion of the flume section. With this construction it will be apparent that by tightening the screws 19, the strip 13 will be forced

to bind tightly upon the upper flume section which, in turn, will be pressed tightly against the lower flume section.

What is claimed is:—

The combination with spaced supporting beams, of a top plate mounted upon each beam, means depending from the outer end of each top plate for lapping the outer side of the adjacent beam, a hanger depending from the inner end of each top plate, an outer trough section secured to the hangers, an inner trough section resting in the outer trough section and having its side edges projecting thereabove, a saddle resting on each side edge of the inner trough section, said inner trough section being adjustable longitudinally relative to the saddles, a seat integral with each saddle, a boss integral with and projecting inwardly from each of the top plates, and a binding screw carried by each boss and adapted to engage the seat in one of the saddles to bind the saddle upon the inner trough section.

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

JAMES H. LANE.

Witnesses:

GEORGE FLETCHER,

RAY D. GAMONS.

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