

W. M. REYNOLDS.

FLUME.

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985,938.

Patented Mar. 7, 1911.

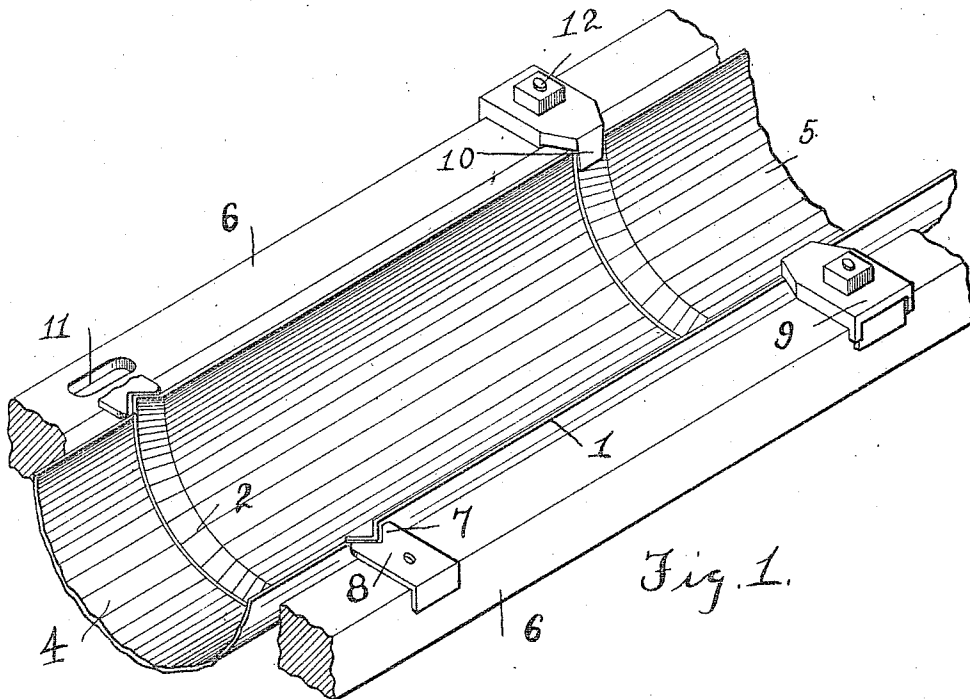


Fig. 1.

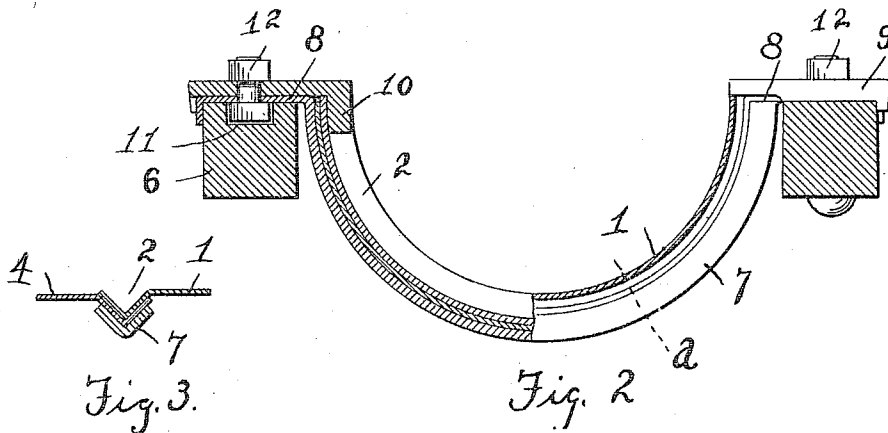


Fig. 2.

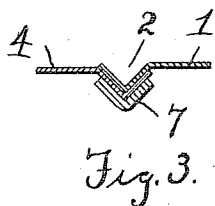


Fig. 3.

Witnesses

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FLUME.

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To all whom it may concern:

Be it known that I, WILLIAM M. REYNOLDS, a citizen of the United States, residing at Middletown, Butler county, Ohio, have invented certain new and useful Improvements in Flumes, of which the following is a specification.

This invention, pertaining to improvements in flumes, will be readily understood from the following description taken in connection with the accompanying drawing in which:—

Figure 1 is a perspective view of a portion of a flume exemplifying my present invention: Fig. 2, a vertical transverse section of the same: and Fig. 3 a longitudinal section of one of the joints in the plane of line *a* in Fig. 2.

In the drawing:—1, indicates one of the sections of the flume, the same being in the form of a semicircular metallic trough: 2, a circumferentially extending crimp near one end of the section, this crimp forming an outwardly projecting bead and a corresponding inner recess, the crimp being best of V-shape in cross-section: 4, a flume-section joining the section 1, the bead of section 1 being seated in the recess of section 4: 5, a flume-section similarly joining the other end of flume-section 1: 6, supports at the sides of the flume at each joint, these supports taking, preferably, the form of suitably sustained continuous longitudinal timbers: 7, metallic saddles disposed below each joint in the flume, these saddles being crimped in cross-section to engage the outside beads at the joints: 8, ears projecting outwardly from the extremities of the saddles and resting on the supports 6: 9, clips secured to the tops of each support at each joint, these clips having portions projecting inwardly over the upper edges of the flume: 10, a spur extending downwardly from the inner projection of each clip and engaging within the inner recesses of the crimps of the flume-sections, the clips bearing down upon the upper edges of the inner flume-sections at the joints: 11, longitudinal slots in the upper faces of supports 6: and 12, bolts clamping ears 8 and clips 9 to each other, the heads of the bolts resting freely in slots 11 so as to permit the ears to come down fairly on the supports.

When the end of one flume-section is placed within the end of a neighboring sec-

tion, with the crimps inter-membering, the edges of the inner flume-section will project somewhat above the edges of the outer section. The clips engage the upwardly projecting edges of the inner section and force that section downwardly into tight inter-membering engagement with the outer section, while the spurs 10 prevent any inward collapsing of the inner section at the joint.

Bolts 12 draw the clips toward ears 8 and thus form the joints for the flume. The slots permit the ears of the saddles to bear fairly on their supports and at the same time the slots permit of longitudinal shifting of the joints under the effect of contraction and expansion. At intervals flume joints may be bolted securely to the supports by passing the bolts entirely through the supports, as indicated at the right-hand support in Fig. 2.

I claim:—

1. A flume comprising, supports at the sides of the flume, a saddle disposed at each joint in the flume and having its ends engaging said supports, a metallic trough formed of sections joined by overlapping and resting in said saddles, and means engaging the edges of the inner members of the flume at the joints and serving to force such inner member toward the outer member and the saddles at the joint, combined substantially as set forth.

2. A flume comprising, supports at the sides of the flume, a saddle disposed at each joint in the flume and having its ends projecting outwardly and resting on said supports, a metallic trough formed of sections having over-lapping ends at and resting within said saddles, clips engaging the outer ends of the saddles and the upper edges of the inner flume-members at the joints, and bolts engaging the clips and the ends of the saddles and serving to draw them toward each other, combined substantially as set forth.

3. A flume comprising, supports at the sides of the flume, a saddle disposed at each joint in the flume and having its ends projecting outwardly and resting on said supports, a metallic trough formed of sections having over-lapping ends at and resting within said saddles, clips engaging the outer ends of the saddles and the upper edges of the inner flume-members at the joints, spurs

projecting down from the inner portions of said clips and engaging against the inner surfaces of the inner flume-members at the joints, and bolts engaging the clips and the
5 ends of the saddles and serving to draw them toward each other, combined substantially as set forth.

4. A flume comprising, supports at the sides of the flume, a saddle disposed at each
10 joint in the flume and having its ends resting on said support and adapted to shift thereon lengthwise of the flume, a metallic

trough formed of sections having overlapping ends at and resting within said saddles, clips engaging the outer ends of the saddles
15 and the upper edges of the inner flume members at the joints, and means for forcibly drawing the clips toward the ends of the saddles, combined substantially as set forth.

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Witnesses:

OLAF HELMER,
ROY FREEZE.