

On account of wood being a non-conductor the temperature of the water passing through wooden pipe is very uniform in winter and summer.

Freezing will not cause wood-stave pipe to burst like iron or steel. The wood expands and the steel wire or bands are merely embedded.

The cost of wood-stave pipe used under moderate head and average conditions is from 25 to 50 per cent. less than steel pipe.

The following are some of the advantages of this pipe claimed by manufacturers:

- 1. It is more durable than wrought iron or steel pipe.
- 2. It is cheaper than cast iron, wrought iron or steel pipe.
- 3. It has a greater carrying capacity than iron or steel pipe of many years' service.
- 4. Its carrying capacity is never decreased by rust.

the ground instead of in sections at the factory. The red-wood staves were imported from California.

For pressures up to 196 feet the staves were one and five-eighths inches thick; and the iron bolts used as bands  $\frac{1}{2}$ -inch round by 149  $\frac{3}{4}$  inches over all. For pressures above this the staves were two and one half inches thick and the bolts  $\frac{5}{8}$ -inch round by 155  $\frac{1}{4}$  inches over all.

The following is a list of typical spacing distances for the iron bands:

42-inch Pipe.

Spacing in Inches.	Pressure in Feet of Head.
11	20
10	24
7	37
5	54
3 $\frac{3}{4}$	72
3 $\frac{1}{8}$	86

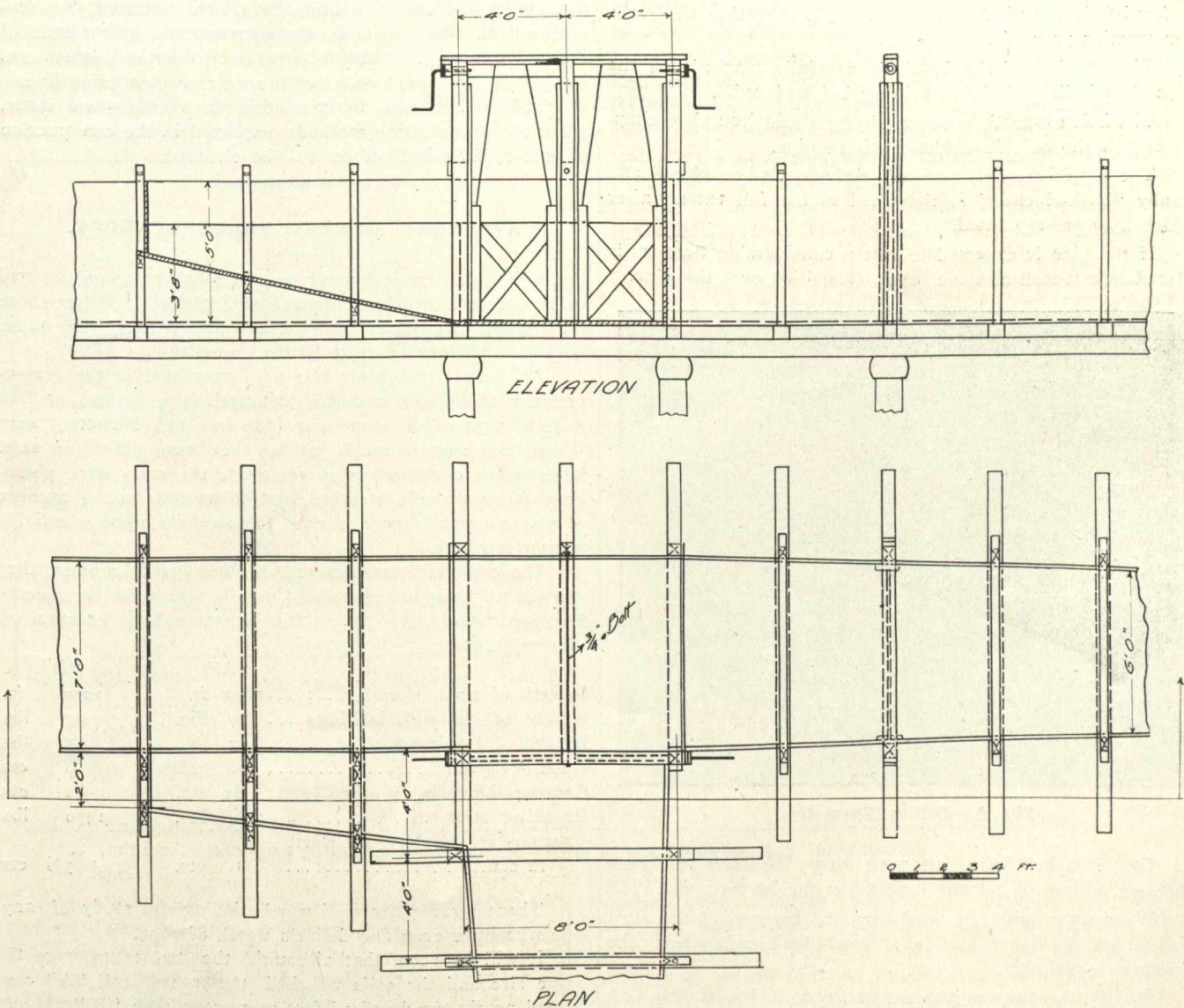


Fig. 3.—Turnout and Spillway.

- 5. It conveys water sweeter, more wholesome and cooler.
- 6. It is cheaply laid.
- 7. It is easily and safely tapped.
- 8. It needs no caulking.
- 9. It can be fitted to any connection.
- 10. No frost bursts.
- 11. No electrolysis.
- 12. No contraction.
- 13. No corrosion.
- 14. Freight saved.
- 15. Greater longevity.

This form of pipe is liberally used in British Columbia, California, and also in New Zealand and other parts of the world. In the Yukon it has been used wherever possible.

The pipe used in connection with the inverted siphons is 42-inch and 48-inch diameter, and is built continuous on

2 $\frac{5}{8}$	103
2 $\frac{1}{4}$	120
1 $\frac{3}{4}$	154
1 $\frac{1}{2}$	180
1 $\frac{3}{8}$	196

Size of Bolts Increased.

2	207
1 $\frac{7}{8}$	220
1 $\frac{3}{4}$	236
1 1-16	245
1 $\frac{5}{8}$	254

48-inch Pipe.

Spacing in Inches.	Pressure in Feet of Head.
10	20
6	41