paints, the coal-tar coatings, and some of the oxide of iron paints are already out of the race, and that neither the lead nor the graphite paints are holding out quite as well as might have been expected.

A chemical analysis of the water beneath the bridge was arrived at as follows :

The average density of ocean water is 1.026, and the composition is as follows :

Water		96.5 per	cent.
Salts	••••••	3.5	**

The composition of the salts is as follows :---

Chloride of sodium	77.758
Chloride of magnesium	10.878
Sulphate of magnesium	4.737
Sulphate of lime	3.600
Sulphate of potash	2.465
Bromide of magnesium	0.217
Carbonate of lime	0.345
Total salts	100.000

The density of the water under the bidge was determined roughly by weighing a certain volume and comparing it with the weight of a like volume of fresh water. This gave a density of 1.00813, which would make the composition as follows :--

Water	98.215 per cent.
Salts	1.785 "

100.000 per cent.

The composition of the salts would be the same as that given above for ocean water.

The highest summer temperature of the air in 1895 was 82° F., and the lowest temperature in winter of 1895-6 was— 2° F. The highest summer temperature of the air in 1896 was 72° F., and the lowest temperature in winter of 1896-7 was— 7° . The summer temperature of the sea-water under the bridge is 60° F. to 63° F., and the winter temperature 30° F. to 35° F. Total precipitation in 1895 was probably about 70 inches. Total precipitation in 1896 was 69.86 inches. Snow lies on the ground, more or less,