

will be seen that, out of seventy-two surface waters examined, only seven contained more than the amount of carbonic acid eliminable by this method. Of these seven cases, three were waters at temperatures above 70° F., and three at temperatures below 35° F. On the whole, less carbonic acid was found in warm than in cold latitudes. Omitting two abnormally high but not incorrect results obtained in the tropical sea between Fiji and Torres Strait, the following table shows the mean amount of carbonic acid per litre in all the surface waters arranged according to the temperature of the water *in situ* :—

Number of Cases taken Account of.	Temperature Interval, °C.	Carbonic Acid, Milligrammes per Litre.
20	25·0 to 28·7	35·88
15	20·0 „ 25·0	37·18
10	15·0 „ 20·0	42·68
8	10·0 „ 15·0	43·50
8	5·0 „ 10·0	47·21
9	- 1·4 „ + 3·2	53·31

The observations made on waters from different depths are averaged in the following Table :—

Depth in Fathoms.	Carbonic Acid, Grammes per Litre.	No. of Determinations of CO <sub>2</sub> .	Average Temperature of Water.
			° C.
Surface.	0·0426	73	...
25	0·0337	2	...
50	0·0488	10	...
100	0·0436	5	14·6
200	0·0446	8	13·0
300	0·0440	4	6·9
400	0·0411	10	5·1
800	0·0422	7	3·5
over 800	0·0446	7	1·5
Bottom	0·0474	54	...