

## PAPERS RELATIVE TO THE INTRODUCTION

## B.—RIVERS FLOWING TO THE WEST.—NORTH ISLAND.

Locality.	Date.	Average Temperature of				Extreme range of Temperature of Water observed.	Remarks.
		Air.	Running Stream.	Ebb Tide.	Flood Tide.		
<i>Auckland—</i>	1868.	°	°	°	°	°	
6. Waikato ...	April 11 to 30 ...	56°	58°	...	...	4°	At Hamilton, Upper Waikato.
Do. ...	May 1 to 31 ...	49·5	54°	...	...	4°	Do. do.
Do. ...	May 7 to 31 ...	60°	56·2	55·5	57·0	9°	Port Waikato, 1½ mile inside the Bar.
<i>Taranaki—</i>							
8. Waitara ...	April 1 to 30 ...	62·5	58·5	57·5	59·5	14°	
9. Urunui ...	April 1 to 30 ...	60°	60·5	60°	61°	16°	At Atkinson's Wharf.

## C.—RIVERS FLOWING TO THE EAST.—SOUTH ISLAND.

<i>Canterbury—</i>							
10. Waimakariri ...	March 6 to April 30	59°	53·2	53·5	53·0	20°	At Kaiapoi, about four miles from mouth.
11. Avon ...	March 5 to April 30	58·3	55·3	...	...	11·3	At Christchurch, about seven miles from mouth.
12. Estuary of Avon and Heathcote	March 7 to April 30	61·7	52·0	50·2	53·7	17°	At Sumner, near the Bar.

## D.—RIVERS FLOWING TO THE SOUTH.—SOUTH ISLAND.

<i>Southland—</i>							
13. Jacob's River Estuary	March 18 to April 29	59°	54°	54°	54°	8°	At Riverton, from a boat or rock.
14. Mataura ...	March 9 to May 7...	53°	50°	...	...	20°	At the Falls.
15. Do. ...	March 10 to May 4	58°	50·5	...	...	13°	At Aralussa.
				Still Surface of Pools.			
16. Omutu ...	Feb. 23 to April 26	55·5	52·5	55°	55°	11°	At Blackwater.
17. Purrapurakino ...	Feb. 23 to April 26	55·5	48·5	55°	55°	14°	At Blackwater.
18. Makarewa ...	March 14 to April 30	61·5	55·5	56°	56°	14°	At Woodburn, New River.

## E.—SEA, EAST COAST.—NORTH ISLAND.

Locality.	Date.	Average Temperature of				Extreme range of Temperature of Water observed.	Remarks.
		Air.	Ebb Tide.	Flood Tide.	Sea.		
	1868.	°	°	°	°	°	
19. Open Sea ...	April 8 to 27 ...	69·0	...	...	59·5	5°	Off Hawke's Bay.
Napier ...	April 8 to 14 ...	69·5	...	...	58·5	1°	At the Wharf.
Open Sea ...	February 6-12 ...	67·6	...	...	62°	3°	Wellington to Tauranga.
Open Sea ...	" 10-13 ...	70·0	...	...	67°	1°	Off Opotiki.
Tiri Tiri Island ...	March 28 to April 30	63·5	65°	65°	65°	5·3	Off a rock.

## F.—SEA, WEST COAST.—NORTH ISLAND.

<i>Auckland—</i>							
In shore ...	February 4 ...	60°	...	...	64·5	...	Off Manukau.
New Plymouth ...	April 20-30 ...	58·2	58·7	58·2	58·5	9·5	At the landing place, off a boat or rock.
Open Sea ...	January 27 to 29 ...	66·2	...	...	67°	...	Off Patea.

## G.—SEA, EAST COAST.—SOUTH ISLAND.

<i>Canterbury—</i>							
Little Port Cooper	March 8 to 31 ...	63°	61°	59·5	60·2	10°	At the Pilot Station, from a rock.
Akaroa ...	March 11 to April 30	62°	59°	60°	59·5	12°	Two chains from beach, off the Jetty.
<i>Otago—</i>							
Tairoa's Head ...	March 3 to April 30	57°	54·5	54·5	54·5	5°	At the Lighthouse, from Jetty or rocks

## H.—SEA, WEST COAST.—SOUTH ISLAND.

<i>Westland—</i>							
Jackson's Bay ...	May 9 to 31 ...	48°	...	...	49°	18°	} From the survey steamer "St. Kilda," off the ship's side when at anchor.
Cape Campbell ...	April 24 to 26 ...	51·5	...	...	54°	14°	
Flaxbourne ...	April 19 ...	54°	...	...	60°	...	