

when the elevation was 810·5 feet above the sea, nearly identical with the elevation determined by the Ordnance Survey on May 18, 1896, viz. 810·4 feet.

Temperature Observations.—The following temperatures were taken in the deepest part of the loch :—

Surface ...	...	...	...	...	...	46°·0 Fahr.
5 feet ...	...	...	...	...	...	44°·3 „
10 „ ...	...	...	...	...	...	44°·0 „
25 „ ...	...	...	...	...	...	44°·0 „
56 „ ...	...	...	...	...	...	43°·0 „

The range from surface to bottom was 3°, a fall of 1°·7 being observed between the surface and a depth of 5 feet, while the readings at 10 and 25 feet were identical.

St. Mary's Loch (see Plate XLIX.).—St. Mary's Loch is situated about 10 miles south of Peebles, 12 miles south-west of Selkirk, and 13 miles north-east of Moffat, and is somewhat crescentic in outline, the narrower upper portion trending nearly north and south, while the wider lower portion trends in a north-easterly direction. It is 3 miles in length, the maximum breadth exceeding half a mile, the mean breadth being one-third of a mile. The superficial area is about 635 acres, or 1 square mile, while the drainage area, including the area draining into the Loch of the Lowes, extends to about 42 square miles. The maximum depth of 153 feet was observed in the wider part of the loch, about 1½ miles from the northern end. The volume of water is estimated at 2018 millions of cubic feet, and the mean depth at 73 feet, or nearly half the maximum. There are two deep basins exceeding 100 feet in depth, separated at the entrance of the Megget water by a ridge, on which a maximum depth of 88 feet was found: the larger and deeper one towards the lower end is nearly 1½ miles in length, while the smaller one towards the southern end has a maximum depth of 112 feet, and is over half a mile in length. The areas between the contour-lines, and the percentages to the total area, are as follows :—

Feet.				Acres.		Per cent.
0 to 50	...	...	...	229	...	35·9
50 „ 100	...	...	...	207	...	32·6
100 „ 150	...	...	...	193	...	30·4
Over 150	...	...	...	6	...	1·1
				—	...	—
				635		100·0

The loch was surveyed on May 5 and 6, 1905, when the elevation was found to be 809·5 feet above the sea, or more than a foot higher than the elevation determined by the Ordnance Survey officers on May 18, 1896, viz. 808·2 feet.

Temperature Observations.—The following temperatures taken in the deepest part of the loch at 6·30 p.m. on May 5, 1905, showed that the range from surface to bottom was only 1°·8 Fahr. :—