

cent. of the lake-floor being covered by less than 50 feet of water, and 85 per cent. by less than 100 feet of water, while the area deeper than 150 feet is exceedingly small.

Temperature Observations.—Numerous surface temperatures were taken during the week spent on the survey of Loch Shin, the readings ranging from 56°·0 Fahr. to 59°·0. Three serial temperatures were taken, with the following results:—

Depth in feet.	August 27, 1902, 5.15 p.m.	August 30, 1902, 6 p.m.	September 1, 1902, 5.30 p.m.
	° Fahr.	° Fahr.	° Fahr.
0	56·5	56·7	57·0
25	...	56·1	56·8
50	56·0	56·0	56·6
90	...	56·0	...
100	54·2	...	·
150	51·2

These observations show that the whole body of water down to a depth of 90 feet was practically uniform in temperature, but in the deepest part of the loch a fall of temperature amounting to 3° was observed between 100 and 150 feet. The extreme range of temperature from surface to bottom and from end to end of the loch amounted to only 7°·8.

Loch Merkland (see Plate LXVII.)—Loch Merkland lies about 3 miles to the north of the head of Loch Shin, amid beautiful surroundings, Ben Hee rising to a height of 2864 feet on the north-east, with Carn Dearg (2613 feet) and other heights to the north, and Ben Leoid (2579 feet) to the west. It trends in a north-north-west and south-south-east direction, and is 3 miles in length, with a maximum breadth of over one-third of a mile, the mean breadth being a quarter of a mile. Its waters cover an area of about 440 acres, or two-thirds of a square mile, and it drains an area of about 16 square miles. Nearly 120 soundings were taken, the maximum depth of 85 feet having been observed close to the narrows towards the head of the loch. The volume of water is estimated at 577 million cubic feet, and the mean depth at over 30 feet. The loch was surveyed on September 2, 1902, when the elevation of the lake-surface above the sea was found to be 360·2 feet.

Loch Merkland is comparatively simple in conformation, the deeper water occurs towards the head of the loch, and is cut into two portions by a shoaling of the bottom at the narrow portion where the large alluvial cone laid down at the mouth of the Allt nan Allbannach on the north-eastern shore approaches the smaller cone at the mouth of the Garbh Allt on the opposite shore. The depth of the channel at the narrows referred to is 31 feet, and the 10-foot and 25-foot basins extend