the loch. It is half a mile in length, with a maximam breadth of onethird of a mile. The superficial area is about 56 acres, of which 63 per cent. is covered by less than 20 feet of water, and the drainage area is about 1 square mile. The maximum depth of 43 feet was observed off the central part of the western shore. The volume of water is estimated at 43 million cubic feet, and the mean depth at $17 \frac{1}{2}$ feet. The loch was surveyed on May 27, 1903, when the elevation was found to be $777 \cdot 6$ feet above the sea. The surface temperature was $63^{\circ} \cdot 0$ Fahr.

Loch Scamadale (see Plate XXIX.). - Loch Scamadale lies about $2 \frac{1}{2}$ miles from the head of Loch Feochan, and about 6 miles south-east from Oban. The loch trends east and west, and is over $1 \frac{1}{2}$ miles in length, the maximum breadth being about one-third of a mile, and the mean breadth less than a quarter of a mile. The superficial area exceeds one-third of a square mile, or about 226 acres, while the total area draining into it is nearly $13 \frac{1}{2}$ square miles, including that draining into Loch na Sreinge. The maximum depth of 145 feet was recorded near the centre of the loch, the mean depth being estimated at nearly 70 feet, and the volume of water at 685 millions of cubic feet. The loch was surveyed on June 1, 1903, when the elevation was found to be $221 \cdot 0$ feet above the sea, or 4 inches lower than that observed by the officers of the Ordnance Survey on July 25, 1864, viz. $221 \cdot 3$ feet.

The conformation of the basin is simple, the slope along the southern shore being much steeper than along the northern shore. The contourlines are deflected sonthward off the alluvial cone at the mouth of the Eas Ruadh, on the northern shore, apparently as the result of the deposition of material brought down by that stream. The approximate areas between the contour-lines drawn in at intervals of 50 feet, and the percentages to the total area, are as follows.-

| Feet. |  |  |  | Acres. |  |  |
| :---: | :---: | :---: | :---: | ---: | :---: | :---: |
| Per cent. |  |  |  |  |  |  |
| 0 to 50 | $\ldots$ | $\ldots$ | $\ldots$ | 79 | .. | 351 |
| 50,100 | $\ldots$ | $\cdots$ | $\cdots$ | 89 | $\ldots$ | 394 |
| Over 100 | $\cdots$ | $\cdots$ | $\cdots$ | 58 | $\ldots$ | $25 \cdot 5$ |
|  |  |  |  | $\boxed{226}$ |  | $\overline{1000}$ |

This table shows the somewhat flat-bottomed character of the basin, the zone covered by water between 50 and 100 feet in depth being larger than the shore-zone covered by less than 50 feet of water.

Temperature Observations.-Serial temperatures, taken in the deepest part of the loch, gave the following results:-

| Surface | . |  |  | ... |  | $55^{\circ} \cdot 0$ | Fahr |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 20 feet ... | ... | ... | . | . | . | $52^{0.1}$ |  |
| 35 |  | ... | . |  |  | $47^{\circ} 8$ | " |
| 70 ,, ... | . |  | ... | - | ... | $46^{\circ} 4$ | , |
| 140 , | - | ... | ... | ... | $\cdots$ | $46^{\circ} \cdot 2$ | " |

The range of temperature from surface to bottom amounted to $8^{\circ} .8$, there being a fall of $2^{\circ} .9$ between the surface and a depth of 20 feet, and a further fall of $4^{\circ} 3$ between the depths of 20 and 35 feet.

