

length of the loch is 70 times the maximum depth, and 190 times the mean depth. The Loch of Craiglush forms a simple basin, the bottom sloping gradually down on all sides towards the deepest part without any pronounced irregularities. The maximum depth of 44 feet was observed in two places opposite the entrance of the Lunan burn, approximately in the centre of the loch, but nearer the western shore and the southern end. The area of the lake-floor covered by less than 20 feet of water is about 51 acres, or 73 per cent. of the total area of the loch; that covered by water between 20 and 40 feet in depth is nearly 15 acres, or 21 per cent.; and that covered by more than 40 feet of water is over 4 acres, or 6 per cent. of the entire area of the loch. Loch Craiglush was surveyed on June 2, 1903, and the height of the surface of the water above sea-level was determined by levelling from benchmark as being 327·6 feet, the same as Loch of Lowes, into which it flows.

Temperature Observations.—Temperature observations taken in the deepest part of the loch at 7.45 a.m. gave the following results:—

Surface	.	.	.	.	.	..	61°·2 Fahr.
5 feet	..	.	.	.	...	..	61°·3 „
8	„	..	..	...	..	...	61°·2 „
9	„	..	.	...	.	...	57°·4 „
10	„	..	.	...	...	...	54°·5 „
20	„	...	..	..	..	..	52°·0 „
30	„	...	...	..	..	...	50°·0 „
42	„	...	...	.	...	..	49° 0 „

This series shows a rapid fall in the temperature between 8 and 10 feet, amounting to 6°·7 (a fall of 3°·8 between 8 and 9 feet, and of 2°·9 between 9 and 10 feet), the extreme range of temperature from surface to bottom amounting to 12°·2.

Loch of Lowes (see Plate XXIX.).—The Loch of Lowes, like the Loch of Craiglush, is surrounded by trees; its shores are mostly composed of stony debris, and weeds are abundant off the south-western shore where the artificial channel from the Loch of Craiglush enters. It trends in a north-east and south-west direction, and is $1\frac{1}{8}$ miles in length, with a maximum breadth of over half a mile, the mean breadth being more than a quarter of a mile, or 24 per cent. of the length. Its waters cover an area of about 218 acres, or over one-third of a square mile, and it drains directly an area of nearly 2 square miles, but since it receives the outflow from the Loch of Craiglush its total drainage area is about $7\frac{2}{3}$ square miles, an area nearly 23 times greater than the area of the loch. Over 60 soundings were taken, the maximum depth observed being 53 feet. The volume of water contained in the loch is estimated at 193,973,000 cubic feet, and the mean depth at nearly $20\frac{1}{2}$ feet, or 39 per cent. of the maximum depth. The length of the loch is 138 times