

The fact that the area between the 25- and 50-foot contour-lines is greater than the area between the shore and the 25-foot line proves the flat-bottomed nature of the basin, as well as the fact that the mean depth is fully half the maximum depth. The Loch of Drumellie was surveyed on the same day as the Loch of Clunie, June 4, 1903; the elevation above the sea was determined by levelling from bench-mark as being 146·7 feet. The Ordnance Survey officers found the level of the lake-surface to be 147 feet above the sea on September 19, 1899.

*Temperature Observations.*—Temperature observations taken in the deepest part of the loch at 11.30 a.m. gave the following results:—

Surface . . . . .	60° 2 Fahr.
10 feet ... ..	59° 0 ,,
15 ,, . . . . .	53°·7 ,,
20 ,, .. . . .	50°·7 ,,
30 ,, . . . . .	49° 5 ,,
40 ,, .. . . .	49°·2 ,,
58 ,, .. . . .	48°·7 ,,

This series shows a range of temperature from surface to bottom of 11°·5, the greatest fall being one of 5°·3 between 10 and 15 feet, with a further fall of 3° between 15 and 20 feet. Compared with the temperatures taken in the Loch of Clunie in the evening of the same day, this series shows a much smaller range of temperature, the surface temperature being 2° lower and the bottom temperature 1°·5 higher, although the difference in depth is only 7 feet; the position of greatest fall in the temperature is nearer the surface in the Loch of Clunie, and the amount of fall is greater.

*Rae Loch* (see Plate XXX.)—Rae Loch (or Ardblair Loch) lies a quarter of a mile to the east of the Loch of Drumellie, into which it flows, and about a mile to the west of Blairgowrie. It is surrounded by low fields and wooded country, and its shores are all weedy, while the western portion of the loch is quite filled with weeds. The water formerly stood at a higher level, and frequently flooded the road on the north side; it was consequently lowered about 10 feet by a cutting, which has since, however, become choked up. It is under half a mile in length, less than one-fifth of a mile in maximum breadth, the mean breadth being about one-ninth of a mile, or 25 per cent. of the length. Its waters cover an area of about 30 acres, and it drains an area seven times greater—an area of over one-third of a square mile. Over 30 soundings were taken, the maximum depth observed being 16 feet. The volume of water is estimated at 8,727,000 cubic feet, and the mean depth at 6½ feet, or 31 per cent. of the maximum depth. The deeper water occurs near the eastern end, off which the slope is steep, at one point a sounding of 10 feet was taken only 20 feet from the shore, giving a gradient of 1 in 2. The area of the lake-floor covered by less than