

depth. The length of the loch is 148 times the maximum depth and 402 times the mean depth. Loch Freuchie forms on the whole a simple basin, but with a few minor undulations of the bottom. The 25-foot basin is sinuous in outline, especially towards the south-east end, and is over $1\frac{1}{2}$ miles in length, approaching close to the north-west end, but distant less than a quarter of a mile from the south-east end. The 50-foot basin, half a mile in length, is contained in the northern half of the loch, and nearer the eastern than the western shore, the maximum depth of 62 feet having been observed in two places, with soundings of 60 feet between them. Cones of alluvium have been formed at the mouths of the Turrerich burns at the northern angle of the loch, and at the entrance of the Allt a' Mhuilinn about midway along the western shore. The area of the lake-floor covered by less than 25 feet of water is about 225 acres, or 65 per cent. of the total area of the loch; that covered by water between 25 and 50 feet in depth is about 95 acres, or 27 per cent.; and that covered by more than 50 feet of water is about 28 acres, or 8 per cent. of the entire area of the loch. Loch Freuchie was surveyed on June 5, 1903, and the height of the surface of the water above the sea was determined, by levelling from bench-mark, as being 867·45 feet; when levelled by the officers of the Ordnance Survey on August 17, 1899, the elevation was found to be 870·8 feet above sea-level.

Temperature Observations.—Temperature observations taken in the deepest part of the loch at 7 p.m. gave the following results:—

Surface	...	...	.	...	...	.	58°·6 Fahr.
10 feet	.	.	.	..	...	..	58°·3 „
15 „	.	..	...	..	.	..	57°·6 „
25 „	..	..	.	..	...	...	53°·0 „
40 „	.	.	.	.	.	.	50°·0 „
60 „	.	..	..	...	.	.	49°·4 „

This series shows a range of temperature from surface to bottom of 9°·2, there being a fall of 4°·6 between 15 and 25 feet, and a further fall of 3°·0 between 25 and 40 feet.

Loch Hoil (see Plate XXXI).—Loch Hoil (or Oyl, or Thuill) lies to the south of Aberfeldy, and flows by the Cochill burn into the river Bran. It contains trout, perch, grayling, and gudgeon. It is surrounded by low, rounded, hummocky, heather-clad hills. Its shores are stony; the bay leading to the outflow is very shallow and full of weeds. It is very irregular in outline, and over one-third of a mile in length from north-west to south-east, under one-third of a mile in maximum breadth from north-east to south-west, the mean breadth being one-seventh of a mile, or 43 per cent. of the length. Its waters cover an area of about 35 acres, and it drains an area six times greater—an area