This series shows a range of temperature throughout the 60 feet of water amounting to  $10^{\circ}4$ , the greatest fall being one of  $5^{\circ}3$  between 15 and 20 feet.

Loch Shechernich (see Plate XXXIII.).-Loch Shechernich (or Bainie), a small loch in Glenshee, situated amid fine mountain scenery, is a good trout loch, but strictly preserved. It flows by the Allt Mor into Shee water, thence by the Black water into the river Ericht, a tributary of the river Isla. Its shores are low and peaty, rising gradually to the surrounding heather-clad hills. Near the centre of the loch is an artificial island composed of small stones. Loch Shechernich trends in an east and west direction, and is nearly half a mile in length, and one-fifth of a mile in maximum breadth, the mean breadth being one-seventh of a mile, or 31 per cent. of the length. Its waters cover an area of about 42 acres, and it drains an area  $16\frac{1}{2}$  times greater-an area considerably over 1 square mile. Thirty soundings were taken, the maximum depth observed being 8 feet. The volume of water is estimated at 7,364,000 cubic feet, and the mean depth at 4 feet, or 50 per cent. of the maximum depth. The bottom sinks gradually from the west towards the east end, being covered by less than 6 feet of water in the western half (to the west of the central island), while the greater portion of the eastern half is covered by more than 6 feet of water, the maximum depth of 8 feet having been observed in three places comparatively close to the east end. The area of the lake-floor covered by less than 5 feet of water is over 31 acres, or 75 per cent. of the entire area of the loch. Loch Shechernich was surveyed on the same day as Loch nan Eun, July 2, 1903. The elevation above the sea could not be ascertained, but from spot-levels it is probably about 1330 feet. The water in the loch was about its lowest on the date of the survey, and apparently rises 1 to 2 feet higher. At 6 p.m. the temperature of the water at the surface and at a depth of 7 feet was in each case  $59^{\circ}2$ .

Auchenchapel Loch (see Plate XXXIII).—Loch Auchenchapel (or Auchintaple), in Glenisla, near Inverharity, is an artificial loch made in 1884, and flows by a short stream (Allt na Beinne) into the river Isla, it is a good trout loch, without pike. It trends in a north and south direction, and is over one-third of a mile in length, and over a quarter of a mile in maximum breadth, the mean breadth being over oneseventh of a mile, or 40 per cent. of the length. Its waters cover an area of about 35 acres, and it drains an area  $5\frac{1}{2}$  times greater—an area of one-third of a square mile. Over 40 soundings were taken, the maximum depth observed being 17 feet. The volume of water contained in the loch is estimated at 12,669,000 cubic feet, and the mean depth at 8 feet, or 49 per cent. of the maximum depth. Auchenchapel