

55 acres, or over 23 per cent. ; and the area over 75 feet in depth is about 53 acres, or less than 23 per cent. of the entire area of the loch. The comparatively flat-bottomed character of the deep basin is indicated by the larger proportion of the bottom covered by water between 50 and 75 feet in depth, as compared with the proportion covered by water between 25 and 50 feet, the average slope being thus considerably steeper in depths of 25 to 50 feet than in depths of 50 to 75 feet ; and this latter gentler slope is continued into the deeper water over 75 feet in depth, as shown by the nearly equal areas on both sides of the 75-foot line. The large proportion under 25 feet in depth is due to the considerable silted-up area towards the north-east end of the loch already referred to. Loch Lyon was surveyed on May 10, 1902. No bench-marks were to be seen along the shores, nor on the Ordnance Survey charts, but the height of the surface of the loch was estimated as being about 1050 feet above the sea. Lines of drift were observed 4 feet above the water, which, according to the keeper, was about its normal height at the time of the survey ; the water rises suddenly and falls as quickly, and might fall perhaps a foot lower than on the date of the survey. Thus a range of about 5 feet in the level of the water is indicated. The temperature of the surface water on May 10, 1902, when commencing the survey, about noon, was $48^{\circ}\cdot7$ at the edge of the bank at the north-east end, and readings taken along the shore gave 50° , $51^{\circ}\cdot8$, $52^{\circ}\cdot5$, and 58° . In the afternoon, readings of $47^{\circ}\cdot9$ were taken in shallow water towards the northern shore, $48^{\circ}\cdot9$ near the south-west end, and $46^{\circ}\cdot4$ in the centre of the loch. These observations show a range of $11^{\circ}\cdot6$ in the temperature of the surface water throughout the day, viz. from $46^{\circ}\cdot4$ to 58° .

Loch Dochart (see Plate XX.).—Loch Dochart, situated at the foot Ben More amid beautiful scenery, is the westernmost of the lochs belonging to the Tay branch of the Tay river-system, being evidently an expansion of the river Fillan, which forms the headwaters of this branch. It receives the drainage from a considerable tract of country, is very shallow, the bottom is very weedy, and there are many reeds, especially at the west end. Loch Dochart is nearly two-thirds of a mile in length, with a maximum breadth of nearly one-sixth of a mile, the mean breadth being over one-tenth of a mile, or 18 per cent of the length. Its waters cover an area of about 46 acres, or nearly one-fourteenth of a square mile, and it drains an area of nearly 39 square miles, or 555 times the area of the loch. Nearly 70 soundings were taken in Loch Dochart, the maximum depth observed being 11 feet ; but this depth is of very limited extent, only two isolated soundings being recorded near the west end of the loch, while by far the greater portion of the bottom is covered by less than 5 feet of water. The volume of water contained in the loch is estimated at 10,032,000 cubic feet, and the mean depth at 5 feet, or 46 per cent. of the maximum