Loch is irregular in outline, and the conformation of the bottom is also irregular, shallow water extending out into the loch in some places, while in other places comparatively deep water approaches close to the shore. The maximum depth of 17 feet was observed near the southern end of the loch, and a sounding of 15 feet was taken near the centre of the wide portion of the loch, in close proximity to a sounding of 5 feet. The diversity in the soundings gives a sinuous character to the 10 -feet contour-line. The area of the lake-floor covered by less than 10 feet of water is about 22 acres, or 62 per cent. of the total area of the loch. The loch was surveyed on July 3, 1903, but the elevation above the sea could not be determined. The water rises about 2 feet above, and falls about 1 foot below, the level on the date of the survey; there is a sluice at the outflow, but it was out of order and disused at the time of the survey. Temperatures taken at $10 \mathrm{a} . \mathrm{m}$. in the position of the deepest sounding gave $58^{\circ} \cdot 0$ at the surface and $57^{\circ} \cdot 5$ at a depth of 1.6 feet.

Loch of Lintrathen (see Plate XXXIII.).-The Loch of Lintrathen, from which Dundee draws its water-supply, has been raised in level to the extent of 22 feet in connection therewith; the water in the loch was 14 inches below the overflow on the date of the survey, so that the 20 -feet contour-line would show approximately the size and position of the original loch. It receives the drainage from a large tract of the hilly country to the north, and it flows by the Melgam water into the river Isla. It is surrounded by gently sloping cultivated ground or woods, with gravelly margin, except in the north-western angle of the loch, where the Melgam water and Inzion burn enter, which is shallow and obstructed by weeds. It is nearly $1 \frac{1}{2}$ miles in length from southwest to north-east, with a maximum breadth of three-quarters of a mile, the mean breadth being nearly half a mile, or 33 per cent. of the length. Its waters cover an area of nearly 400 acres, or considerably more than half a square mile, and it drains an area 47 times greater, or nearly 29 square miles. Nearly 120 soundings were taken, the maximum depth observed being 70 feet. The volume of water contained in the loch is estimated at $405,207,000$ cubic feet, and the mean depth at $23 \frac{1}{2}$ feet, or 34 per cent. of the maximum depth. The length of the loch is 104 times the maximum depth, and 311 times the mean depth. The Loch of Lintrathen forms a simple basin, the bottom sloping down, with few irregularities, to the deepest part, which is situated in the wide south-western portion of the loch. The maximum depth of 70 feet was observed to the north of Loch Craigs, considerably nearer the southern than the northern shore, and the slope of the bottom off Loch Craigs is evidently very steep, a sounding of 26 feet having been taken close to the shore. The line of soundings taken northwards from Loch Craigs shows a slight rise of the bottom towards

