

elevation was estimated at about 830 feet above sea-level. The bottom of an Gead Loch is irregular and stony, so much so that in the deeper part no mud could be got, while the shallow western portion is covered with sand. Though irregular, the basin has a flat-bottomed character, for the majority of the soundings were taken in depths exceeding 10 feet, and only three soundings in depths exceeding 20 feet. The area of the lake-floor covered by more than 10 feet of water is about 62 acres, or 56 per cent. of the total area. The temperature of the water was nearly uniform on the date of the survey, a reading at the surface giving  $46^{\circ}7$  Fahr., and a reading at 25 feet  $46^{\circ}0$ .

*Loch Monar* (see Plate LXXXI.).—Loch Monar lies at the head of Glen Strath Farrar, little more than a mile to the north-east of an Gead Loch, and is one of the most important lochs in the Beaully basin. In length and in superficial area it is slightly inferior to Loch Mullardoch, but it is the deepest of the series, and contains the largest volume of water. The general trend of Loch Monar is east and west, but with a slight sinuosity in the outline, the length exceeding 4 miles. The width varies considerably, the maximum breadth of nearly half a mile occurring near the west end, the mean breadth of the entire loch exceeding a quarter of a mile. The waters of the loch cover an area of about 750 acres, or over one square mile, and the area draining directly into it is about 41 square miles, but since it receives the overflow from Lochs Calavie, an Tachdaidh, and an Gead, the total drainage area is about 50 square miles. The maximum depth of 260 feet was observed much nearer the eastern than the western end. The volume of water is estimated at 3213 millions of cubic feet, and the mean depth at  $98\frac{1}{2}$  feet. The loch was surveyed on October 10, 1903, when the elevation of the lake-surface above the sea was found to be 663.9 feet; when levelled by the officers of the Ordnance Survey on June 20, 1866, the elevation was 662.8 feet above sea-level. At the time of the survey the water was about its normal level, and might rise to the extent of several feet.

Loch Monar is quite simple in conformation, all the contour-lines enclosing continuous areas, and the cross-lines of soundings indicating a regularly sloping bottom from the shores out towards the centre of the loch. The longitudinal section, A-B on the map, along the centre of the loch from end to end shows slight undulations of the lake-floor, the shallowings coinciding with constrictions in the outline. The contour-lines all approach nearer to the eastern than to the western end of the loch, showing a steeper slope in an easterly direction from the deepest sounding, which was taken less than a mile from the east end, or one-fourth of the distance from one end to the other. The off-shore slope is in places very steep, especially along the southern shore at the deepest part of the loch, where near the centre of the loch a