

FIG. 2.—LONGITUDINAL SECTION OF LOCH KATRINE, ALONG THE AXIS OF MAXIMUM DEPTH. THE BLACK PORTION SHOWS THE TRUE SLOPES; THE OUTLINE SHOWS THE SLOPES EXAGGERATED TEN TIMES.

The bulk of water contained in the loch is estimated at 27,274,000,000 cubic feet, or about one-fifth of a cubic mile, and the mean depth (supposing the loch to be of uniform depth over its present area) at 199 feet (33 fathoms), the mean depth being over 40 per cent. of the maximum depth. The length of the loch is 85 times the maximum depth, and 211 times the mean depth.

The surface of the loch is, according to the Ordnance Survey maps, at an elevation of 364 feet above sea-level, so that our survey shows that a considerable portion of the bottom of the loch (equal to about 645 acres, or over one square mile) lies below sea-level, the deepest part being 131 feet (or 22 fathoms) below the level of the sea. The area below the level of the sea is indicated by a red line on Plate IV. In this respect Loch Katrine differs from the other lochs referred to in this paper, for in none of them is the depth sufficiently great to bring any portion of their bottoms below the level of the sea.

The soundings show that Loch Katrine practically forms a single basin, not being divided, like Loch Lomond and Loch Lubnaig, for instance, into separate basins by any important ridges or rises on the bottom. The deepest part is in the centre of the loch, a long narrow depression, with depths exceeding 400 feet, extending for over 4 miles from opposite Coilachra to opposite Ruinn Dubh-aird, with a maximum width of over a quarter of a mile; this 400-foot depression has an area of about 515 acres, or 17 per cent. of the entire superficial area of the loch. The deepest sounding (495 feet) is situated at the very eastern extremity of the 400-foot depression.

The 300-foot depression is over 5 miles in length, with a maximum breadth of one-third of a mile; it extends from off Coilachra to near Ellen's isle. The area enclosed between the 300-foot and

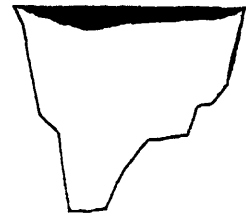


FIG. 3.—CROSS-SECTION OF LOCH KATRINE. THE BLACK PORTION SHOWS THE TRUE SLOPES; THE OUTLINE SHOWS THE SLOPES EXAGGERATED TEN TIMES.