

than half a degree lower than in the north loch); between 20 and 30 feet the fall was  $1^{\circ}2$ , and between 30 and 40 feet  $1^{\circ}7$ —a fall of nearly  $3^{\circ}$  in the 20 feet of depth.

*Loch Achanalt* (see Plate LVIII.).—Loch Achanalt is an irregular shallow loch apparently in process of being silted up, the material brought down by the river Bran forming two long spits extending out towards the centre of the loch. The northern spit extends nearly across the loch, joining the islands, and leaving only a narrow passage close to the eastern shore, through which there was a strong current, and thus practically cutting the loch into two portions. The western shores are bordered by weeds. It flows into Loch a' Chuilinn by a short and rapid stream, the difference in level exceeding 4 feet; the Highland railway is carried over the passage between the two lochs. Loch Achanalt is approximately quadrangular in outline, its maximum diameter exceeding three-quarters of a mile, and it covers an area of about 160 acres, or one-quarter of a square mile. The deepest water was found comparatively close to the western shore, south of the entrance of the river Bran, where two soundings of 9 feet and two soundings of 8 feet were recorded. The volume of water is estimated at 31 million cubic feet, and the mean depth at  $4\frac{1}{2}$  feet—half the maximum depth. The area draining directly into Loch Achanalt is very large, exceeding 39 square miles; but, since it receives the outflow from Lochs a' Chroisg and Gown, its total drainage area exceeds  $72\frac{1}{2}$  square miles, or 290 times the area of the loch. Loch Achanalt was surveyed on August 9, 1902, when the elevation of the lake-surface was found to be 365.1 feet above the sea; when levelled by the Ordnance Survey officers on May 9, 1870, the elevation was 364.7 feet above sea-level. The temperature of the surface water on the date of the survey was  $57^{\circ}1$  Fahr.; the temperature of the river Bran being  $55^{\circ}2$ . On August 19, 1901, Mr. Clark observed a temperature of  $60^{\circ}1$  at the surface, and a temperature of  $60^{\circ}4$  at a depth of 5 feet.

*Loch a' Chuilinn* (see Plate LVIII.).—Loch a' Chuilinn (or Culen) trends east and west, is irregular in outline, of varying width, and with an undulating floor. It is  $1\frac{1}{2}$  miles in length, with a maximum breadth of one-third of a mile. Its waters cover an area of about 113 acres, and it drains directly an area of nearly  $1\frac{3}{4}$  square miles; but as it receives the outflow from Loch Achanalt, its total drainage area is over 74 square miles—over 400 times the area of the loch. The maximum depth of 43 feet was observed approximately near the middle of the loch. The volume of water is estimated at 50 million cubic feet and the mean depth at  $10\frac{1}{4}$  feet. The bottom of Loch a' Chuilinn is most irregular; close to the west end is a 10-foot basin, with a maximum depth of 29 feet, the slopes of which are in places steep, depths of 20