

have been over $4\frac{1}{2}$ miles in length. As the level of these two lochs is 50 feet higher than the level of Loch Katrine, it has been suggested by Mr. Gale that the water-supply to the city of Glasgow could, if necessary, be increased by connecting these lochs to Loch Katrine by a conduit through the intervening hills.

Loch Voil (see Plate VII.).—Loch Voil has a total length of over $3\frac{1}{2}$ miles, with a maximum width (near the western end) of about one-third of a mile. The mean breadth is about a quarter of a mile, or 422 yards, being 7 per cent. of the length. The waters of Loch Voil cover an area of about 561 acres (0.88 square mile), and those of Loch Doine about 135 acres (0.21 square mile), or together over one square mile, while they drain an area thirty-five times greater, or about 24,600 acres (nearly $38\frac{1}{2}$ square miles).

The total number of soundings taken in Loch Voil is 279, the average depth of these being $39\frac{1}{2}$ feet, and the greatest depth 98 feet (or $16\frac{1}{2}$ fathoms). The bulk of water contained in the loch is estimated at 1,000,000,000 cubic feet, and the mean depth at 41 feet (or nearly 7 fathoms), being 42 per cent. of the maximum depth. The length of the loch is 189 times the maximum depth, and 451 times the mean depth.

Loch Voil becomes narrower and shallower towards the eastern end, one must proceed about a mile and a half (or over one-third of the length of the loch) from the eastern end before encountering depths of 50 feet, while deeper water is found towards the western end. The 50-foot depression extends from quite close to the western end for a distance of 2 miles towards the eastern end of the loch, with a maximum width of about a quarter of a mile. Towards the western end of the loch is a considerable area (over half a mile in length by a sixth of a mile in maximum breadth) having depths greater than 90 feet. In this all the deepest soundings are situated (the greatest depth, 98 feet, having been observed in two places). From this depression the bottom of the loch apparently rises very gradually towards the eastern end.

The area over 50 feet in depth is estimated at about 230 acres, or 41 per cent. of the entire area of the loch, while the area between the shore and the 50-foot line is estimated at about 331 acres, or 59 per cent. of the total extent of the loch.

Loch Doine (see Plate VII.).—Loch Doine has a total length of nearly one mile, with a maximum width of over a quarter of a mile, the mean breadth is about 0.21 mile, or 370 yards, being 21 per cent. of the length. The total number of soundings taken in Loch Doine was 90, the average depth of these being $34\frac{3}{4}$ feet, the greatest depth being 65 feet (11 fathoms). The bulk of water contained in the loch is estimated at 196,000,000 cubic feet, and the mean depth at 33 feet ($5\frac{1}{2}$ fathoms). The length of the loch is 81 times the maximum depth, and 160 times the mean depth.