

and nearly half a mile in length, with a maximum breadth of one-fifth of a mile. The superficial area is about 32 acres, and the drainage area exceeds half a square mile. The maximum depth of 55 feet was taken towards the southern end. The volume of water is estimated at 36 million cubic feet, and the mean depth at $25\frac{1}{2}$ feet. The basin is simple, the deeper water lying in the southern portion of the loch, the upper end being comparatively shallow, with weeds in the northern angle. Off the south-western shore the slope is steep, soundings in 26, 27, and 35 feet having been taken close inshore; and off the central part of the opposite shore a sounding in 38 feet was taken a short distance out. The deepest part of the loch is flat-bottomed in character, no less than three consecutive soundings being taken at the maximum depth of 55 feet, and the area of the lake-floor covered by more than 50 feet of water is equal to 16 per cent. of the total area, while that covered by less than 25 feet of water is equal to 58 per cent. The loch was surveyed on April 28, 1905, when the elevation was 171·8 feet above the sea. The temperature of the water varied to the extent of less than 1° Fahr. from surface to bottom, the reading at the surface being $46^{\circ}\cdot 5$; at 25 feet $46^{\circ}\cdot 2$; and at 53 feet $45^{\circ}\cdot 6$.

Kirk Loch (see Plate XLVII.).—Kirk Loch lies to the south of Mill Loch, and to the west of the northern portion of Castle Loch, into which it drains by the Vendace burn. It is surrounded by stony fields, a circular hill, called Castle hill, rising between it and Castle Loch. Kirk Loch trends nearly north and south, and is less than half a mile in length, covering an area of about 33 acres. The maximum depth of 25 feet was taken towards the northern end, the mean depth being 10 feet, and the volume of water 15 million cubic feet. The basin is simple, with the deeper water occupying the northern portion of the loch, soundings in 12 and 13 feet being taken quite close to the northern end. More than half the lake-floor is covered by less than 10 feet of water. The loch was surveyed on April 28, 1905, when the elevation was 157·15 feet above the sea. The temperature of the water was practically uniform throughout, the reading at the surface being $47^{\circ}\cdot 4$ Fahr., and at 23 feet $47^{\circ}\cdot 2$.

Castle Loch (see Plate XLVII.).—Castle Loch, the largest within the basin, is situated immediately to the south of Lochmaben. The shores of the loch are gentle, grassy slopes, with patches of wood, and there is a fringe of weeds nearly all round; the eastern shore where free from reeds is stony. It receives the drainage from Mill and Kirk Lochs, and the outflow is by a large burn (Valison burn) at the southern end through a peaty flat. The loch is subtriangular in outline, the length from north-west to south-east exceeding three-quarters of a mile, the maximum breadth across the wide southern portion being two-thirds of a mile, while the mean breadth is one-third of a mile. The superficial area is about 193 acres, or nearly one-third of a square mile, the drainage area extending to nearly