

Castle Semple Loch (see Plate CXXXIII.) is a fairly large loch, in the county of Renfrew, about 15 miles west of the city of Glasgow. The north shore is wooded, and there is a sparse strip of trees on the south shore also, between the loch and the railway. The loch is of narrowly triangular form, broadest near the west end, and measures $1\frac{3}{4}$ miles in length, and a little more than one-third of a mile in breadth. It is extremely shallow and flat-bottomed, 5 feet in maximum depth, and $2\frac{1}{2}$ feet in mean depth. The area is about 203 acres, or one-third of a square mile, and the volume 22 millions of cubic feet. Castle Semple Loch receives the drainage of an extensive area (nearly 36 square miles), chiefly brought from the hills to the west by the river Calder, which enters the west end of the loch. The Black Cart water issues from the east end of the loch, and, after flowing 10 miles to the north-east, enters the Clyde 3 miles north of Paisley.

The level of the surface on May 7, 1896, was found by the Ordnance Survey to be 89.6 feet above the sea. The temperature was 60.0 Fahr. throughout on July 21, 1906.

Upper Gryfe Reservoir (see Plate CXXXIV.).—The Gryfe reservoir, which lies 3 miles south of Greenock, and immediately to the east of Loch Thom, has been formed by draining the upper portion of the valley of the Gryfe, and is a part of the Greenock Waterworks. The surroundings are moorland and pasture. The north shore rises more steeply from the loch. When full the length is $1\frac{1}{2}$ miles, but on the date of the survey (October 8, 1906) the loch was very low, and was only about a mile long. The greatest breadth at the east end was fully one-third of a mile. The maximum depth close to the dam was 34 feet, and the mean depth over 17 feet. The superficial area was about 115 acres, and the volume 87 millions of cubic feet. The drainage area is $2\frac{1}{2}$ square miles. The river Gryfe flows eastward about 12 miles, and joins the Black Cart near Paisley. The elevation was 598.2 feet above sea-level.

Loch Thom (see Plate CXXXIV.) is a large artificial loch, the principal reservoir of the Greenock Waterworks, lying at an elevation of 632.4 feet above the sea among the hills some 3 miles south of Greenock. It is surrounded by moorland, and there are one or two farms on the shores.

The loch was very low at the time of the survey (August 16, 1906), and the large island near the east dam was joined to the shore. The length, measured in a straight line from north to south, is $1\frac{1}{2}$ miles. The axis of the loch is strongly curved. The greatest breadth, about the middle of the loch, is half a mile. The depth is greatest in the northern part, and the maximum depth of 42 feet is near the northern end of the loch. The mean depth is $19\frac{1}{4}$ feet, the area about 331 acres, or half a square mile, and the volume 277 millions of cubic feet. The drainage area is about $5\frac{1}{2}$ square miles.

The temperature was identical (60.0 Fahr.) at the surface and at 35 feet.