

10 feet of water is about 24 acres, or 80 per cent. of the total area of the loch. Rae Loch was surveyed on June 23, 1903, and the level of the lake-surface above the sea was determined, by levelling from benchmark, as 195·2 feet.

*Temperature Observations.*—Temperatures taken in the deepest part gave the following results.—

Surface	...	..	.	.	...	..	...	60°·8	Fahr.
5 feet	...	..	.	...	..	...	...	60°·5	„
10	„	...	..	..	...	...	...	57°·9	„
15	„	..	...	...	...	..	...	57°·1	„

The range of temperature throughout the 15 feet of water was 3°·7, there being a fall of 2°·6 between 5 and 10 feet.

*Fingask Loch* (see Plate XXX.).—Fingask Loch lies about three-quarters of a mile to the south-east of Rae Loch, and  $1\frac{1}{2}$  miles to the south-west of Blairgowrie. It is surrounded by low cultivated ground, and weeds occur in the north-western angle of the loch and near the shore in other places, but not in any great abundance. It receives the outflow from White Loch by a mill lade, and it flows into the Lunan burn by a short sluggish stream. It is over one-third of a mile in length from north-west to south-east, with a maximum breadth of a quarter of a mile, the mean breadth being about one-seventh of a mile, or 41 per cent. of the length. Its waters cover an area of over 32 acres, and it drains directly an area of about one-sixth of a square mile, but, since it receives the outflow from the White Loch, its total drainage area is over a quarter of a square mile—an area  $4\frac{1}{2}$  times greater than the area of the loch. Nearly 40 soundings were taken, the maximum depth observed being 48 feet. The volume of water is estimated at 32,182,000 cubic feet, and the mean depth at nearly 23 feet, or 48 per cent. of the maximum depth. Fingask Loch forms a simple basin, the bottom sloping down gradually on all sides to the deepest part, which is, approximately, centrally placed. The north-western angle is shallow and obstructed by weeds, but the remainder of the loch is comparatively deep, and forms a sub-circular basin. The slope of the bottom is in places moderately steep, as, for instance, off the northern shore, where a sounding of 20 feet was taken about 80 feet from the shore, giving a gradient of 1 in 4. The area of the lake-floor covered by less than 10 feet of water is about 9 acres, or  $27\frac{1}{2}$  per cent. of the total area of the loch, that covered by water between 10 and 25 feet in depth is about  $8\frac{1}{2}$  acres, or  $26\frac{1}{2}$  per cent., that covered by more than 25 feet of water is about 15 acres, or 46 per cent. of the entire area of the loch. This last percentage indicates the flat-bottomed character of the basin. Fingask Loch was surveyed on June 19, 1903, and its elevation above the sea was determined by levelling from the White Loch (which was surveyed on the same day) as being 140·6 feet.