feet to the west. To the south and east of the inch depths of 22,25 , and 26 feet were found, separated from the deep water to the west by depths of 13 to 16 feet. The 10 -feet basin is a continuous area, nearly three-quarters of a mile in length, following approximately the outline of the central portion of the loch, the two ends of the loch being comparatively shallow, and weeds are abundant off the northern shore at the east end. The area of the lake-floor covered by less than 10 feet of water is about 56 acres, or 54 per cent. of the total area of the loch; that covered by water between 10 and 25 feet in depth is about 39 acres, or 38 per cent.; and that covered by more than 25 feet of water is about 8 acres, or 8 per cent. of the entire area of the loch. The Loch of Forfar was surveyed on June 26, 1903, and its elevation above the sea was determined, by levelling from bench-mark, as being 166.3 feet; when levelled by the officers of the Ordnance Survey in 1861, the elevation was found to be 170.5 feet above sea-level.

Temperature Observations.-Temperatures taken in the deepest part of the loch gave the following results:-

| Surface |  | . |  | ... |  | ... | $58^{\circ} 9$ | ahr |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 10 feet | . | .. | ... |  | .. | .. | $58^{\circ} 3$ | , |
| 15 ," | ... |  | ... |  | . | ... | $57^{\circ} \cdot 7$ | , |
| 20 ,, | $\cdots$ |  |  | . | ... | .. | $56^{\circ} \cdot 0$ | " |
| 27 , | . |  |  |  | .. | ... | $56^{\circ} 0$ | " |

This series shows a range of temperature from surface to bottom of only $2^{\circ} \cdot 9$, the greatest fall being one of $1^{\circ} \cdot 7$ between 15 and 20 feet.

The particulars regarding the different lochs within the Tay basin are collected together in the table on next page for convenience of reference and comparison. Where the elevation above the sea has not been determined by levelling from bench-mark, the approximate elevation has, where possible, been indicated within brackets.

From this table it will be seen that in the 59 lochs under consideration 6850 soundings were taken, and that the aggregate area of the water surface is about 40 square miles, so that the average number of soundings per square mile of surface is 172 The aggregate volume of water contained in the lochs is estimated at 151,353 millions of cubic feet. The area drained by these lochs is 1100 square miles, or $27 \frac{1}{2}$ times the area of the lochs.

