

being respectively 10 and 5 feet, the mean depth in each case being one-half of the maximum. The volume of water in Duddingston is about 4 million cubic feet, and in St. Margaret's about half a million cubic feet. They were surveyed on June 27, 1903, when the temperature of the water in Duddingston was $61^{\circ}1$ Fahr., and in St. Margaret's $60^{\circ}7$.

Harperrig Reservoir (see Plate CXI.) is situated at the base of the Pentland hills, about 12 miles south-west of Edinburgh. It exceeds a mile in length from south-west to north-east, with a maximum breadth of half a mile, the superficial area being about 226 acres. It is, on the whole, comparatively shallow and flat-bottomed, with a small area of deep water near the outflow, the maximum depth of 30 feet being recorded close to the weir. More than one-half of the bottom is covered by water between 10 and 20 feet in depth, while only 4 per cent. is covered by more than 20 feet of water. The volume of water is estimated at 108 million cubic feet, and the mean depth at 11 feet. When surveyed on July 21, 1903, the elevation was 891.9 feet above sea-level.

Threipmuir Reservoir (see Plate CXII.) lies about 4 miles to the north-east of Harperrig reservoir, and is practically continuous with Harelaw reservoir, though standing about 25 feet higher. These two contiguous basins form a perfect contrast in conformation, Threipmuir covering an area six times greater than that of Harelaw, but being relatively shallow. Indeed, the south-western portion is merely a swamp. Threipmuir reservoir is $1\frac{1}{2}$ miles in length from south-west to north-east, excluding a narrow arm branching off to the east; from the extremity of this arm to the extremity of the south-western swampy portion is fully 2 miles. The superficial area is about 192 acres, while the drainage area exceeds 6 square miles. The maximum depth of 17 feet occurs near the outflow, whence the water shallows gradually on proceeding to the south-west or along the narrow arm to the east. The volume of water is estimated at 66 million cubic feet, and the mean depth at 8 feet. When surveyed on July 1, 1903, the elevation was 831.5 feet above the sea, and the temperature of the water was uniform, the reading at the surface being $59^{\circ}3$ Fahr., and at 10 feet $59^{\circ}2$.

Harelaw Reservoir (see Plate CXII.) is irregular in outline, and exceeds half a mile in length from south-west to north-east, covering an area of only 30 acres, and draining an area of 7 square miles, including Threipmuir. The depth increases gradually on proceeding from the inflow towards the outflow, where a maximum of 54 feet was recorded. The volume of water is estimated at 30 million cubic feet (nearly half that of Threipmuir), and the mean depth at 23 feet (nearly three times that of Threipmuir). When surveyed on July 1, 1903, the elevation was 806.0 feet above the sea. Temperatures taken in the deepest part gave some