

## LOCHS OF THE WICK BASIN.

THERE are three lochs within this basin which were sounded by the Lake Survey, viz. Lochs Scarmclate, Watten, and Hempriggs; there were no boats on the few smaller lochs, of which the most important are the Loch of Toftingall, lying to the south-west of Loch Watten, and the Loch of Yarehouse, lying to the south-west of Loch Hempriggs. The basin is a fairly large one, extending from Wick bay on the east coast of Caithness to Sordal hill on the north-west, and to Stemster hill on the south-west, the larger portion being drained by the Wick water and its tributaries independently of the lochs under consideration. The outflow from Loch Scarmclate is carried by the Quoynee burn into Loch Watten, thence into the sea at Wick by the Wick water, which is joined a short distance from the head of Wick bay by the burn of Newton, bearing the outflow from Loch Hempriggs. The lochs are characterized by their shallowness, although one of them (Loch Watten) covers a larger superficial area than any other of the Caithness lochs; they contain trout, but the fishing is preserved.

*Loch Scarmclate* (see Plate III).—Loch Scarmclate (or Scarmclett, or Stemster) is situated about 7 miles to the south-east of Thurso, and over a mile to the north-west of Loch Watten, surrounded by cultivated land, the margins of the loch being swampy and reedy. The loch is somewhat triangular in outline, with the apex pointing to the south-east, and nearly a mile in length, with a maximum breadth exceeding half a mile. The superficial area is about 190 acres, or less than one-third of a square mile, and the drainage area about 7 square miles. The floor of the loch is practically uniform in depth, about one-half of the soundings being taken in 5 feet of water, which was the maximum depth observed. The volume of water is estimated at 21 million cubic feet, and the mean depth at half the maximum depth. The loch was surveyed on October 7, 1902, and the elevation of the lake-surface above the sea was determined as being 89.5 feet, which is half a foot higher than the elevation determined by the officers of the Ordnance Survey on February 28, 1871, viz. 89.1 feet. The water in the loch was high on the date of the survey, and a drift-mark was observed about a foot above the surface of the water, but the range in level is apparently very small. The deposits covering the lake-floor are brown muds, except over a small area to the south of the island,