

LOCHS WESTER, HEILEN, AND ST. JOHN'S.

THESE three lochs apparently drain into the sea by separate streams. An inspection of the Ordnance Survey maps on the 6-inch and 1-inch scales would lead one to suppose that the outflow from Loch Heilen was carried into the Loch of Wester by the Burn of Reaster and the Burn of Lyth, but Mr. Garrett, who assisted in the survey, states that Loch Heilen drains out to the north, so that the draining stream is the Burn of Inkstack, which in its northward course passes close to St. John's Loch.

Loch of Wester (see Plate IV.).—The Loch of Wester lies little more than half a mile from the sea at Sinclair's Bay, Moray Firth, and only 6 feet above sea-level. The water of Wester carrying the outflow from the loch is about a mile in length, and when the tide is out there is no perceptible current in the river. Ordinary spring tides flow as far as Bridge of Wester, less than a quarter of a mile from the loch, while high spring tides are said to carry seaweed right up to the head of the loch, and to make the water salt for a time; a recent tidal drift-mark was observed 2 feet above the level of the water on the date of the survey. The loch contains sea-trout and loch-trout, but the fishing is preserved. The trend of the loch is north-west and south-east, and the length 1 mile, while the superficial area is about 110 acres, and the drainage area comparatively large, about $29\frac{1}{2}$ square miles. The loch is extremely shallow, the maximum depth of 3 feet occurring in various places throughout the loch; the river between the loch and Bridge of Wester was found to be deeper than anything observed in the loch. The Loch of Wester was surveyed on October 11, 1902, when the temperature of the surface water was 44·3 Fahr.; a reading at 3 feet gave 44·1.

Loch Heilen (see Plate V.).—Loch Heilen (or Loch of Hailan) is a small shallow loch lying in cultivated land, surrounded by reeds, about 2 miles to the east of Dunnet Bay on the north coast of Scotland, and about 8 miles from Thurso. Duck and other wild fowl are very abundant. The loch trends in an east and west direction, and is somewhat crescent-shaped in outline. The length is over $1\frac{1}{2}$ miles, and the maximum breadth nearly half a mile, the superficial area being about 191 acres, or nearly one-third of a square mile. Several soundings in 5 feet of water (the maximum depth observed) were taken in the central part of the loch.