## H.

NOTE OF RECENT EXCAVATIONS AT ST MARGARET'S INCH, IN THE LOCH OF FORFAR. By JOHN STUART, Esq., LL.D., Secretary S.A. Scot.

The Loch of Forfar was in early times a sheet of water of considerable extent. It was in the centre of a rich country, which from the earliest times had been chosen as one of their settlements by the Pictish kings, and this occupation was continued by their successors the kings of Scot-One of the royal castles was placed on an island in the east end of the loch, and continued to be one of the royal residences in the thirteenth On the north side of the loch, and about midway between the opposite ends, is the small projecting ridge which has long been known as St Margaret's Inch. It was described by Dr Jamieson in a paper read to this Society, and printed in the second volume of the "Archæologia Scotica" (p. 14). It is there stated that it is wholly of an artificial nature—vast piles of oak having been driven into the loch, on which were heaped prodigious quantities of stones, the whole having then been covered with earth.

Dr John Ogilvie also describes the discovery of the Inch in a letter to the Society dated in 1781. He states that it was on the partial drainage then made by Lord Strathmore that the Inch became visible, adding that it was discovered to be built upon great quantities of stone raised up upon oak trees sunk down and surrounded by some oak piles with sharp points uppermost. Part of the whinstones removed seem to have been bedded with heather—some of it remarkably fresh, other parts of it petrified.<sup>1</sup>

In 1864 the water of the loch having become unusually low, a projecting ridge from the west end of the Inch was discovered, which was styled a causeway, although it was found to lead into the centre of the loch where the water is deepest. In the autumn of last year (1868), Lord Strathmore, the owner of the loch, resolved to make some excavations in the Inch with the view of determining its real character. Having been present at these operations, I took notes of the details, and I now submit the results to the Society. They afford another instance of the little reliance which can <sup>1</sup>MS. Letters, vol. i. Soc. Antiq. Scot. 1780-81.

be placed on the descriptions of early remains given by the observers of last century, so far as relates to details. St Margaret's Inch is the highest part of a narrow ridge of natural gravel which runs out into the loch, and the so-called causeway is the continuation of this ridge as it dips into the deep water. We made sure of this by making various sections across the ridge, which showed its real character.

At some early period a settlement had been formed on the highest point of the ridge, and to make it available for this purpose the following steps were adopted:—First, a deep trench was cut across the ridge where it joins the shore, so as to insulate the promontory. Next, as the round and narrow ridge did not give much of an available flat surface, it was widened on the north side at the base by a considerable extent of piling, within which trees were disposed, with their branches, and piles in a transverse direction, and on them a quantity of black soil was laid. Some of these trees were found to be birch and others oak; and the soil appeared to have been the debris of a midden, being mixed with bones, charred wood, and ashes. This secured a narrow flat space at the base of the ridge, and on cutting through it inward we reached the core of gravel of the original ridge.

The higher surface of the Inch had been obtained by bringing soil from the shore, and spreading it across the gravel ridge, especially towards the west end, where the widest level space was attained. Pits were dug at various spots of this surface, when it appeared that towards the east end there was nothing except the natural gravel, while the formation became to be of dark and travelled soil towards the west. In some of the holes bits of pottery and bones of animals were discovered. The south side of the ridge is flatter than the north, and did not require to be widened or made up by piling, but there are rows of oak piles driven into the ground along the margin, and big stones are laid in the same line, both being obviously intended to resist the force of wind and water.

In the case of the stockaded island on Loch Canmore in Aberdeenshire, which has also been described as artificial and resting on piles, I found, on recently inspecting it, that it is wholly natural, and that the only piles which occur about it are a few lines at the west end, designed, as at St Margaret's Inch, to strengthen the marginal border against the force of the prevailing winds. The relics which have been found on St Margaret's Inch

at different times are evidences of the various kinds of occupation to which it has been adapted. At the first drainage of the loch in 1781, the objects brought to light included silver ornaments like ear-rings; about 30 or 40 disks of bone, some of them plain and others finely carved; tusks of boars, wolves, and deers' horns of a great size. Dr Jamieson refers to certain vessels of bronze as having been also found and deposited at Glammis Castle. All these are relics of an early period, and agree in character with those found in many of the Irish crannogs. At a time long after the period of this first settlement we find the Inch in the possession of the Abbey of Cupar-Angus, when two monks resided in a cell subject to that house. In the year 1234, King Alexander II. granted for their support common pasture in his lands of Tyrbeg for six cows and a horse, with fuel.

In the year 1508 the chaplaincy of St Margaret's Inch was conferred on Sir Alexander Turnbull, he being bound to personal residence, to see to the building and repair of the chapel and houses, to make plantation of trees within and without, and to make works of stones for the defence and safety of the loch and its trees, lest the trees be overthrown by the violence of the water.<sup>2</sup>

Among the charters at Glammis is one by Thomas Ogilvie of Craigs, to Patrick Lord Glammis, dated 16th May 1605, conveying "the island in the Loch of Forfar, of old called the chappel of the Holy Trinity, and now St Margaret's Inch, with the pasturage of six cows and a horse on the lands of Turfbeg, and that piece of land on the north of the said isle without the loch called Garthe, together with the fishing on the Loch of Forfar, and other privileges therein specified, as the same was possessed by the monks of Cupar, and thereafter by Andrew Turnbull, chaplain, paying to the Earl of Athol L.4 scots of feu, and 60 dozen of pikes and perches for the said fishing in the month of March in name of kain." It would thus appear that the name of the island, which arises from a supposed connection with St Margaret, is not the oldest one, and at the date of this charter in the beginning of the seventeenth century was of no great age. In order to adapt the Inch for this second purpose, much disturbance of the surface had taken place, and in this way the tumbled and confused

<sup>&</sup>lt;sup>1</sup> Notices of Scottish Crannogs, Proceedings, vol. vi. p. 114.

<sup>&</sup>lt;sup>2</sup> Ibid., vol. vi. pp. 143, 144.

appearance of the soil is to be accounted for. The stones of the buildings formerly on the Inch were carried off for materials to a neighbouring farm-steading, but a fragment of a pillar, probably of the fifteenth century, and a bronze hinge, were turned up, both probably relics of its ecclesiastical occupation. Some sort of building continued to be on the Inch towards the end of last century, and a structure described as an oven was almost entire, while the surrounding ground was full of trees and used as a garden.

In conclusion, I may state that the adaptation of natural ridges in lakes or natural islands approached by causeways, for purposes of defence, was not unusual in other parts of Scotland and in Ireland, while in the latter country the artificial island was most commonly resorted to.