



Our third picture, 'The Duke's Tooth-pick', reproduced by kind permission from 'The Northern Times', shows how steam engines were used for the ploughing of moor ground in Sutherland in the 19th century. This detail of a wide panoramic landscape, depicting progress with the steam plough in moorland by Loch Shin, parish of Lairg, is taken from one of two copies made from a painting by the Rev. J M Joass apparently in the 1870's. There is an account by Francis H Groome (1894) of the conversion of moor into arable land in Sutherland and that arable land increased from 18,125 acres in 1808 to 31,787 acres by 1894. Seeing how large sums were spent in the purchase of oatmeal and turnips from outside Sutherland, the Duke of Sutherland engaged the agriculturalist Kenneth Murray of Geanies to prepare a survey of moorland suitable for ploughing and growing of these arable crops. As recommended by Murray, large tracts in the parishes of Kildonan and Lairg were converted to arable use between 1873 and 1878. At great expense the ground was deeply ploughed, trenched and drained by means of large ploughs and implements, all worked by steam, many of them specially designed and built. This work attracted much interest from the Highland and Agricultural Society. Among the visitors who came to see it was the Prince of Wales, who visited Sutherland in 1876. The 'Tooth-pick' here illustrated - a large hook or claw attached to both ends of the plough - was used to break the rocky ground and to bring up the heavy boulders, tree stumps and roots. This was done by means of two steam engines, the plough being fastened to them by hawsers, shuttling across the ploughland, which enabled ploughing two to three feet deep for up to three acres a day. Looking back, one is left to wonder if the agricultural survey by Murray was matched by an archaeological survey, the whole parish of Lairg being an area of ancient habitation with numerous sites of historic and pre-historic interest.