Donal Stewart and the Mineral Survey of Co. Clare

When working last summer in the Library of the Royal Dublin Society, in search of matter concerning Clare in the 18th century, Mr. Desmond Clarke, Librarian, showed me the manuscripts written by Mr. Donald Stewart on the Mineral Survey of Clare in 1788-89.

It is to the unfailing interest and help of Mr. Clarke that the preparation of this paper has been made possible, and I wish here to acknowledge my very sincere thanks.

KATHERINE DILLON.


"A Scotchman named Donald Stewart was, in 1786, employed by the Committee of Agriculture in making searches for fossils and minerals for which he was paid a guinea a week while at work. In 1788 he was directed to make a tour through County Clare, under the orders of Sir Lucius O'Brien, Bart. During 1794 he was directed to make a descriptive catalogue of the minerals, fossils, clays, etc., discovered by him and deposited with the Society, and to label the collection. When he had completed a good deal of his work, about 1797, the minerals, fossils, etc., were arranged in the Society's repository. Donald Stewart died in 1811."—History of the Royal Dublin Society. By H. E. Berry.

Mr. Stewart seems to have had a knowledge of the Gaelic language from his frequent references to the meaning of Irish place-names. On page 189 of this paper will be found the phrase Frahan a gour, in his description of the vegetation on the Burren Mountains. This is the only instance of a Gaelic phrase I have found after close reading of many newspapers, books and other matter, dealing with Irish affairs, in the last decade of the 18th century. It is possible that the Dublin Society deliberately selected a Gaelic speaker since that must have been the language of most of the country people, particularly in the western counties.

He must have met with opposition in some counties, for on April 19th, 1792, the following minute is found in the Dublin Society's Minute Book for that year: "It appearing that Donald Stewart had met with frequent interruptions in the course of his progress through this kingdom by direction of the Society to search for Mines, Minerals, etc., by persons mistaking his employment. Resolved: That a certificate be granted to Donald Stewart, signed by the Assistant Secretary, expressive of his being in the service of the Society for the purposes of searching for and examining Fossils, Ores and Minerals in this kingdom, and that the Corporation seal of this society be affixed thereto."

The following Minutes were also found, relating to the Co. Clare Survey:

Nov. 13, 1788. Resolved: "That the Register lend to Rt. Hon. Sir Lucius O'Brien, Bart., the Boring Rods for discovering Mines, now in the Society's Repository, he giving the usual Receipt and promise to re-deliver the said Rods in a given time."
Feb. 12, 1789. His Excellency the Marquis of Buckingham having directed his Agent to lay before the Dublin Society several specimens of Clays raised by Donald Stewart in his Excellency’s Estate in the County of Clare, which Clays said Stewart alleged were valuable, and to request the Society’s opinion thereon.

Resolved: Said specimens of clay be examined by the Committee of Agriculture and reported thereon.

Feb. 19, 1789. Resolved: [In reference to foregoing minute]. The Committee had examined same and were of opinion they might be of great use; but to obtain further information respecting their qualities the committee thought it necessary that a large quantity of said Clays should be sent to the Society, to be delivered to several glass and other Manufacturers in this City, to ascertain what uses they may answer.

Resolved: The Assistant Secretary be directed to send above Report to James Irwin, Esq., Agent to the Marquis of Buckingham.

Nov., 17th 1793. Resolved: That the Boring-rods for discovering Mines, the property of the Society, now in the possession of the Rt. Honorable Sir Lucius O’Brien, Bart., be lent to the Rt. Hon. Lord Newhaven, as soon as the same shall be returned by Sir Lucius O’Brien to the Society.

Resolved: That the Assistant Secretary do apply by Letter to Sir Lucius O’Brien to request that he will return the said Mining-rods lent to him on the 13th day of November, 1788.”

In the Transactions of the Dublin Society 1799 1, pt. 2) there is published The Report of Donald Stewart Intermittent Mineralogist to the Dublin Society, with the following foreword:

“Mr. Stewart does not pretend to be a perfect mineralogist, or fossilist; yet the Society were of opinion, that by sending a laborious and pains-taking man round the Kingdom, who traverses the mountains and glens, always on foot, Mr. Stewart might point out situations for the direction and attention of a more accurate mineralogist, at a future day. His labours have been attended with great advantage in several parts by discovering marles, lime stone, and other manures not before known to the landlord or tenant; by the discovery of fine clays, fuller’s earth, or good substitutes for them, of emery, etc., which have been used by manufacturers, whose certificates he has produced. He has also instructed the peasantry in the method of coaking bog turf, which we have given in the first part of this year’s Transactions. In some counties he has made but a superficial view of such minerals, as occurred in his removal from place to place, by order of the Society; in others he has been more particular. Wherever he has been employed he has produced certificates from gentlemen of known character and abilities, of his having been ardent and industrious in the pursuit of the objects to which he was directed by the Society. The following Report may be very useful to such gentlemen as have undertaken the Statistical View of the counties of this kingdom, and it is principally with that design the Society publish this imperfect sketch of Mr. Stewart’s Itinerary.”

The portion of the Report of Donald Stewart which concerns Co. Clare is contained in pages 23 to 30 of the above-mentioned Transactions. It is
largely based on the Co. Clare items listed on pages 103 to 117 of Stewart's manuscript Catalogue of Irish Minerals in the Museum of the Dublin Society, extracts from which, as arranged and annotated by Murrogh V. O'Brien, are given below. Numerous additional notes appear in the Report but not in the Catalogue. Some or all of these may derive from a complete report on the county, presumed to have been submitted by Mr. Stewart to the Society but not now extant. A few of interest are:

"All the high mountains in Burren are lime-stone, covered with a very remarkable heath, which bears a white flower, like a lily, the cattle are very fond of it, for which cause it is eaten close to the ground, it tastes like hops and is very astringent. I think it would answer the purpose of bark in tanning leather. I drank good beer made of it by Mr. Maddin, in the lodge of Chivey Chace. The inhabitants call this goats' Heath, Frahan a gour."

"In the lands of Glinvane on the side of the bay of Galway, is lead ore, some large pieces of it were beautifully coloured, like the feathers of a peacock's tail."

"In the demesne of Doolin, near the bay of Galway, is a large course of fluor-spar, and some metal in it, probably tin. I believe it is the only flour-spar ever before found in Ireland. On the seashore of Doolin are remarkable large blocks of very black and solid lime-stone, fit for chimney pieces.

"In the remarkable pure white crystallized spar on the lands of Milltown I found pure lead ore and potter's-ore. The crystal spar is forty yards broad, and large blocks of it may be raised.

"In the lands of Cahermurphy, near the bleach mill, I found manganese and good potter's clay.

"The peasants dye a good and durable black with mud of the spa-water springs.

"In the lands of Soughkeen is coal-smut and remarkable strong spa-water. The working of this mine was prevented by the death of the proprietor, Sir Edward O'Brien.

"I discovered the upper strata of coal in several places in the County of Clare, exclusive of that at Liscannor Bay, which was poorly worked on the upper stratum of thirty inches thick, coal, coal-smut and coal-slate included, two cargoes were sent, one to Limerick and another to Galway, but so mixed with slate that no person would buy the coal. If the main coal was sunk into there is no doubt but it would turn out good.

"In the cliffs on the shore at Doonbeg I found the upper strata of coal in three several places; here is a good convenience to make a safe harbour by a canal of only two hundred yards, through a flat soft bottom, to a deep lough near the bridge, where there is a salmon fishery.

"In the large and high mountain of Callaun I found the upper strata of coal in two several places, and all round that mountain spa-water is to be seen, it is very strong near the stone with the Ogham inscription, said to be a tomb stone over a druid; these strong mineral waters and the iron ores to be found in the great deep cuts the several rivulets have made, proves that this mountain is full of mines.

"In the cliffs of the river Shannon, near Kilrush, are remarkable good and large flags, with impressions of almost every kind of animals, herbs, etc., etc., as if stamped; the largest ship can lie safe at these quarries, the flags are in beds, nearly horizontal, from one to six inches thick.

"In the beds and banks of Doolin river and the other rivers that run which may probably yield cobalt. Irish diamonds are in great abundance in these rivers..."