SIR CHARLES LEWIS GIESECKE (1761–1833) AND GREENLAND: A RECENTLY DISCOVERED MINERAL COLLECTION IN TRINITY COLLEGE, DUBLIN

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Abstract

Sir Charles Lewis Giesecke (1761–1833), who was born in Germany, became a mineralogist after a diversity of careers He spent seven years in Greenland from 1806 and amassed large collections of minerals, including the rare species cryolite and sapphirine. These collections were dispersed during his lifetime and are now found in a number of institutions in Europe. He donated a collection and catalogue to Trinity College, Dublin, in 1824, but until recently this material remained unrecognised Rediscovery in 1994 of the catalogue, which lists 149 specimens from Greenland and Norway, has led to the recognition of nearly one-third of the material to date in the present holdings of the Geological Museum in Trinity College.

Introduction

Charles Lewis Giesecke (1761–1833) was an important mineralogist who assembled large and unique collections of minerals from Greenland in the early 1800s. The history of the dispersal of these collections is well known, and the material can now be found in the Natural History Museum, London, the National Museum in Vienna, and in the Geological Museum of Copenhagen University. More material is possibly in the National Museum of Ireland, where it remains to be recognised. Recently a long-forgotten suite of Giesecke's Greenland specimens, together with a manuscript catalogue of the same, has come to light in the Geological Museum, Trinity College, Dublin. This paper describes the background to the acquisition, and the present extent of the collection.

Charles Lewis Giesecke (1761–1833)

Sir Charles Lewis Giesecke (1761–1833) was born in Augsburg, Bavaria, Germany, on 6 April 1761, the eldest son of George Melchior Metzler, a Protestant tailor, and Sibylla Magadalena Gotz (Craig 1993), and was named either Johann Georg or Karl Ludwig. Questions also surround the name and occupation of his father, which have been given as Johann Georg, a vintner (Petersen and Secher 1993). Other sources suggest that Charles Lewis Giesecke may have been a twin (Scouler 1834), and that he was the second-born son of the family (Monaghan 1993). By

the age of twenty, for reasons unknown, he had assumed the name Karl Ludwig Giesecke (Anglicised after 1813 to Charles Lewis) by which he is now better known (Steenstrup 1910). The problems of his name and that of his family are complex and need clarification. After studies in divinity and law at Gottingen, where he also took some courses in mineralogy under Johann Friedrich Blumenbach (1752–1840), he embarked on a succession of careers, including those of musician, actor, diplomat, and mineralogist In Vienna, where he had moved in the early 1780s, he published the opera *Oberon,* which was performed in 1790 (Craig 1993), and appeared in the first performance of Mozart's *The magic flute* in 1791 He was to suggest later that he was the author of the libretto of the opera (Whittaker 1991).

After a period of further study at Freiberg, under Abraham Gottlob Werner (1743–1817) in 1794, he became an Austrian diplomat, based in Constantinople and later in Italy. He left the diplomatic service on account of disability, and from 1801 spent several years engaged on mineralogical collecting trips. He eventually settled in Copenhagen, where he became a mineral dealer and from where, in 1805, he travelled to the Faeroe Islands on behalf of the Royal Greenland and Faeroese Trading Company (Jørgensen 1996, Monaghan 1993) In 1806 he travelled to Greenland for the company in order to assess the mineral wealth and trading potential of the country (Monaghan 1993). He was due to remain for three years but owing to the political unrest in Europe was unable to leave Greenland until 1813. Whilst there he assembled several mineral collections.

After a sojourn of seven years Giesecke left Greenland on a whaling ship bound for Hull (A. Long 1921). On his arrival in England he travelled to Scotland, where he met the mineral collector Thomas Allan (1777–1833), who had purchased some of his specimens that had been captured as a prize-of-war while in transit to Copenhagen. At Allan's suggestion Giesecke, who was then virtually penniless, applied for and was appointed to the chair of mineralogy at the Dublin Society (later the Royal Dublin Society), at a salary of £300 per annum (Mitchell 1981). He was to hold this position for twenty years until his death in 1833. He was made a Knight Commander of the Royal Danish Order of Danneborg in 1816 when he was in Copenhagen sorting out his effects left there prior to his travels in Greenland.

For much of his life in Dublin he lived at 14 George's Place, now Hardwicke Place (N.T. Monaghan, pers. comm.). He died on 5 March 1833 and was buried in the adjoining churchyard of St George's Church, Hardwicke Place (A. Long 1921). A fine memorial to him was erected inside the church, it was executed by the sculptor Edward Smyth and carries a medallion of Giesecke in profile (T. Long 1921).

After his death, at which time he was said by his executor Robert Hutton to be living in abject poverty, his library was sold in the week ending 31 May 1834 in at least 1311 lots, some of which were purchased by the English geologist George Bellas Greenough (C. MacArthur, pers. comm.). His personal effects were retained by Hutton, including some autograph notebooks which were later described by Waterhouse in 1936. These were deposited in the National Museum of Ireland and in 1950 were donated to the National Library A number of his manuscripts are now to be found in the National Library of Ireland (Anon. 1977), and may have been deposited with the Royal Dublin Society by Hutton's descendants (Waterhouse 1936).

Giesecke's collections of minerals from Greenland

For seven years, between 1806 and 1813, Giesecke lived in Greenland, where he assembled large and valuable collections of minerals, as well as making important observations on the lives and traditions of the indigenous people, whose artifacts he also collected He found a number of new mineral species, including arfvedsonite (described by Brooke in 1823), sapphirine (which he himself described in 1819), and sodalite (described by Thomson in 1811), and he located the source of the rare mineral cryolite at Ivikatt in Arsuk Fjord (Petersen 1993)

During the Napoleonic wars in Europe travel by sea was difficult, and ships were liable to be captured by the enemy. Giesecke's valuable collection of minerals, which was bound for Copenhagen, was captured by a French ship which in turn was taken by the English. The collection was acquired by the Scottish collector Thomas Allan for the paltry sum of £40. This material, which included valuable cryolite specimens estimated to be worth at least £5000 (Farrar and Farrar 1968), is now to be found in the Natural History Museum, London. This institution purchased the collection from Robert Phillips Greg (1826–1906), whose father, Robert Hyde Greg (1795–1875), had purchased it from Allan's executors for £1300 in 1833 (Cleevely 1983).

When word reached Giesecke that the collection had been stolen, he assembled a second collection. Some of this material was sent to Copenhagen, where it was destroyed by enemy action in 1807 (Jørgensen 1983) The majority of his second Greenland collection is probably in the National Museum of Ireland, and smaller collections are in Vienna and Copenhagen (donated in 1814) and in Trinity College, Dublin.

On his appointment as professor of mineralogy to the Royal Dublin Society in December 1813 (White 1955) Giesecke donated 415 mineral specimens from Greenland to its museum (Monaghan 1993, Scouler 1834) He had to learn English, and was soon delivering public lectures in the language. He was responsible for the already large mineralogical collections housed in the Society's museum on Hawkins Street (O'Riordan 1983), which included those of Nathanael Leske, acquired in 1792. Soon he set out to enlarge the holdings of Irish minerals, and did this by undertaking several collecting trips around his adopted country (Giesecke 1826; 1828; 1829; MacArthur 1987). In 1815 he arranged for the transfer of the collections to Leinster House, the new home of the Royal Dublin Society. The museum in this building consisted of six rooms; the Leskean collection was accommodated in one room, a collection of Irish material in another (called the 'Museum Hibernicum') and geological material in another. Giesecke's large collection of Greenland anthropological artifacts, such as a native hut and furniture, was on display in another room, together with his minerals The museum was open to students at all times and to the general public for three hours from 12 noon on Mondays, Wednesdays and Fridays (Wright 1821).

Giesecke also purchased minerals from and exchanged minerals with various European contacts, including Johann Wolfgang von Goethe (1749–1832) (Waterhouse 1933) and the Imperial Museum in Vienna, which he visited between 1817 and 1819 (Hennig 1951, Monaghan 1993). These Viennese exchanges are listed in a manuscript now in the National Library of Ireland (MS 263) (Hennig 1951) A comprehensive catalogue of the Royal Dublin Society mineralogical collection was published in 1832, the year before his death (Giesecke 1832) Subsequently the collections were inherited by the National Museum of Ireland, where Giesecke's Greenland material has not at present been identified.

The Dublin University Museum and its mineralogical collections: Giesecke's additions

The Dublin University Museum was founded in 1777 to house Polynesian artifacts collected during the voyages of Captain James Cook (Wyse Jackson 1992) The driving force behind its establishment is thought to have been the Rev. William Hamilton (1755–97), one-time fellow of the university, who is perhaps better known for his geological observations which advanced the idea of the igneous origin of the Giant's Causeway.

By 1807 the museum housed a collection of 1089 minerals, some petrological specimens, including material from Vesuvius gathered by the cleric George Graydon (Vaccari and Wyse Jackson 1995), and some fossils.

Whitley Stokes (1763–1845), lecturer in natural history, whose political activity brought him at one time into conflict with the university authorities, was responsible for the collections from the late 1790s until 1844. The mineralogical collections were enlarged

Fig. 1—Page from Giesecke's manuscript catalogue listing mineral specimens given by him to Trinity College, Dublin, in 1824. The catalogue is now in the Geological Museum, Trinity College, Dublin [Geol/TCD/Mun/Giesecke/001].

through purchases and donations. Specimens were bought from dealers in Dublin, Derbyshire and Paris, and private collections were also acquired. Donations included minerals from Gascony given in 1798 by the professor of German (Wyse Jackson 1994) and specimens from Greenland donated by Giesecke in 1824.

A catalogue of the complete mineralogical collection was published in 1807 by Stokes, and in it we find no specimens from Greenland listed. In the revised catalogue, published eleven years later, the collection included six Greenland specimens: hyacinth (4), iolite with fahlunite (30), sodalite from Kangertuarsuk (361), plumose anthophyllite from Ivertok (467), cryolite from Ivikatt (749) and allanite from Tindingen (1204) (Stokes 1818—catalogue numbers in parenthesis) It is possible that these were given to the museum, or exchanged for specimens for the Royal Dublin Society museum, by Giesecke sometime after 1814

In 1823 a large collection of approximately 600 specimens was purchased for the considerable sum of £500 (£15,000 today) from the Hon. George Knox (1765–1827), one-time member of parliament for Dublin University In this one transaction the university mineralogical collections were increased by a third to nearly 2000 specimens. The Knox specimens include many from the Americas, particularly the British colonies of the Caribbean, and from Europe. Of particular interest are beryl crystals from Ireland, particularly from the Mourne Mountains, said by Giesecke (1832) to be of exceptional quality Equally of note, particularly in the context of the subject of this paper, are the specimens of gieseckite from Greenland and hornblende and epidote from Norway given to Knox by Giesecke.

In 1823 Giesecke wrote to the board of Trinity College, Dublin, stating that he intended to present a suite of minerals, collected by him in Greenland, to the Dublin University Museum (TCD MS 846). He also stated that a catalogue of the collection would be forwarded at the same time It is a measure of the value of the collection that the board instructed the registrar to write to Giesecke conveying their thanks, and that they granted him permission to use the library of the college. Such permission must have been very welcome to Giesecke, as the library contained the finest collections of books and manuscripts in Dublin.

Giesecke's catalogue (Fig. 1) has recently been recognised in the Geological Museum of Trinity College. It is an eleven-page, unbound, coverless, hand-written document, on foolscap pages (330mm x 203mm in size) which bear the watermark of either a crowned lion clasping a trident within a crowned oval frame or the name and date 'J. Green 1824'.

Giesecke lists, in his distinctive and legible handwriting, in black ink (now faded to brown), 149 specimens, giving each a specimen number, the name of the material and a short description, and in most cases stating the location where the material was collected. This numbering scheme is very distinctive, with the first number 'to one decimal place' followed by a dash, after which is a one- to three-digit number (e.g. 6.1–32, or 1204.2–90). It is possible that this is a numbering scheme popularised by Werner. In most cases the specimens are from Greenland, either from the continent or from some offshore islands The material from Greenland was varied and included specimens of the rarer minerals, such as allanite, cryolite (listed as kryolite) (Fig. 2) and sodalite, large numbers of zeolite minerals, and more common mineral species, including garnet, hornblende (Fig. 3) and tourmaline. The catalogue also lists seventeen specimens, mainly of tourmaline and feldspar, from Arendal, Bucen and Naes in Norway, and one specimen, tourmaline with rubellite, from North America (Table 1). Giesecke also included in his gift a lava specimen that he had procured from an iceberg from Iceland

Using the catalogue, the collections in the Geological Museum have been searched and 46 of Giesecke's specimens have now been recognised. In nearly all cases they bear two labels that are Giesecke's own and a further two labels that have been attached since 1826. Giesecke's consist of a small hand-written label on which the specimen number is written,

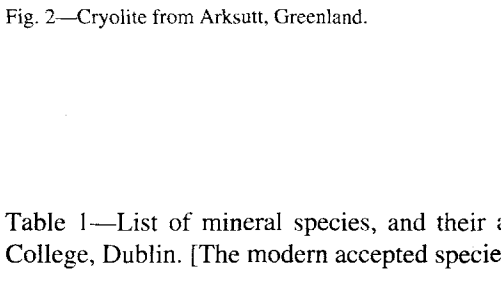

Fig. 2—Cryolite from Arksutt, Greenland.

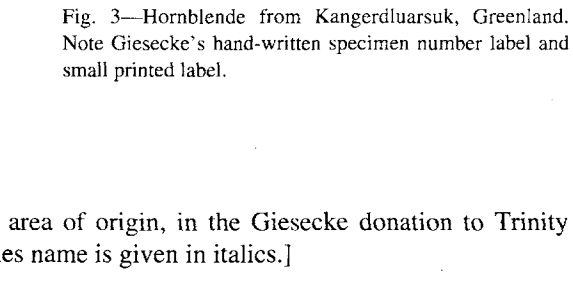

Fig. 3—Hornblende from Kangerdluarsuk, Greenland. Note Giesecke's hand-written specimen number label and small printed label.

Table 1—List of mineral species, and their area of origin, in the Giesecke donation to Trinity College, Dublin. [The modern accepted species name is given in italics.]

Greenland

Actinolite
Allanite
Amethyst (baccillar white)
Analcime
Apatite
Apophyllite
Arctigite [*scapolite*]
Asbestus [*asbestos*]
Aventurin felspar [*sunstone–oligoclase*]
Aventurin quartz [*quartz*]
Baccillar arragonite
Blackish-brown lava
Calcareous spar [*calcite*]
Chabasie [*chabazite*]
Chalcedony
Coccolite [var. of *diopside*]
Copper glance [*chalcocite*]
Copper pyrites
Diallage [probably *hypersthene*]
Dichroite (Iolite) [*cordierite*]
Epidote
Floating mesotype
Fluor [*fluorite*]
Garnet
Granular limestone
Hornblende
Hypersthene
Indurated green earth
Indurated marl
Indurated talc
Inflammable shale
Iron pyrites
Kryolite [*cryolite*]
Labrador felspar [*labradorite*]
Massive iron pyrites
Magnetic iron ore
Mesotype [zeolite group name]
Milk quarts [*quartz*]
Needlestone [*mesotype*]
Opalising adular felspar [*orthoclase*]
Pearl-white felspar
Precious apophyllite [*apophyllite*]
Precious garnet [*pyrope* and *almandine*]
Precious hypersthene [*hypersthene*]
Precious serpentine [*serpentine*]
Red Kryolite [*cryolite*]
Rock crystal [*quartz*]
Sahlite
Sapphirine
Silver white mica [*muscovite*]
Sodalite
Stilbite
Syenite
Tourmaline
Tremolite
Wavellite
Whitestone (compact felspar) [*orthoclase*?]
Yellow rhomboidal spar [*?*]

Norway

Augite
Diopside
Elceolite [*?*]
Epidote
Felspar
Garnet
Hornblende
Magnetic iron ore
Scapolite
Titanite

North America

Tourmaline, with rubellite

and a smaller printed label (Fig 3) On the latter a number to one decimal place appears above a line underneath which is a one- to three-digit number. The number is written in black ink identical to that used in the catalogue, except for the digit after the decimal place, which is written in red ink The black ink has faded to a brown colour, while the red ink in most cases has faded but is legible under ultraviolet light. The smaller printed label bears a printed number that matches the hand-written number beneath the line (Fig. 3). In addition to the specimens listed in the catalogue are a small number that carry only the small printed label—these may be the specimens given prior to 1824.

In 1850, small labels with red printed numbers were added, the numbers corresponding to entries in James Apjohn's catalogue (Apjohn 1850). This catalogue lists only 41 specimens from Greenland Perhaps the remainder of Giesecke's donation was held in a stratigraphic collection rather than in the systematic mineralogical holdings. More recently, in the 1970s, numbers prefixed with 'M' were given to specimens recatalogued at that time.

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