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Sir Arthur Russell

ARTHUR EDWARD IAN MONTAGU RUSSELL, 6th Baronet, of Swallowfield Park, Reading, Berks., was born on the 30 November 1878, the second son of Sir George Russell, 4th Baronet (who died in 1898), and succeeded to the title on the death of his elder brother, George Arthur Charles Russell, in 1944. He died on the 23 February 1964, in his 86th year, and by his death the science of mineralogy lost one of its outstanding figures. He is survived by his widow, Marjorie Lady Russell, and other members of his family.

Arthur Russell's mother, Lady Constance Charlotte Elizabeth Russell, was a grand-daughter of the 4th Duke of Richmond, and her elder brother, Arthur C. W. Lennox, who was a geologist, had for a time worked with Murchison, but had died at the early age of 34. It was from his mother that Arthur Russell first acquired his intense interest in and love of minerals, together with the nucleus of what was, in due course, to become the most outstanding and comprehensive private collection of British minerals that has ever been made.

Lady Constance Russell had had elementary lessons in mineralogy while she was a girl, besides paying frequent visits to study the minerals in the British Museum, and had herself made a considerable collection of minerals. This collection she gave to her younger son, and with her help and encouragement he started adding to it from about the age of seven. The minerals of Cornwall and Devon seem to have attracted him greatly even at an early age, and his mother gave him, among other books, a copy of J. H. Collins's 'Handbook to the Mineralogy of Cornwall and Devon'.

When nearly eight years old, Russell made his first visit underground in a working mine, at Wheal Providence, Lelant, near St. Ives, Cornwall, and many years later he mentioned in a letter that he was 'very frightened on the ladders', comparatively few mines, even at that date, having any other means of access to the workings. Presumably because of his age they refused to allow him to go underground in Botallack mine, St. Just, about the same time, but he went down some three years

later at the age of eleven. Thereafter he was to visit and collect from almost every mine in Great Britain and Ireland, and to go underground in every metalliferous mine in the British Isles that had been worked during his long life, with the exception of the Laxey and Foxdale mines in the Isle of Man—a remarkable achievement.

After leaving Eton, Russell went to King's College, London, where he studied chemistry under Sir Herbert Jackson, but owing to his father's unexpectedly early death in 1898, he left after two years and took up an appointment with the London and South Western Railway (later part of the Southern Railway). He remained there until just before the First World War, ending up, as he himself has described, in the rather unusual occupation of 'Outdoor Assistant to the Locomotive Superintendent'. His father, and other members of his family, had been associated with the old Great Western Railway for many years, and though minerals came first, Russell had also a lifelong but subsidiary love of railway engines. On one occasion, when travelling up to London with him from Reading on the Great Western line, I can well remember Arthur Russell's excitement at finding that the engine hauling the train was the 'Swallowfield Park'.

In the First World War, Russell went to France with the Red Cross in October 1914 as a driver but was invalided home in 1915. He then joined the Railways Unit of the Royal Engineers as a Lieutenant, but was subsequently seconded for work on British mineral resources. Among those he investigated at this time were the chromite deposits of the Shetlands. He was awarded an M.B.E. for this work in 1920. During the next few years he made a number of trips abroad, in particular to Spain and Portugal, where wolfram appears to have been his main interest, and where he collected mineral specimens at some of the well-known localities such as Panasqueira.

In spite of these activities, Russell had been pursuing his collecting whenever and wherever suitable opportunities arose, visiting active and abandoned mines, quarries, and other localities throughout Great Britain and Ireland in his quest for mineral specimens. He was very devoted to his elder brother, Charles, who was greatly handicapped throughout his life by poliomyelitis, and often took him on his collecting trips. He received great encouragement from his brother, and considerable help in the rediscovery of obscure and forgotten localities.

In the field, and as a collector, Arthur Russell was outstanding; he had a keen eye for good specimens, and especially for the rarer and more unusual species that most people would be likely to overlook. He

paid great attention to local mineralogical conditions and environment, and had an instinctive feeling for where minerals might be found. His enthusiasm was boundless and infectious, and his patience and persistence generally brought their reward. One of his very few disappointments occurred in 1945, when he just missed recovering the 'Brasky' meteorite, the largest stone (weighing about 65 lb) of the Limerick (Eire) fall of September 1813, which had been lost sight of for years. After many inquiries, especially in Ireland during the three summers of 1943-45, and by piecing together scraps of evidence, Russell had succeeded in tracking down the whereabouts of this stone, only to be forestalled in the meantime by just a week or two, by two members of the Eire Land Department who stumbled on the meteorite without realizing what it was, and reported the unusual object to the National Museum in Dublin.

Russell had a great sense of humour and was a good 'mixer', getting on well with almost everyone and making many friends among mine and quarry managers, miners, and quarrymen. He was, in consequence, usually notified of any interesting discoveries in mines or quarries, and so was able to get hold of, *in situ*, many fine specimens that might otherwise have been damaged or destroyed.

In addition to his mother's collection and to material collected by himself, Russell had, over the years, acquired the whole or part of a considerable number of other collections, some dating back to 1800 or earlier, many of them containing specimens no longer obtainable *in situ* during his own lifetime. Among the more important may be mentioned those of: Philip Rashleigh (1728-1811), John Hawkins (1761-1841), Lady Elizabeth Coxe Hoppisley (1760-1843), Edmund Pearse (1788-1856), George Fox (1784-1850), Alfred Fox (1794-1874), Robert Were Fox (1789-1877)—these last three being members of the well-known Quaker family of mining adventurers, all of Falmouth—Sir Maziere Brady (1796-1871), Sir Warington W. Smyth (1817-90), Baroness Burdett-Coutts (1814-1906), John Ruskin (1819-1900), Samuel Henson (1848-1930), J. H. Collins (1841-1916), Col. R. B. Rimington (1828-1910), W. Semmons (1841-1915), and the pick of the Williams Collection from Burncoose, Gwennap, Cornwall. Arthur Russell's collection at Swallowfield became known throughout the world, and was visited by many enthusiastic mineralogists from Britain and overseas. All who went there could be assured of a warm and enthusiastic welcome, and many a young and inexperienced mineralogist must have received valuable help and encouragement. The collection

contains so many outstanding specimens that it is difficult to pick out those for specific reference; mention must, however, be made of the excellent suites of chalcopyrite, chalcocite, fluorite, calcite, pyromorphite, mimetite, and baryte. In his early years, Russell had made many collecting trips to Ireland, and the collection is unusually rich in authentic Irish specimens.

The whole of this superb collection, amounting to some 14 000 specimens, has passed to the British Museum (Natural History) by Arthur Russell's generous bequest.

Russell joined the Mineralogical Society in 1902, publishing his first paper in the *Mineralogical Magazine* in 1907, and, in addition to serving on the Council on several occasions, was President from 1939-42. In 1926 he organized and directed a southern mineralogical excursion to Cornwall and Devon in connexion with the Society's Jubilee Celebrations in September of that year.

In 1948, the postponed 18th Session of the International Geological Congress (originally to have been held in 1940) took place in Great Britain and, in connexion with this, Russell led a special Mineralogical Excursion to Cornwall and Devon.

In recognition of his contributions to the science of mineralogy he was awarded the William Bolitho Gold Medal for 1948 by the Royal Geological Society of Cornwall, and in 1953 the Royal Institution of Cornwall awarded him the Henwood Medal for his work on the mineralogy of the county. In April 1956 he was awarded the honorary degree of Doctor of Science by the University of Oxford.

Most of his published work, comprising more than thirty papers of a descriptive or historical nature, appeared in the *Mineralogical Magazine*, several papers, however, appearing in the *Journal of the Royal Institution of Cornwall*, including one on the Revd. William Gregor (1751-1817), discoverer of the element titanium. His contribution to the knowledge of British minerals was outstanding, and among those of which he described the first British occurrences, either alone or as a co-author, may be mentioned bementite, carminite, celsian, cerulite, cornubite, cotunnite, laurionite, nadorite, paralaurionite, phenakite, realgar, serpierite, turquoise, and varlamoffite. The mineral rashleighite was named and first described by him, and he himself is commemorated in two minerals, russellite and (jointly with Arthur Kingsbury) arthurite. An unfulfilled ambition was the complete revision of Greg and Lettsom's *Mineralogy of Great Britain and Ireland* (1858); his manuscript notes for this, and for brief biographies of many mineral collectors and

dealers, are deposited in the library of the Mineralogy Department, British Museum (Natural History).

In addition to his work on minerals, Arthur Russell took a great interest in the historical and, to a rather less extent, the practical side of mining, so that his advice was often sought by mine managers and others. Though his activities ranged over the whole of the British Isles, Cornwall and Devon probably claimed the greater share of his interest and attention, and he acquired a remarkable knowledge of the mines and mineral localities of the two counties. His interest in Cornish mining and its possible revival was very real and for many years he was Honorary Consulting Mineralogist to the Cornish Mining Development Association. In 1946, just after the end of the Second World War, an attempt was made to re-open the old mine of Wheal Martha, later known as New Consols, Luckett, near Callington, Cornwall. The mine suffered many setbacks after the re-opening, and though, at one stage, Russell was called in to advise, and became associated with it for a short time, the venture, as he himself had feared, proved abortive, and the mine was abandoned in 1952.

During the course of his long and varied life, Arthur Russell got to know many people in all walks of life and made a wide circle of friends, both at home and from other countries. Many of his old mining friends had predeceased him, but at the time of his death there were still a few of the older generation left who remembered him with warmth and affection, and though they might not have seen him for some years they always inquired after him. He will be greatly missed, especially by his mineralogical friends, among whom are many members of this Society. His death, however, is most keenly felt by those who had come to know him more intimately and had been able to work with him and accompany him in the field. Few men have been so dedicated to mineralogy, and it can truly be said that his passing marks the end of an era.

Arthur Russell's collection, upon which he spent so much of his life and bestowed so much loving care, will remain his greatest memorial.

ARTHUR KINGSBURY
