

CENTENARIES.

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Rome De l'Isle, Jean Baptiste Louis,
(1736-1790).

ROME DE L'ISLE, the French mineralogist, was born at Grai on 26th August 1736. The first half of his life appears to have been spent in military service, which he entered in 1757. It is of interest to us to learn that he visited India as the Secretary of a company of artillery. He is said to have lived in Pondicherry and Tranquibar. He was taken prisoner by the English in 1761.

CONTRIBUTIONS TO CRYSTALLOGRAPHY.

After his release in 1764, he returned to France and entered on his scientific career, choosing minerals and crystal forms, as his special field of study. In 1772 he brought out his *Essai de cristallographie*. The second edition of this book came out in 1783 in four volumes under the title *Cristallographie, ou description des formes propres a tous les corps du regne mineral*. This edition included figures of more than 500 crystal forms. This book contains an account of his important discovery that the various shapes of crystals of the same natural or artificial substance are all intimately related to each other. He distinguished the six kinds of primitive forms.

THE CONTACT GONIOMETER.

Rome De l'Isle was fortunate in his assistant, Carangeot who, in addition to making the crystal models for him, invented, in 1780, the Contact Goniometer, which was greatly used by him and his contemporary Abbe Hauy. A duplicate of the original Contact Goniometer used by Rome De l'Isle came into the hands of the Duke of Buckingham and was eventually deposited in the University Museum at Oxford.

HIS OTHER PUBLICATIONS.

In addition to his *Cristallographie*, Rome De l'Isle published seven papers and three other books. The book entitled *Des Caracteres exterieurs des mineraux* came out in 1784 and the *Metrologie ou tables* came out in 1789. These books and the papers came out regularly in the last decade of his life, almost to the year of his death. This shows how active he was throughout his life. He died at Paris on 7th March 1790.

THE MINERAL ROMBEITE.

In the *Annales des mines* of 1841, Damour immortalised the name of Rome De l'Isle by giving the name Romeite to a honey-yellow crystal of an antimonite of calcium, which occurs in minute octahedrons.

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Leach, William Elford (1790-1836).

LEACH, the British Zoologist, was born at Plymouth in 1790. Though he got the Doctorate in medicine of the University of Edinburgh in 1812, he abandoned the medical profession to devote himself to natural history. This made him enter service in the British Museum in 1813. He served this institution for nine years, first as Assistant Librarian and later as Assistant Keeper of the natural history department. Those nine years of Leach's life in the British Museum were one of such absorption and overwork that both his body and mind broke down when he was but 31 years. This led to his retirement in 1821 and his migration to Italy, where he was looked after by his most devoted sister.

CONTEMPORARY ESTIMATE OF HIS REPUTATION.

But, during this short period of 9 years, Leach had earned a great reputation at home and abroad. At the anniversary meeting of the Royal Society, H. R. H. the Duke of Sussex, referred to him in the following terms in his presidential address:—"His enthusiastic devotion to his favourite studies, his great knowledge of details, combined with no inconsiderable talents for classification, were eminently calculated to raise him to the very highest eminence as an original and philosophical naturalist.... We are chiefly indebted to him for the first introduction into this country of the natural system of arrangement in conchology and entomology." The Secretary of the Linnean Society referred to his death in equally high terms as "one of the most laborious and successful as well as one of the most universal cultivators of Zoology which this country has ever produced." He was elected a Fellow of the Royal Society in his 27th year.

HIS WORK AND PUBLICATIONS.

Although he had made extensive discoveries in vertebrata, especially birds, he is best remembered for his work in malacology and entomology. It is claimed that his knowledge of the crustacea was superior to that of any other naturalist of his time. He was a profuse writer. During the nine years of his active scientific life, he contributed no less than 31 papers to the organs of learned societies, and in addition four voluminous treatises entitled respectively (1) *The Zoological Miscellany*, 3 Vols., (2) *Malacostraca podophthalma Britannicæ*, (3) *Systematic catalogue of the indigenous mammalia and birds*, (4) *A synopsis of the mollusca of Great Britain*. He also described the animals taken by the Congo Expedition and contributed articles to several encyclopædias.

THE END.

No wonder that such an output in the first 9 years of active life led to a premature termination of his labours. After 15 years of slow recovery and secluded life under the care of his sister, he died of cholera in Italy on 25th August 1836.

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Black, Greene Vardimen (1836-1915).

G. V. BLACK, the American dentist, was born on 3rd August 1836 at Winchester, Illinois. At 17, he took up the study of medicine and three years later he became an apprentice in dentistry. A year later he began practice in his own town and later in Jacksonville. He was Lecturer in Dentistry at the Missouri Dental College from 1870 to 1880. He then became Professor of Dentistry in the Chicago College of Dentistry (1883-1889), in the University of Iowa (1890-91) and in the North-Western University Dental School (1891-1915). He was the Dean of the last-mentioned school from 1897. It is an unusual coincidence that his son, Dr. Arthur Davenport Black, who is also an eminent dental surgeon, was Professor of Operative Dentistry for many years during his father's deanship and himself continues as the dean from 1917.

HIS WRITINGS.

Black's first paper appeared in the July 1869 issue of the *Missouri Dental Journal*. He was a frequent contributor to several dental periodicals of America. He also published several books on dentistry. His first book came out in 1884 under the title *The formation of poisons by micro-*

organisms. In 1887 came *A study of the histological characters of the periosteum and periodental membrane*. The two famous books of his are the *Dental Anatomy* (1891) and *The Operative Dentistry*, 2 V. (1908). At a banquet tendered to him five years before his death by the Chicago Odontographic Society, a pamphlet was distributed containing more than 500 titles of books, papers and reports written by him. At the time of his death, it was estimated that their number had reached 1,000.

HIS CONTRIBUTIONS.

Black was a pioneer in many departments of dentistry. The pages of *Dental Cosmos* contain many of his discoveries. He gave the successful rule of practice for dentists in preventing the loss of workability by cohesive gold when stored in the dental cabinet. He evolved a method of making alloys for amalgam as a filling for tooth cavities. He invented the cord driven, foot power, dental engine. He supplied the patterns for 102 cutting instruments necessary for the proper excavation of cavities. He steadily refused to commercialise his work and freely placed all the results of his labours at the disposal of his profession.

HIS HONOURS.

In 1901, he was elected President of the National Dental Association of America. Five universities conferred Honorary Degrees on him. In 1910, he was the first recipient of the Miller Memorial Prize awarded by the International Dental Federation for "eminent services to dentistry". This international prize was established by the Federation in memory of its president Professor Miller of the Berlin University. The award is biennial and consists of a gold medal, a diploma of honour and the interests of a fund of £3,000. His former pupils are said to be scattered over the world—in America, in Europe, in Asia, Africa and Australia. His activities continued till within a few weeks of his death. In 1915, appeared his last book, *Diseases and treatment of the investing tissues of the teeth and the dental pulp*, and his last article appeared in July 1915, while he died on August 31. An estimate of his personality was given as follows by one of his colleagues. "He was great in achievements, great also in his simplicity and sincerity. He climbed the heights, but he took his fellows with him every step of the way."