

and devitrified, upon novaculites and quartzites, on the 'porfido rosso antico,' and on the dwindling of limestones. To the Royal Society he contributed two papers, one, in conjunction with Mr. Herman, 'On the microscopic characters of some specimens of devitrified glass, with notes on certain analogous structures in rocks'; the other, 'Notes on alteration induced by heat in certain vitreous rocks.' He also wrote papers for the 'Geological Magazine,' the Royal Microscopical Society, and the Geological Societies of Ireland and Cornwall.

Rutley joined the Geological Society in 1870, and in 1881 the balance of the proceeds of the Murchison Fund was awarded to him by the Council of the Society in recognition of his work and to assist him in his researches. He joined the Mineralogical Society in 1888, and served upon the Council from 1890-3, and in 1897-8. He wrote a paper on the classification and nomenclature of crystallites in the 'Mineralogical Magazine,' vol. ix, and several papers on quartz, zircon, manganite, and on fulgurites, &c., in vol. x of the Magazine. He was also a member of the French Mineralogical Society.

In 1898, Rutley's scientific activities and his work as a teacher were alike interrupted by a stroke of paralysis, and though he still continued to do a little work, his friends from that time missed his familiar presence at scientific gatherings. He passed away peacefully on May 16, 1904, after a long and patiently borne illness, and was buried in the Fulham Cemetery. Many friends mourn the loss of a true-hearted colleague and fellow-worker, and will long cherish a memory of the man and of the excellent work that he accomplished.

J. W. J.

#### HENRY PALIN GURNEY (1847-1904).

Henry Palin Gurney, eldest son of Henry Gurney and Eleanor Palin, was born in London on September 7, 1847. He received his early education at the City of London School, proceeding afterwards to Clare College, Cambridge. There he distinguished himself both in Athletics and the Schools: he rowed in the college boat and ran for his University in the Oxford and Cambridge Sports of 1868 and 1869; he took both the Mathematical and Natural Sciences Triposes in the year 1870, being placed fourteenth wrangler in the former and in the first class in the latter; immediately afterwards he was elected to a college fellowship, which he held till 1883. In 1871 Mr. Gurney took orders in the Church of England, and for the next four years worked as curate to Canon Beck in one of the largest and poorest of London parishes, that of Rother-

hithe; in the early part of that period he was married at Whitchurch in Herefordshire to Louisa, daughter of the Rev. H. Selby Hele, of Grays, Essex, and great-granddaughter of Bishop Horne.

Mr. Gurney's innate love of crystals had been developed under the influence of the Cambridge Professor, William Hallows Miller, during whose illness he later acted for some time as Deputy. Appreciating the difficulties which at that epoch presented themselves to English students, Mr. Gurney wrote a very simple and useful Manual of Crystallography (128 pages), founded on the Tract of Professor Miller and the Lectures of Professor Story-Maskelyne; it was published in 1875 by the Society for Promoting Christian Knowledge. He was one of the Original Members of the Crystallogical Society founded on June 14, 1876, and was a Member of its first Council. At one time he meditated acceptance of an appointment in the Mineral Department of the British Museum, but, notwithstanding the great attractions which work in a mineral collection would have had for him, he did not feel justified, having regard to the interests of his family, in becoming a candidate for a post of which the prospective emoluments must be both uncertain and small.

Instead, therefore, of making research in mineralogy and crystallography his life-work, Mr. Gurney accepted an offer made to him and became a colleague, afterwards (1877-94) managing partner, of Mr. Walter Wren in the large establishment which the latter had instituted at Westbourne Park for the training of candidates for the various competitive examinations for posts in the Army and in the Home and Indian Civil Services; there his vast energy, physical and mental, found full employment. His remarkable powers of organization, and the personal influence he was able to bring to bear on young men of ability at a very critical period of their lives, contributed largely to the success of the undertaking. The pupils of that establishment now occupy prominent posts in every part of Greater Britain, and it thus comes about that few tutors have ever been more widely known and respected. During a large part (1876-88) of this period, he officiated as curate of the church of St. Peter in Bayswater.

When the Principalship of the Durham College of Science, Newcastle-upon-Tyne, fell vacant through the resignation of Dr. William Garnett, it was felt that the educational experience, the wide culture and attainments, and the personal character of Mr. Gurney marked him out as the ideal man for that important position. His appointment to the post has been abundantly justified during the ten years which have since elapsed.

He devoted himself to the advancement of the interests of the college

in every possible way. Of the thousands of students who have passed through the institution during his tenure of office, many will long remember his kindly advice and ready help. His charm of manner and sweetness of disposition made him everywhere popular; and at distributions of school-prizes and public meetings in general in Newcastle and the surrounding district, he was sure of a hearty welcome. He took a leading part in inducing the promoters of the Armstrong Memorial Fund to devote its proceeds to the completion of the college buildings, and he afterwards gave help in the encouragement of subscriptions. Mr. Gurney provided a remarkable illustration of the well-known fact that the busiest man is the one who is most ready to add to his work and responsibilities: he was the representative of the college on the governing bodies of schools at Newcastle, Rothbury, Hartlepool, and Middlesbrough; he was a co-opted member of both the Newcastle and Northumberland Education Committees; he was Chaplain to the Bishop of Newcastle, and also to the Third Volunteer Battalion of the Northumberland Fusiliers; he was Warden of the Newcastle Diocesan House of Mercy.

Notwithstanding the great multiplicity of the duties which fell to him as Principal, and the demands made on his time by the professorship of mathematics which he later combined therewith, Mr. Gurney found it possible to give some attention to the development of his old subject, the study of crystals. Impressed with the importance of crystallography both as an independent science and as auxiliary to chemistry, physics, mineralogy, and petrology, he equipped the college with apparatus for the measurement of the angles and for the determination of the symmetry and optical characters of crystals, and arranged that opportunity for the acquisition of a theoretical and practical knowledge of the science should be provided for Newcastle students.

Mr. Gurney received the honorary degree of D.C.L. from the University of Durham; he was a Fellow of the Geological and Physical Societies, and for several years was a Member of the Council of the Mineralogical Society.

Whenever it was practicable for him, Mr. Gurney sought complete relaxation and change of thought in travel, spending many of his vacations abroad and availing himself of every opportunity of visiting places of general or geological interest both in Europe and America. With the present writer he spent several happy holidays; on one occasion journeying to Moscow, Nijni Novgorod, and down the Volga to Kazan afterwards making an excursion with other members of the International

Geological Congress to various noteworthy places in Finland: a brief account of the latter he gave in his 'Notes on the Geology of Finland.' He was an ideal companion; full of energy and enthusiasm; of infinite patience, good temper, and cheerfulness; indeed, to see his pleasant face and hear his hearty laugh was almost a holiday in itself. Only a few short weeks ago he proposed that they should again spend a few weeks together, this time at Arolla in Switzerland, where he was to go with two of his daughters, but the writer was unable to leave London. Soon afterwards came the startling news of his death. With only a walking-stick in his hand, he had started off alone at 8 a.m. on August 13, not saying, probably not knowing, how far he was likely to go. Night came and he did not return. Search was immediately begun, and by dusk the next day his footmarks had been discovered on an *arête* of the Gysa, a southern spur of Mount Roussette; there they ceased. Soon after dawn on the following morning his body was discovered several hundred feet below; his watch had stopped at nearly twelve. Notwithstanding the caution and carefulness which were ever prominent features in his own character, and were strongly impressed by him on others, he had doubtless been gradually led on by the beauty of the view to climb higher and higher, and had eventually and unexpectedly found himself in a place where a slip was easy and would mean instant death.

His loss will long be felt far and wide, more especially in the North of England, where he had lived for the last ten years; but for the members of his family and his intimate friends, more especially for one to whom he always showed the kind feeling of a brother, it will cast a shadow over what remains of life.

L. FLETCHER.

#### FERDINAND ANDRÉ FOUQUÉ (1828–1904).

By the death of Professor Fouqué, on March 7, our Society loses a distinguished Honorary Member, elected in 1898. Since 1877 he had been Professor of Natural History in the Collège de France, and in 1881 was elected Membre de l'Institut. His first paper, with St. Claire Deville in 1854, dealt with the losses experienced by minerals when heated, and his studies in volcanic geology led to the publication, in 1879, of his great work 'Santorin et ses éruptions.' In conjunction with Michel Lévy he published two other important monographs—'Minéralogie micrographique: roches éruptives françaises' (1879), and 'Synthèse des minéraux et des roches' (1882)—and he was the author, often also in collaboration with Michel Lévy, of numerous papers on petrology and on rock-forming minerals.