in the same way as the Neozoic into two periods: (a) the Protozoic or Proterozoic (Gr. protos, first), including the Cambrian, Ordovician, and Silurian; and (b) the Deutozoic or Deuterozoic (Gr. deuteros, second), embracing the Devonian, Carboniferous, and Permian."

Curiously, however, in the late Professor Gümbel's "Grundzüge der Geologie," which came out in parts (and the full volume in 1888), on pp. 527-529 the transition series is placed in the following three subdivisions:—

I. Cambrische or Proterozen System (Paradoxides period).

II. Silur or Deuterozen System (Graptoliten period).

III. Devon or Tritozen System.

I think Gümbel's employment of these terms must have been published before the 12th edition of Page's Text-book, though Lapworth may not have seen them, and he has given an altogether different signification to his Proterozoic and Deuterozoic to what Gümbel has done.

F.G.S.

## OBITUARY.

HENRY PALIN GURNEY, M.A., Hon. D.C.L., F.G.S., ETC.
BORN SEPTEMBER 7, 1847. DIED AUGUST 14, 1904.

HENRY PALIN GURNEY, eldest son of Henry Gurney and Eleanor Palin. was born in London on September 7th, 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 Science 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 Rotherhithe; 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 Crystallological Society founded on June 14th, 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 lifework, Mr. Gurney accepted an offer made to him and became a colleague of, and afterwards (1877-94) managing partner with, 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 and encouragement in obtaining further 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 13th, 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 12. 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 east a shadow over what remains of life.1

L. FLETCHER.

## ROBERT HARRIS VALPY, J.P., F.G.S.

BORN SEPTEMBER 16, 1819.

DIED DECEMBER 18, 1904.

Mr. R. H. Valpy, whose death, in his 86th year, we regret to record, had been an active worker among the Devonian rocks of North Devon. Residing for portions of many years at Ilfracombe, he gathered together a rich collection of fossils from that neighbourhood, and his help was cordially acknowledged by Mr. Etheridge in the celebrated paper "On the Physical Structure of West Somerset and North Devon, and on the Palæontological Value of the Devonian Rocks" (Quart. Journ. Geol. Soc., vol. xxiii, 1867, see pp. 605-8, etc.). Mr. Valpy himself never published much, and his little work entitled "Notes on the Geology of Ilfracombe and the Neighbourhood" was issued anonymously, by Twiss & Sons, Ilfracombe. He was a man who seemed to shrink from publicity, and to prefer a quiet and retired country life. He was the only son of Capt. A. B. Valpy, R.N., of Combe Lodge, Blagdon, Somerset, and was born at Streatley in Berkshire. He was educated, first, under his relative, the eminent Dr. Richard Valpy, F.S.A., at the Reading Grammar School, and afterwards at Harrow and Balliol College, Oxford, and qualified in 1846 as J.P. for Berkshire. In 1849 he purchased the estate of Enborne Lodge, near Newbury, in Berkshire, and this was his principal home during the greater part of his life. There he was highly respected as "the good squire," and he lived to be the oldest magistrate in the county.2

When engaged in the re-survey of portions of the Mendip Hills in 1869 the present writer, together with Mr. Ussher, had the good fortune to meet Mr. Valpy at Blagdon. Every locality for fossils appeared familiar to Mr. Valpy, who pointed out the occurrence of trilobites in the basement portion of the Lower Limestone Shales near Burrington, the occurrence of bone-beds in the Carboniferous Limestone, and the presence of Rhætic beds in a somewhat abnormal position in the vicinity of Blagdon. He also mentioned that he had found striæ, which he considered might be of glacial origin, on blocks of Carboniferous Limestone in the Dolomitic Conglomerate. The information which he had acquired here, as elsewhere, by a very close study of the rocks, was ever generously placed at the service of others. H. B. W.

<sup>1</sup> Reprinted from the Mineralogical Magazine, October, 1904, vol. xiv, No. 63,

pp. 61-64.

2 If not the founder, he was a member of the Old "Valpeian Club," which dined together annually in London to keep alive the memory of old Dr. Valpy-the author of Valpy's Latin Grammar, on which so many boys were brought up!