

The Very Rev. GEORGE PEACOCK, D.D., Dean of Ely, was born on the 9th of April, 1791, at Thornton Hall, Denton, in the parish of Gainford near Darlington, in the county of Durham, and about fourteen miles from Richmond in Yorkshire, being the residence of his father, the Rev. Thomas Peacock, incumbent and during fifty years perpetual curate of that parish, where he also kept a school. His family consisted of five sons and three daughters, three of the sons by a first marriage, and the other two, with the daughters, by a second; George being the youngest son of the five. In early youth he showed no precocity of genius, but was a bold and active lad fond of out-door sports, and, if remarkable for anything, rather for his daring feats in climbing, which sometimes led him into very dangerous situations, than for any special attachment to study. From the nature of his father's occupation, it is not probable that he lacked the usual elementary instructions; but his early reading was desultory, books of voyages and travels being most in favour with him; nor was it until, with a view to his future college career, he was sent at nearly seventeen years of age (in January 1808) to the school of the Rev. Mr. Tate (formerly a Fellow of Sydney Sussex College, Cambridge) at Richmond, that his great natural powers began to develop themselves. Here, however, he applied himself with diligence to the studies of the school, and with such success, that at the July examination he was placed alone, by a decided superiority, at the head of his class, in which it may be noticed were two boys who afterwards became Fellows, and four others who became Scholars of Trinity College. He did not live in Mr. Tate's house, but in lodgings near it, and had his evenings uninterrupted for study, which he used to such purpose as to have read far in advance of the classical course of the school, and to have obtained an accurate knowledge of the niceties of Greek criticism, as well as a habit of sound rendering both of the Greek and Latin classics. During one or more of the vacations, particularly the summer one of 1809, he also read mathematics with Mr., afterwards Dr. Brass, at that time a distinguished Undergraduate of Trinity, from the town and school of Richmond, and who subsequently took a Wrangler's degree. It would seem, however, that up to the period of his entry at Trinity College in October 1809, his mathematical reading had not extended much beyond the first year's subjects then studied at Cambridge. We

have the testimony of one of his schoolfellows, afterwards himself a distinguished ornament of the same University and College, that during his whole time at Richmond, "though a severe student, he was a joyous, sociable, and genial spirit, always ready for good companionship, for any pleasurable excursion, for manly exercise, and for all innocent mirth and playfulness." How well calculated, as a teacher, Dr. Tate must have been to bring forward the powers and to win the affectionate regard of his pupil, may be gathered from the terms in which their connexion is spoken of in the dedication of his first considerable mathematical work,—terms which indicate more than an ordinary community of feeling and facility of intercourse between the pedagogue and the pupil.

During the first year of his residence as an undergraduate at college, he does not appear to have applied himself with any extraordinary diligence to the studies of the place; but this temporary relaxation of energy was amply compensated during the remainder of his pupillage by a very extensive and conscientiously accurate course of mathematical reading, which issued in his taking the degree of Second Wrangler in January 1813. Shortly after the examination for the degrees, he also gained one of the Smith's prizes.

In 1812, being the earliest period at which, as a sizar of his college, he was allowed to compete, he obtained a Scholarship, and on his first offering himself as a candidate for a fellowship (in 1814), was elected to one of the only two then vacant, his extensive classical knowledge no doubt standing him in stead on that occasion. In the subsequent year he was appointed Assistant Tutor and College Lecturer; in 1823, Full Tutor, conjointly with Mr. Evans; and finally, in 1835, Sole Tutor of the "side" which bore his name in that great and venerable establishment, an office which he held till called away from the performance of its duties by his appointment to the Deanery of Ely in 1839, when he also took the degree of Doctor of Divinity, having been admitted into Holy Orders in or about the year 1817. In one of the summer vacations in this interval (1816) he visited Italy.

Of his conduct in the important and responsible office of tutor, there has never been but one opinion in the University. While his extensive knowledge and perspicuity as a lecturer maintained the high reputation of his college, and commanded the attention and

admiration of his pupils, he succeeded to an extraordinary degree in winning their personal attachment by the uniform kindness of his temper and disposition, the practical good sense of his advice and admonitions, and the absence of all moroseness, austerity, or needless interference with their conduct. "His inspection of his pupils," says one of them, "was not minute, far less vexatious; but it was always effectual, and at all critical points of their career, keen and searching. His insight into character was remarkable."

It was impossible for any one, at the epoch of his undergraduacy, and for several years preceding that epoch, drawn on to read extensively in mathematics for the sake of the science itself, and thus becoming aware of the progress made on the continent in that department of knowledge, while at the same time subjected to the course of reading then pursued for the Senate-house examinations, not to become at the same time unpleasingly sensible to what we must now consider the discreditable state of Cambridge mathematics then prevalent. Peacock, in common with many other students of his own standing, was profoundly impressed with this, and resolved, so far as in him lay, to contribute towards remedying the evil. Accordingly we find him, so soon as relieved from the pressure of examinations, exerting himself vigorously in the cause of mathematical improvement. As a preliminary step towards introducing the continental methods and the spirit of the higher analysis, he joined with two fellow-students of his own year (Messrs. Babbage and Herschel) in the task, more useful than brilliant, of translating the smaller work of Lacroix on the differential and integral calculus. This translation, published at Cambridge in 1816, was followed by a copious collection of examples in 1820; and, the sale of both being rapid, contributed no doubt materially to further the object in view. His position as Moderator for 1817 supplied him with a powerful lever for urging forward this movement, and he was not backward in availing himself of it. In his questions for the Senate-house examination for that year, the differential notation of the continental analysts was for the first time *officially* employed in Cambridge; an innovation which passed not altogether without censure. How little this affected him will appear from the following extract of a letter to a friend, which we have before us, dated March 17, 1817.

"I assure you, my dear ——, that I shall never cease to exert

myself to the utmost in the cause of reform, and that I will never decline any office which may increase my power to effect it. I am nearly certain of being nominated to the office of Moderator in the year 1818-19*, and as I am an examiner in virtue of my office, for the next year I shall pursue a course even more decided than hitherto, since I shall feel that men have been prepared for the change, and will then be enabled to have acquired a better system by the publication of improved elementary books. I have considerable influence as a lecturer, and I will not neglect it. It is by silent perseverance only that we can hope to reduce the many-headed monster of prejudice, and make the University answer her character as the loving mother of good learning and science."

Nor was it only towards placing on a better footing the purely mathematical studies of the University that his aspirations were directed. In the best spirit of a faithful and devoted son of Alma Mater, he repudiated the idea of her approaching decrepitude, and contended for her progress in all the great lines of scientific distinction. He was one of the most zealous promoters of the establishment of an Astronomical Observatory at Cambridge, and succeeded, in spite of considerable opposition, in procuring the appointment of two successive Syndicates for the consideration of the subject, and finally in carrying it triumphantly through the Senate. The result, it need hardly be remarked, has brilliantly justified the effort. He was also one of the first members of the Cambridge University Philosophical Society founded in 1819,—a body, which has established a well-earned scientific reputation, and of which he held the office of Vice-President in 1831 and 1840, and of President in 1841-42. He was also one of the earliest members of the Astronomical Society, which he joined immediately on its foundation in 1820. In 1818 he became a Fellow of the Royal, and subsequently of the Geological Society.

In 1825-26 he contributed to the *Encyclopædia Metropolitana* an article on Arithmetic, which has been designated by one eminently qualified to form an opinion on every point of mathematical history, as "the most learned work on the history of that subject which exists," and which, entering as it does into the details of the arithmetical nomenclature, notation, and methods of every age and lan-

* This was the case. He was also Senior Moderator in 1821.

guage, must have been the result of a world of reading and toilsome antiquarian research. In 1830 he supplied by his treatise on Algebra one of the greatest deficiencies in our whole circle of mathematical reading,—that, namely, of a sound elementary work on that subject based on truly philosophical principles, and explaining the true gist and nature of symbolical reasoning, in its relation to ordinary arithmetic and the science of concrete numerical magnitude, and pointing out (on the principle of the ‘Permanence of equivalent forms’) the origin and the solution of many of those difficulties which were usually slurred over by the student, in a way little conducive to the formation of clear logical habits of thought. In this remarkable work, the ideas propounded by Buée, Argand, Mourey and Warren, respecting the geometrical interpretation of imaginary symbols, were for the first time presented to the student in an elementary treatise as part and parcel of the general subject, and as intimately interwoven in the very texture of the algebraic methods; thus preparing them to understand and appreciate those more abstruse and powerful systems of imaginary representation subsequently developed in the double and triple algebra of Professor De Morgan and the quaternions of Sir William Hamilton. A report which he presented to the British Association in 1834, “On the recent progress of certain branches of Analysis,” afforded him the occasion of still further maturing his views of the subject; and finally, in 1842 and 1845, he published in two successive volumes a more elaborate and complete treatise, in which the purely arithmetical or technical view of algebra is presented quite separately from the purely symbolic or formal one, and which leaves little to desire in respect of metaphysical completeness, and nothing in that of lucid exposition. The position which he then held in the University, as Lowndean Professor of Mathematics (to which office he was elected in 1837), identifies this work with the University in which it was produced as a contribution to scientific literature of which it may well be proud.

In this, his capacity of Lowndes Professor, he at first gave a series of lectures on practical and theoretical astronomy; and when, by mutual arrangement with the Plumian Professor, these lectures, belonging more properly to the department of the latter, were given by that officer, he delivered a course on geometry, and for three suc-

cessive years attempted to form a class for a course on the principles of analysis and their application. Those who are conversant with the mode in which the mathematical studies of the junior members of the University are prosecuted, will not be astonished that the attendance was small. Not discouraged, he attempted to form a class for astronomy, but though at first successful, the attendance was not maintained in subsequent years.

In 1838 Professor Peacock was appointed a member of the Parliamentary Commission for considering the steps to be taken for the restoration of the Standards of Weight and Measure destroyed by the burning of the Houses of Parliament. To the duties of this Commission he gave his diligent attention, and it was indebted to him for many valuable and useful suggestions. Of the Second Commission, appointed in 1843 to carry out the report of the first by the construction of new standards, he was also a member.

In 1839 he was appointed to the Deanery of Ely, vacated by the death of Dr. Wood, and with this appointment ceased, of course, his connexion, as Tutor, with Trinity College, and his residence at Cambridge other than such as the duties of his Professorship required. In this position it is too little to say that he conscientiously devoted himself to the performance of its duties. He went into them with all the zeal of an earnest and pious spirit, and with all the energy and prudence of an able and practical administrator. The venerable and beautiful fabric of the Cathedral had fallen into grievous decay, and had even become endangered by neglect. Its restoration became one of his principal objects, for the accomplishment of which he exerted himself with such success, that it remains distinguished as one of the most beautiful specimens of our ecclesiastical architecture. He laboured hard to introduce, and he succeeded in effectually introducing into the city of Ely, in spite of much opposition, the sanitary measures required by the Public Health Act; the result being a material improvement of the recorded salubrity of the place. Its educational establishments, especially the schools more immediately connected with the Chapter, received from him the most assiduous attention and active support, and its public charities his vigilant supervision. These duties, however, neither withdrew him from the pursuit of science, nor from his favourite and cherished object of University Reform. In his Life of the late Dr. Young, and

in his collection and republication of his numerous and important papers and memoirs, originally printed either as separate works, or in the Transactions of this Society and various journals and periodical works; he has conferred a lasting benefit on Science while doing justice to one of its most distinguished ornaments. There can be no doubt that this work must have cost him a vast amount of labour. Few scientific writers, thinking so profoundly and arriving at such important conclusions, have adopted a form of exposition so obscure and difficult to follow as Dr. Young. The discussion of these memoirs in the Biographical volume of Dr. Peacock's work, however, shows that he had completely overcome this difficulty, and obtained a perfect appreciation both of their merit and method. In the Archæological department of this work he had for a coadjutor Mr. Leitch, who edited the volume devoted to Dr. Young's Hieroglyphical discoveries. This work occupied him at intervals spread over a period of twenty years, and was only published in 1855, three years before his own decease.

Dr. Peacock was an active member of both the Cambridge University Commissions (of 1850 and 1855). Earnestly devoted to the improvement of the University system, he had early made its statutes and history an object of especial study, and had stated, in the form of observations published in 1840 on its constitution and studies, and in 1841 on its statutes, the result of his impressions on a variety of points in which he conceived amelioration practicable. He came therefore to this arduous and by no means popular duty fully prepared, by intimate practical acquaintance with the working of the then existing system, and by long meditation, resulting in an entire conviction of the desirableness of a very considerable amount of change in the directions indicated in the Report of the first Commission. These views he throughout supported, however, with perfect candour and moderation, and with an earnest desire, as far as possible, to conciliate opposition, and to wound no private or individual feeling.

In 1841 he accepted the office of Prolocutor of the Lower House of the Convocation of Canterbury, which he filled till 1847, and again from 1852 to 1857; an office for which the well-known temperateness of his views on all those subjects where, in imperfectly-balanced minds, strong feeling is apt to degenerate into passionate

advocacy, the weight of his character, and the uniform dignity (combined as it always was with exceeding courtesy and gentleness) of his personal bearing, peculiarly fitted him.

His health, which in the earlier days of his residence at Cambridge, after taking his Bachelor's degree, had not been strong, latterly gave way under the influence of repeated attacks of influenza and bronchitis, which necessitated his passing the winters in warmer residences. That of 1848 he passed in Madeira with every promise of permanent benefit. The disorder, however, recurred in succeeding winters, and was aggravated in 1857 by an attack of dysentery. On the 28th of October in the present year he attended a meeting of the University Commission, from which returning, he took to his bed, exhausted by the effort, to rise no more—a striking comment on the expressions used by him in his letter above cited. His decease took place on the 8th of November, 1858.

Dr. Peacock married, in 1847, Frances Elizabeth, second daughter of W. Selwin, Esq., Q.C. He has left no family. He was for several years a Vice-President of this Society; in 1830–31, and various subsequent sessions down to 1856–57, he acted as a Member of the Council. Few men have left behind them a memory more cherished, or been attended through life by more universal manifestations of affectionate regard and reverential esteem.

MAJOR-GENERAL SIR WILLIAM REID, K.C.B., was born on the 25th of April, 1791: his father was a Minister of the Established Church of Scotland, at Kinglassie, in Fife, and with slight previous advantages of education, he was sent, soon after he entered his fifteenth year, to the Royal Military Academy at Woolwich. Young Reid made rapid progress, completed his course of study before he had attained his eighteenth year, and was sent, as was at that time the custom, to the Ordnance Survey, then directed by Colonel Mudge, Royal Artillery: in February 1809, he was commissioned in the Royal Engineers. In those stirring times the interval was short between the hall of study and the field. Lieutenant Reid joined the army of Wellington in 1810, was present at the first unsuccessful siege of Badajoz in April 1811, and at the final capture of that fortress twelve months later. Early and continuously conspicuous for his zeal, intelligence and energy, even among the very many young officers of Engineers who greatly distinguished themselves in that