OBITUARY NOTICES.

His Excellency R. H. Gunning, Esq., M.D., LL.D., etc. By Professor Duns, D.D., Vice-President.

(Read February 4, 1901.)

I need hardly remind the Society that, at the first meeting of the Session, the Chairman is expected to refer to the Fellows who have died in the course of the year. In a few words mention was made of the death of His Excellency Robert Halliday Gunning, Esq., M.D., LL.D., F.S.A. Scot., and the Vice-President who occupied the Chair intimated that I would prepare a fuller notice of His Excellency later on. When looking at Dr Gunning's relation to this Society it is worth noting that the Fellows consist of five classes:—(1) those who join it with the intention of contributing to its literature; (2) those who listen with pleasure to the things new and old which the Proceedings reveal; (3) those who find in the title F.R.S.E. an honour and, in many cases, a true help in their life's work; (4) those who set a high value on the work done by the Society, who in the past have been, and no doubt in the future will be, helpful by money endowments; and (5) Honorary Fellows-men of this and other lands who are celebrated by original contributions to one branch or to more than one branch of science. Numbers 2 and 4 are specially represented, both in the motive and the method of true science, by the personal friend of whom I now write.

When Napoleon heard any one praised highly he was wont to ask, "What has he done?" Is this relevant in the present case? I think it is, though the proofs of Dr Gunning's 'doing' often come, not in scientific sequence, but are frequently suggestive of missing links. Anticipation becomes mixed with retrospect and the association is mutually interesting. Both testify to a busy life. In a letter to me, so recently as August 1899, we have a good illustration of his frequently linking the chief events of his

changeful life with matters which might have stood alone, whose connection, however, gave them a place of importance which they could not otherwise have had. The mention of a comparatively small matter leads him to think of his childhood, and then to hasten to dwell on the upward steps of his experience. I notice this in answer to the query, "What has he done?" It gives me the opportunity early in this sketch of bringing to the front his standing as a worker. "I am anxious," he says, "to determine some points about my family history. My mother belonged to the Dicksons of Gateside and Bankhead, and having lost both her parents in Dumfries when about nine years of age, she was taken to Gateside and brought up by her uncle, the laird. I was born in Ruthwell, 1818, but left, when only two or three years old, for Kirkbean, and afterwards Newabbey and Dumfries, whence I left for Edinburgh in 1834. My last visit to Dumfries and Newabbey was in 1839 and in 1839-40, and 1840-41 I went to Aberdeen as Assistant and Demonstrator of Anatomy to Dr Allen Thomson at Marischal College. I returned with him to Edinburgh in 1841-42, and when he was appointed to the Chair of Physiology I took charge of the Anatomical Rooms under Monro tertius, and afterwards lectured on anatomy in Surgeon's Square, and prepared a numerous class of students and graduates from all parts of the Empire for taking the Degree of M.D. in Scotland and the membership of Surgeon in London. In 1847 I was married, and in 1849 I was obliged to seek a warmer climate on account of my health. The great improvement of my health in Brazil, and the prospect of easy and lucrative medical practice, induced me to remain there for thirty-three years; and from the time of my return to England in 1882 on to 1896 I had never been to my native place; that is, I had been away from it between seventy and eighty years. In 1896 I took Lady Hughes [Mrs Gunning] to Dumfries, to show her my native haunts, and we drove by way of Glencaple and Bankhead to Ruthwell and returned to Dumfries. Blindness deprived me of seeing these various places. It was in connection with this visit that I thought I should do some little thing for my native place, as I had done for the neighbouring parish, Ecclefechan, in honour of Carlyle. My chief benefactions have been for Edinburgh, where I spent many happy days, but I

felt I should also remember my birthplace and Newabbey, where I was at school for some years before going to Edinburgh."

I am indebted to Dr Gunning's agents, Messrs Auld & Macdonald, W.S., for the following record of his chief benefactions:—
The University of Edinburgh for Medical Prizes, £5000; the University of Edinburgh for Divinity Prizes, £5000; Protestant Institute of Scotland, £1000; Waldensian Missions Aid Society, £2500; Reformed Church of Bohemia, £2500; Evangelical Church of Italy, £2500; Royal Society of Edinburgh, £1000; Society of Antiquaries of Scotland, £1000; Association for University Education of Women, £1000; New College, Edinburgh, £1000; Royal College of Surgeons, Edinburgh, £1000; Royal College of Physicians, Edinburgh, £1000; Royal Society, London, £1000; Victoria Institute, London, £500; Dumfries Infirmary, £1250; and Robertson's Orphanage, South Queensferry, £1000; more than £28,000.

In forwarding this list Mr Macdonald adds:—"I enclose a list of Dr Gunning's benefactions which are passing through my hands. Of course his benefactions to the West Port Church, from first to last, must have come to a very large sum. He continued his subscriptions to it all the time he was in Brazil."

Now I am far from gauging the worth of a man by his wealth, or his greatness by his giving. But it seemed to me the only way to shed light on the individualism of one whose environments were often so many, and their influence on his every-day life so well marked. The list of his benefactions make it clear that he had determined to devote his riches only to schemes which were great and good. These considerations lead us to seek for links between his personal motives and every-day practices. The Institutions to the help of which his gifts were so generous were associated with philanthropy or with physical and natural science.

In looking over the material for this biographical notice, I am struck with Dr Gunning's frequent references to two men who, in their several departments of thought, were in their day men of mark, men appreciated by him while they lived and not forgotten after their death. One could not be long in his company without hearing him refer to one or the other—Thomas Chalmers, D.D., and Robert Christison, M.D. In this connection we find a key to

many things in Gunning's life: Chalmers the leader of theological thought and action; Christison the distinguished physician, well known as a man of high attainments, not only in medicine but in sciences outside of his personal profession. The influence of this acquaintanceship was the strengthening of those desires and ambitions which characterised and gave direction to Gunning's earnest efforts as indicated in the list of his benefactions. making this statement I wish simply to show that Gunning admired both because he found in each elements with which he was in deep sympathy, and which would be helpful to himself in carrying out aspects of work which he loved and early began to take a lively interest in. In Mr Macdonald's communication a striking contrast is suggested without any break :-- "Dr Gunning's interest," he says, "in Home Missions was aroused by Dr Chalmers, and he was one of the first elders ordained in the West Port, and Dr Gunning was created a Grand Dignitary of the Empire of Brazil by the Emperor Dom Pedro II., and this carried with it the right to be addressed as 'His Excellency.' The Emperor, a short time before his own expulsion from Brazil, wrote a holograph letter to the Queen asking that Dr Gunning should be authorised to use the rank in this country. The Queen granted this request, and Dr Gunning had a letter from Lord Salisbury intimating the fact."

The mission work was a great success, and His Excellency lived to take a leading part in laying the memorial stone of the present West Port Church, which has a congregation almost as large as the largest in Edinburgh.

Reference has been made to Sir Robert Christison as a friend of His Excellency, and helpful to him in trying to influence the Church in other than purely religious work. Chalmers had seen good opportunities for ministers benefiting society if, to their theological acquirements and teaching, they brought to their work the knowledge of one or more branches of physical or of natural science. In 1843 he had given great prominence to his views on this matter:—"We hold," he wrote, "a natural science class in connection with theology to be most desirable as a component part of our system of theological education." In this quotation I keep clear of seeming to discuss the question on the merits. I only wish to indicate the lines of public thought which led Dr Gunning

to devote large sums of money in its behalf. Chalmers, whose views impressed Gunning very much, was well acquainted with the apologetic value of such questions, and was in the habit of complaining that no provision was made in the theological course for it. There might be willing students, and Gunning resolved to do something for them. His strong efforts in this direction comes out in his correspondence with Sir Robert Christison. entered cordially into his proposals and brought them under the notice of leading University friends. The second object in the benefaction list, £5000, must be associated with Sir Robert Christison's friendly desires to help him to realise his long-cherished designs. I am greatly indebted to David Christison, Esq., M.D., for documents bearing on this and other matters. He says:-"I send you all the correspondence with Dr Gunning which my father had preserved. It relates, 1st, to the procuring of specimens of the ipecacuanha plant with the object of cultivating it in India, at a time when its enormous importance as a specific in dysentery, taken in large doses, was being realised. The 2nd series relates to the negotiations about the Gunning Fellowship." There are also documents bearing on Sir Robert's first acquaintance with him. Among the letters is one in which he informs Sir Robert that "Professor Agassiz passed a couple of days with him, seeking specimens of fresh-water fishes in the river not far from his resi-He was going south with Count Portales on the Gulph Stream Exploration." Gunning's mind was at the time charged with strong dislike of what he believed to be the tendency of the science of the day: "Telling Agassiz my disgust with the modern caricature of the doctrine of the production (spontaneous generation) and reproduction (evolution and development) of living beings, he thought well of my idea to help research for the solution of these questions." Another letter to Sir Robert is from Principal Tulloch, St Andrews, approving of his suggestions in favour of Dr Gunning's plans, and concluding:-"I do not think, therefore, you could give your friend better advice than what you indicated to me."

In the Life of Sir Robert Christison (vol. ii. p. 257) an extract from his private Journal (June 27, 1870) is given relating to ipecacuanha as referred to above. "A box of ipecacuanha plants arrived from Dr Gunning of Rio Janeiro. It has recently

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been ascertained in China and India that it is a sovereign remedy for dysentery." It was a native of S. America, and Sir Robert had pressed for several years on his students the importance of introducing it into India. "Some months ago," he says, "I wrote to Dr Gunning, an Edinburgh graduate, who entered very cordially The first consignment of plants has just arrived into the scheme. at the Botanic Garden, consisting of roots well preserved in soil. . . . I have seen to-day in the garden stove-house a hundred thriving young plants." Soon arrangements were made for introducing it into India, and he records that "there is a promise of four hundred more from the cuttings of Dr Gunning's consignment." I believe that ipecacuanha is still reared in India, and is regarded as a specific in dysentery. Be this as it may, it says much for Dr Gunning's zeal in his profession. Indeed the desire to work in its behalf led to that habit of the eye which characterised him until blindness overtook him, as it had done his father. could not spend an hour with him without his varied scientific attainments coming to the front. The scientific references to Brazil were many and valuable, but he had also been a skilled observer in the home field. The fluviatile and glacial markings of his native district, and its zoology and antiquities, had occupied much of his attention in his student life. The so-called 'pots and pans' proofs of fluviatile action in the Kirkbean stream's course, or the history of the Ruthwell Stone, with its form and runes, and the value of its verses, were favourite themes.

There are many other facts which might be stated illustrative of His Excellency's Christian efforts, philanthropic movements, and friendly correspondence with members of the Royal families of Brazil and Portugal, which might be referred to here; but to dwell on these would be outside of the Society's intentions in this "Obituary Notice." I may, however, hark back for a little on the benefactions, and specially the "Jubilee Prizes," which pass into classes that will keep the occasion of their institution ever in remembrance, though to-day it is not the sound of the Jubilee trumpet but the wailing of the funeral dirge which fills men's ears and touches their hearts.* "The Gunning Victoria Jubilee Prize" was founded in 1887 by Dr R. H. Gunning, and is awarded * Written on the day of Her Majesty's Funeral.

triennially by the Council of the Royal Society of Edinburgh, in recognition of original work in Physics, Chemistry, or pure or applied Mathematics. Evidence of such work may be afforded either by a paper on one of the above subjects, or some discovery in them, elsewhere communicated or made, which the Council may consider to be deserving of the prize. The prize consists of a sum of money, and is open to men of science resident in or connected with Scotland. The first award was made in the year 1887. In accordance with the wish of the donor, the Council of the Society may on fit occasions award the prize for work of a definite kind to be undertaken during the three succeeding years by a scientific man of recognised ability.

At the close of the first triennial period, 1884-87, the prize was awarded to Sir William Thomson, Pres. R.S.E., F.R.S. (Lord Kelvin), for a remarkable series of papers on "Hydrokinetics," especially on waves and vortices, which have been communicated to the Society. At the close of the second triennial period, 1887-90, it was awarded to Professor P. G. Tait, Sec. R.S.E., for his work in connection with the "Challenger" Expedition and his other researches in Physical Science. At the close of the third triennial period, 1890-93, it was awarded to Alexander Buchan, LL.D., for his varied, extensive, and extremely important contributions to Meteorology, many of which have appeared in the Society's publications. The last triennial award, 1893-96, was made to John Aitken, Esq., for his brilliant investigations in Physics, especially in connection with the Formation and Condensation of Aqueous Vapour.

The Gunning Fellowship in connection with the Society of Antiquaries of Scotland, constituted by the Victoria Jubilee gift of His Excellency Dr R. H. Gunning, "to enable experts to visit other museums, collections, or materials of archæological science at home or abroad, for purposes of special investigation and research," was inaugurated in the Jubilee year, 1887–88, by the appointment of Dr Joseph Anderson and Mr George F. Black to visit and report on local museums in Scotland. The Report, which extends to 160 pages, is printed, with illustrations, in the *Proceedings of the Society*, vol. xxii. p. 331. Under this Jubilee Gift the following appointments and additions have been made:—

In 1889 Dr Anderson was appointed to visit the museums of Switzerland and North Italy. His Report, extending to 32 pages, is printed in the *Proceedings*, vol. xxiv. p. 478.

In 1890-91 Mr J. Romilly Allen was appointed for two years to visit and report on the Sculptured Stones of Scotland, with a view to obtaining an archæological survey and description, with photographs, rubbings, or drawings of these monuments, for a work on the Early Christian Monuments of Scotland, to be issued by the Society. His first Report, "A Preliminary List of the Sculptured Stones of Scotland," is printed in the *Proceedings*, vol. xxiv. p. 510.

His second Report, "On the Sculptured Stones older than A.D. 1100, with Symbols and Celtic Ornament, in the district of Scotland north of the River Dee," is published in the *Proceedings*, vol. xxv. p. 422.

In 1892 Mr George F. Black was appointed to visit and report on the antiquities of the Culbin Sands, Morayshire. His Report, with numerous illustrations, is printed in the *Proceedings*, vol. xxv. p. 484.

In 1893 Mr George F. Black was appointed to visit and report on the Scottish Antiquities preserved in the British Museum, and the Museums of S. Kensington, the Society of Antiquaries, the Guildhall, and the Tower of London, and in the Museum of Science and Art, Edinburgh. His Report, with illustrations, is printed in the *Proceedings*, vol. xxvii. p. 347.

In 1894-98 Mr J. Romilly Allen was appointed to visit and make outline drawings or photographs of the Sculptured Stones in Scotland for the work on the Early Christian Monuments of Scotland to be issued by the Society, of which about 700 pages have been printed with nearly 2000 illustrations.

In 1899 Mr F. R. Coles was appointed to commence a survey of the Stone Circles in the north-east of Scotland. His Report, with measured plans and drawings of upwards of twenty circles in and near the valley of the Dee, is printed in the *Proceedings*, vol. xxxiv. p. 139.

In 1890 Mr F. R. Coles was again appointed to continue the survey of the Stone Circles of Scotland. His Report, including measured plans and drawings of over twenty circles in and near

the valley of the Don, will be issued in the *Proceedings*, vol. xxxv.

The following extract minute is from the Records of New College Senatus, March 19, 1890: - "The Secretary submitted to the Senatus a bond for One thousand pounds (£1000) by His Excellency Robert Halliday Gunning, Esq., M.D., LL.D., Grand Dignitary of the Empire of Brazil, of Rio de Janeiro and of Edinburgh, in favour of the General Trustees of the Free Church of Scotland, for behoof of the Natural Science Chair, New College, with relative letter from Messrs Auld & Macdonald W.S., Dr Gunning's agents. The objects for which His Excellency has granted this bond are stated in the bond as follows:—'with the view of commemorating the Jubilee of Her Majesty Queen Victoria, and of encouraging the study of Natural Science by students of the Presbyterian Ministry with the view of the defence of the faith when attacked from the scientific standing point; being also desirous of commemorating the name and work of Hugh Miller, and being likewise moved by regard for the present occupant of the Chair (Professor Duns, D.D.) of Natural Science in New College, Edinburgh, I undertake to pay to the General Trustees of the Free Church of Scotland the sum of One thousand pounds (£1000), the income of which is to be placed at the disposal of the Professor of Natural Science in the New College for the time being, to be applied in class prizes, or in purchasing additional objects for the Museum, or scientific appliances or books for the Natural Science Library of the said New College, or in procuring an assistant for the professor.'

"In accepting the very appropriate and handsome gift the Senatus agree to carry out His Excellency's intentions, and they cordially thank him for his thoughtful liberality. They would assure His Excellency that his liberality with the College is highly appreciated both by the Senatus and the Church."

In conclusion, we cannot help acknowledging the value of Dr Gunning's liberality, when under it we have such contributions to the literature of Physics and Archæology.

Dr Gunning died at 12 Addison Crescent, London, on the 22d March 1900. A man valiant for what he held to be true. Acquaintances who knew him best admired him most.