mination. That there were disadvantages attending this habit of mind is undoubtedly true; but, in the main, it enabled him to overtake an amount and range of work quite remarkable in its extent and variety.

His administrative talent was conspicuous; and in work which brought him in contact with large numbers of persons of diverging views and opinions, his genial presence and firm attitude often secured united action, and moderated with singular success in divided counsels.

His courtesy of manner, kindness of heart, and obviously earnest desire to be helpful, attracted towards him the confidence and affection of a wide circle of attached friends.

Broadly viewed, few more useful lives have been spent in the community of which he was a member, and still fewer have commanded for themselves so much influence and regard as to leave, as he has done, a vacant space in society, which it is not probable we shall soon or easily see adequately filled.

## WILLIAM LAUDER LINDSAY. By Dr. W. C. M'Intosh, F.R.S.

Dr. WILLIAM LAUDER LINDSAY was born at Edinburgh on the 19th December 1829, and received his education at the High School. He had naturally strong tastes towards botany and geology, and had collected plants even before entering the University as a student of medicine in 1847. During his medical curriculum his botanical tendencies received a great impetus, as he himself records, from Professor Balfour, in whose classes for two summers he carried off Some of his beautiful dissections of grasses are still high honours. justly admired in the Museum in the Botanic Garden. career in which he distinguished himself as a zealous and industrious student, he graduated as Doctor of Medicine in 1852, his thesis being on the "Structure and Physiology of the Lichens." This essay and its illustrative preparations received the high commendation of the Medical Faculty. He soon after competed for the Conservatorship of the Museum of the Royal College of Surgeons, Edinburgh, but the late Professor Sanders obtained the post. then became Resident Physician in the Cholera Hospital, Surgeon's Square, under the amiable and accomplished Dr. Warburton Begbie.

and while in this position his perseverance and acute powers of observation enabled him to make a series of interesting experiments on the communicability of cholera to the lower animals. These researches attracted considerable notice in the medical papers both at home and abroad.

Dr. Lindsay thereafter entered the Crichton Royal Asylum, Dumfries, as Assistant Physician, his chief being the able and genial Dr. W. A. F. Browne, the brother-in-law of his botanical patron. This seems to have been the turning-point in his career, as it is unlikely he would have left the arena of pure science if there had not been a paucity of suitable appointments in the botanical or other department. While doing duty in his new office in a manner that gained him much approbation, he received, at the instigation of the late Dr. Malcolm of Perth, the appointment of Resident Physician to Murray's Royal Asylum, Perth, at the end of 1854; and for a quarter of a century he laboured with unflagging zeal to promote the welfare of his patients and the interests of the institution, until failing health compelled him to resign at the end of 1879.

Few physicians in our country have been gifted with a pen so facile, an intellect so varied, and a perseverance so unbroken as that of Dr. Lauder Lindsay. The mere list of his literary and scientific publications would form a considerable pamphlet, the chief articles grouping themselves under the heads of Botany, Medicine, and General Literature. It must be remembered, also, that his scientific work was accomplished after his energies had been spent in continuous and responsible duty, and at a distance from scientific aid His medical writings, including his laborious and encouragement. work on Pensions to Asylum Officers, and the collection of incidents massed in his Mind in the Lower Animals, have already received notice in various Journals (e.g. the Edinburgh Medical Journal for January 1881), so that on the present occasion attention will be directed to his more strictly scientific labours.

Eager to add to existing botanical knowledge, he very early in his career, at the suggestion of Professor Balfour, chose the Lichens as a suitable subject for investigation, and soon after graduation he published a *Popular History of British Lichens*, illustrated by many plates. This little work received very favourable notice, and is still a useful guide on the subject. A series of structural and

other papers on the Lichens then followed, several being communicated to this Society. For one of these, viz., his Memoir on the Spermogones and Pycnides, the Neill Prize was awarded in 1859. His various papers were illustrated with plates drawn by himself, and though the nature of his subject did not admit of much artistic display, his representations were both accurate and well finished. His labours amongst the Lichens did much to place the study of that department on a scientific basis, and greatly extended our knowledge of their structure and economy.

In his early days a considerable traveller, he explored the mineralogical and geological features of the Hartz mountains, and made large collections. He also in subsequent years visited many other places on the Continent, besides Iceland and the Færoe Islands, America, and Egypt. Moreover, his health, which had never been robust, failing in 1861, he obtained a year's leave of absence, which he spent in visiting New Zealand and Australia, making extensive collections, and laying the foundation of many papers on the Botany and Geology of New Zealand. He also stimulated the colonists by a lecture, at Otago, on "The Place and Power of Natural History in Colonisation." In the same way his visits to Iceland and the Færoe Islands formed the basis of several botanical and geological papers, and subsequently enabled him to deal more easily with the Lichen-flora of Greenland.

In viewing the number and variety of Dr. Lindsay's botanical and geological communications, one is struck by the extraordinary industry that characterised him. His active mind was ever on the stretch, and his facile pen never failed to make the best use of the materials at his disposal. The field covered by his labours, however, was much too extensive for the production of work of equal value in every case, and the pressure on his time occasionally prevented the necessary consolidation of prolix articles. Taken all in all, however, his botanical labours do him infinite credit, and have greatly advanced the subject he took under his care. It will be long before the Lichens find so able and so accomplished a worker. He was, indeed, the Nylander of Scotland. In accordance with his instructions, his valuable collection of Lichens was presented by his trustees to the University of Edinburgh, and is now in the Museum in the Botanic Garden.

As a public official in the Perth Royal Asylum, his bearing and administration were admirable; nor were his relations in private life He placed the institution on a sound basis less worthy of esteem. financially, in his early years, and reorganised every department; while in his later years of office he greatly improved and beautified the internal arrangements of the various wards, and he did so with uncommon ingenuity and taste. Shrewd and acute to an extraordinary degree, he proved himself a most accomplished alienistphysician, kind and considerate to his patients, skilful in promoting their comfort and recovery, and an apt organiser of all the events that constantly take place in such institutions. His thorough medical training, and his natural penetration, made him always a safe and prudent adviser.

Originally of a slight build, his intense application to work caused his health to give way after his marriage in 1859, and even the improvement gained by the year's relief in 1861-62 gradually wore off on the active resumption of literary and official engagements. Indeed, for years before his death he was an invalid. bravely did his duty to the last, and kept a cheerful word for every one—even while he doubted if his strength would enable him to conclude his visit. Probably for the same reason he avoided society, solacing himself rather with his books and microscope. His health unfortunately showed no sign of improvement, and he had hardly been a year out of office when he succumbed to the increasing exhaustion on the 28th November 1880, at the comparatively early age of fifty-one. Much of the work his ardent mind sketched out for himself he left undone; but he achieved enough to win a solid reputation, and to furnish a worthy example of what ability and application can do under difficulties.

## Professor Benjamin Peirce. By Professor Simon Newcomb.

Professor Peirce was born at Salem, Massachusetts, April 4, 1809, and graduated at Harvard College in 1829. He made the acquaintance of Dr Nathaniel Bowditch, the translator of the *Mécanique Céleste*, and assisted him in getting his great work through the press. He spent two years after his graduation in teaching. He was appointed tutor in mathematics at Harvard Vol. XI.