Sussex, was born January 1, 1844, at Oakendean. He was educated chiefly at the Edinburgh Academy and Edinburgh Military Academy. In 1864 he went out to Queensland, and was engaged in sheep-farming in that colony for two years. He then proceeded to India, where Lord Napier of Ettrick, at that time Governor of Madras, conferred on him the appointment of Assistant Engineer in the Public Works department. After holding successively the posts of Special Executive Engineer of Wainád, District Engineer of South Kanara, and Divisional Officer of the West Coast, he was gazetted to Gaujám; and at Berhampúr, in that district, he was seized with cholera on May 30, 1882, and expired after a few hours' illness.

He was devoted to scientific pursuits from his boyhood, and, in addition to his astronomical attainments, was an acute and careful naturalist. He applied himself chiefly to spectral astronomy, but was unfortunate in being long stationed on the hills of Malabar, which for months together are enveloped in clouds and mist, and are otherwise unsuited for observations save at rare intervals. His health was moreover much shattered by fever contracted in the jungles of Wainád, and of late years the pressure of official duties allowed him scant time for the pursuit of his favourite science.

Mr. Pringle was a not unfrequent contributor to the pages of *Nature* on astronomical and zoological questions, and in 1877 published a small pamphlet on the subject of forests in relation to famines, a matter which has since then engaged much attention in India.

He was elected a Fellow of the Royal Astronomical Society on April 10, 1874; he was also a Fellow of the Royal Geographical Society and a Member of the Society of Telegraph Engineers.

Thomas Romney Robinson, D.D., F.R.S., was born in Dublin on April 23, 1792. His abilities and genius seem to have been manifested at a very early age, and his first appearance as an author dates so far back as 1806. On that occasion his venture was entitled "Juvenile Poems by Thomas Romney Robinson, to which is prefixed a short account of the Author by a Member of the Belfast Literary Society": Belfast, 1806. The book contains a number of poems written by the author at various ages below thirteen. Dr. Robinson's last publication is in the *Philosophical Transactions* for 1880, and it must be regarded as a curious circumstance in literary history that an interval of three-quarters of a century should have elapsed between Dr. Robinson's first appearance as an author and his last.

In the year 1814 Dr. Robinson was elected a Fellow of Trinity College, Dublin, and he was for several years engaged in lecturing in the University as Deputy Professor of Natural Philosophy. In connection with his labours as a teacher he

published in 1820 a volume entitled *A System of Mechanics for the Use of Students in the Dublin University.*

After a residence for nine years at Dublin University, Dr. Robinson accepted the living of Enniskillen, which was in the gift of Trinity College. Robinson's career in the University was thus finished the year before Humphrey Lloyd, the late Provost, was elected to a fellowship. Dr. Robinson did not long remain Rector of Enniskillen. In the year 1824 he exchanged the living of Enniskillen for that of Carrickmacross; and of his ecclesiastical career there is little further to note, except that about half a century later (in the year 1872) he was nominated a Prebendary of St. Patrick's Cathedral, Dublin, and that several of his sermons have been published.

Dr. Robinson is principally known to fame by his connection with the Armagh Observatory. The Observatory at Armagh was founded in 1793 by Primate Robinson. The endowment of the Observatory, as well as that of a public library, arose out of Primate Robinson's scheme of forming at Armagh a university which might serve for the education of the North of Ireland. It is needless to say that the greater part of the Primate's beneficent scheme was never realised. At his death the meridian instruments he had ordered for the Observatory seem to have been countermanded by his heirs. The two following Primates had but little interest in science, and it was not until they were succeeded by Lord John George Beresford, the late Primate, that any further steps were taken. Primate Beresford presented to the Observatory a Transit Instrument, a Mural Circle, and an Equatorial Reflector of fifteen inches aperture. The first of these was erected in 1827, and the last in 1835. It was in the year 1824 that Dr. Robinson was appointed Director of the Armagh Observatory. He threw himself into the work of practical astronomy with the greatest zeal and success, and the celebrated Armagh Catalogue is a noble monument of his assiduity and skill. This catalogue, though not published until 1859, contains many observations of stars between the years 1830–40, of which we possess few contemporary observations. On this account the Armagh Catalogue has a distinct value, and it has been much used by Argelander in his investigations of the proper motion of 250 stars in vol. vii. of the Bonn Observations. It may be mentioned that a note by Dr. Robinson giving the places of three stars, which were affected with errors in the Armagh Catalogue, appeared in the *Monthly Notices* as recently as last March; it was read at the meeting at which his death was announced. The Mural Circle at Armagh was subsequently furnished with a new telescope having an objective of seven inches aperture, and with this 1000 of Lalande's stars, nearly all between 6·0 and 7·5 magnitude, were re-observed in 1868-76, and the results have been published in the *Transactions* of the Royal Dublin Society, new series, vol. i.

Dr Robinson's determination of the Constant of Nutation also

deserves notice, though, for reasons which need not now be discussed, it has never come into practical use among astronomers.

The celebrated cup anemometers, now so extensively used, are an indication of the practical skill and ingenuity by which Dr. Robinson was distinguished. The very latest scientific labour of his long life was a redetermination of the constants of the cup anemometer. This was accomplished by experiments on a very large scale, in the dome of Mr. Grubb's workshops, at Dublin. The results of these labours have been published in the *Phil. Trans.*, 1878–1880.

Considering that Dr. Robinson was an author before the battle of Trafalgar, that he was elected a Fellow of Trinity College, Dublin, before the battle of Waterloo, and that he was made Director of the Armagh Observatory within a year or two of the death of Sir W. Herschel, it is not surprising to find that his scientific friends and associates belonged mainly to the past generation. In that past generation, Dr. Robinson occupied a distinguished and remarkable position. He was intimately associated with the late Earl of Rosse in all those memorable experiments which culminated in the great Reflector at Parsonstown. He was the friend of Sir James South, of Sir William Fairbairn, and of many other celebrities. His wide sympathy, his gentle and invariable kindness, his wondrous stores of knowledge, his charming powers of conversation, his brilliant eloquence, were qualities universally recognised, and caused him to be welcomed and beloved in many circles besides those purely scientific.

He was elected a Fellow of the Society on May 14, 1830.

R. S. B.

Charles Vincent Walker died at his residence at Tunbridge Wells, on the morning of December 24, 1882, in the seventy-first year of his age. He had been Telegraph Engineer to the South Eastern Railway since 1845, and was one of the oldest telegraph engineers in the country. He was a zealous worker in the science of electricity, and was the inventor of several useful appliances in connection with telegraphy, including the instruments by which the block system on railways is worked. His name is especially associated with the origin of the distribution of time by telegraph. On May 10, 1849, Mr. Glaisher wrote to Mr. Walker that he wished to talk with the latter about the laying down of a wire from the Observatory to the Lewisham Station, and on May 23 following, the Astronomer Royal gave Mr. Walker a brief sketch of the use to be made of the wire referred to, his scheme, as he stated, being "the transmission of time by galvanic signal to every part of the kingdom in which there is a galvanic telegraph from London." It was proposed to lay four wires underground from the Royal Observatory to the railway station at Lewisham, and to extend them to London Bridge. The South Eastern Railway Company gave every