He was appointed on the survey staff of Otago very shortly after his arrival, and for two years was engaged in the settlement surveys in the survey districts of North Harbour and Blueskin, Otokia, Waipouri, Maungatua, Taieri, and Moeraki. From 1861 December to 1863 October he was engaged in the reconnaissance survey of over four million acres of the back mountain country of Otago, including the Hawea, Wanaka, Wakatipu, Mavora, Te Anau, Manapouri, Monowai, and Hauroto Lakes. For the next three years he was Geodesical Surveyor. In 1866 September he was appointed Inspector of Land and Mining Survey, and continued in that office until 1873, when he became Chief Surveyor of Otago. In 1876 November, on the abolition of the Provincial Governments, he was appointed Assistant Surveyor-General for the Colony, in 1878 Secretary for Crown Lands and Mines, and in 1879 Surveyor-General. In 1889 January he was appointed Chief Commissioner of Railways, and held that position for six years. He was then appointed Chairman of the Board of Land Purchase Commissioners, holding that office for several years until 1901 December 31, when he retired.

He served also as a member of the Midland Railway Commission, and Chairman of the Land Commission in 1905. He was also a director of the Gear Company for some years, and Chairman of the Wellington Trust, Investment, and Agency Company. He was also a prominent member of the Presbyterian Church, and the senior elder of St. John's Church. He was twice married, and is survived by his second wife and two daughters by his first wife.

That he was a man of exceptional ability in his profession is shown by the many high positions which he held in the Civil Service, and the public records are proof of the invaluable services that he rendered to the Dominion. The years of arduous work that are comprised in the brief record of his professional activities in the early days demonstrate to the full the loyalty, grit, and solid determination that he possessed and displayed in the carrying out of expert and scientific work at a time when means of communication were of the most primitive description, and when the surveying of the mountainous forest lands of the South necessitated the finest qualities that man can possess. But, intent only on doing his duty, he carried out his responsible work unappalled by dangers which rarely cross the path of a professional man, and won through to a healthy old age, with mind unimpaired, and with a bodily vigour that only the process of years could affect. Reticent and retiring to a degree, he was content with having done to the best of his ability the work that came to his hand—and it is a record of which any man might be proud. He died on 1919 June 29.

He observed the Transit of Venus in 1882, and was elected a Fellow of the Society in December of that year.

George James Newbegin was born at Norwich in 1845, and educated at Priory School. At an early age he was apprenticed

to a firm of booksellers and stationers at Tunbridge Wells. From there he returned to Norwich to assist his father in the business of tobacco manufacturing.

He early manifested a love for astronomy, and about 1875 erected his first telescope—a 5-inch equatorial—in a quadrangle of the factory. This was about 35 feet square, the walls being 30 feet high, and admitted of only a very limited horizon. To overcome the difficulties of the situation the telescope was mounted on a very high pillar. In 1882 he moved to Thorpe St. Andrew and re-erected his telescope in beautiful grounds overlooking the river Yare. In 1888 he purchased a fine 9-inch Cooke equatorial, together with a dome 22 feet in diameter, and for sixteen years devoted much of his time to the study of solar phenomena, both visual and photographic. In the early nineties he parted with his 5-inch instrument and replaced it with a $4\frac{1}{4}$-inch Cooke photo-visual, which has done good work in other hands besides his own. Not being able to take part in total solar eclipse expeditions himself, he was ever ready to lend the instrument to some astronomer who could go, and, in 1898, Mr. C. Thwaites, M.Inst.C.E., F.R.A.S., took it to India, and in 1901 Mr. E. W. Maunder had the loan of it for Mauritius. In 1905 Mr. Thwaites again used it on the Spanish expedition.

In 1904 October Mr. Newbegin moved to Sutton, Surrey, taking the 9-inch with him and mounting the photographic lens alongside. It was there perhaps that his most serious work was accomplished, for he started a series of spectroscopic observations on solar prominences which were continued to the close of his life, the results being published in the *Journal of the British Astronomical Association* and latterly in the *Monthly Notices* as well.

The instrumental side of astronomy appealed strongly to Mr. Newbegin, and many improvements of his own design were carried out on his equipment. It was always a great pleasure to him to show anyone interested something through his telescope, and for many years his observatories at Thorpe were open to the public on Easter Monday. On one occasion 241 persons passed through the observatories.

He was quiet and somewhat reserved in manner, and for recreation indulged in walking, and was very fond of chess problems. In his earlier life his sporting instincts led him to take up yachting.

He died on 1919 April 4, leaving one son. He served for several years on the Council of the British Astronomical Association, and was many times appointed an Auditor of the Society's accounts.

He was elected a Fellow of the Society, 1888 April 13.

JOHN WILLIAM STRUTT, 3rd Baron Rayleigh, was born in 1842. As a child he was extremely delicate, and was not able to go through the ordinary public school education. He was prepared for the university by Mr. Warner, who took pupils