

Sir John and Lady Franklin, which lasted through their lives. This coterie was soon largely though only temporarily augmented by the arrival in Hobarton in 1840 of the Antarctic Expedition under Sir James Clark Ross, who together with some of his officers, assisted Sir John and Lady Franklin and Mr. Gunn in founding the "Tasmanian Journal of Natural Science," the reading of the papers for which took place in the drawing-room of Government House. From this small beginning sprang the Royal Society of Tasmania, and the nascent periodical subsequently grew into the "Proceedings of the Royal Society of Van Diemen's Land," of which Mr. Gunn was the editor, as he had been of the Journal, from the first.

Unfortunately Mr. Gunn's health broke down under the close confinement and long hours of office work at Hobarton; and after fulfilling various duties in Launceston and elsewhere, including that of member of the Legislative Council for Launceston, and of the House of Assembly for Selby, he was compelled to retire from the public service in 1876. He eventually succumbed, March 12, 1881, to attacks of creeping paralysis complicated with disease of the lungs.

Mr. Gunn's published labours are few, but the results of his collections and copious observations are embodied in various works on Australian science, and especially in Sir J. D. Hooker's "Flora of Tasmania," and in Mr. Gould's "Birds of Australia." In conjunction with the late Dr. J. E. Gray, he published notes and descriptions of the mammals and fish of Van Diemen's Land, and he was the author of a few other papers on the geology and some on the botany of that island, together with one on the encroachments of the sea on the north coast of Tasmania; he further contributed to "West's History of Tasmania" a compendium of its zoology.

Mr. Gunn was elected a Fellow of the Linnean Society in January, 1850, and of the Royal Society on June 1, 1854. J. D. H.

JOHN SCOTT RUSSELL, the eldest son of the Rev. David Russell, of Clydesdale, was born in 1808, and displayed at an early age a great predilection for mechanics and natural science. After some preliminary practical training he studied at the Universities of Edinburgh, St. Andrew's, and Glasgow, at which latter he graduated at the early age of sixteen. On the death of Sir John Leslie, Professor of Natural Philosophy in Edinburgh in 1832, Mr. Russell, being then only twenty-four years of age, was appointed temporarily to carry on the work of the chair during the session 1832-33.

About this time he commenced his well-known researches on the nature of waves, and the resistance of fluids to the motion of floating bodies. His first paper on this subject was read before the British Association in 1835, his deductions being founded on a very large and

elaborate series of experiments. In 1837 he read a second paper on the same subject, before the Royal Society of Edinburgh. The Society conferred on him their Keith Prize (a gold medal and a sum of money) in 1838, and elected him into their Council.

His principles of ship construction were first carried into execution in a vessel called the "Wave," built in 1835, and, subsequently, in many others, including the then new fleet of the West India Royal Mail Company, built by a company at Greenock, of which Mr. Russell was the manager.

He was elected in 1847 a member of the Institution of Civil Engineers, where he served on the Council, and was chosen one of the Vice-Presidents. In 1849 he was elected a Fellow of the Royal Society.

Mr. Scott Russell removed to London in 1844, and became well-known as a ship-builder on the Thames. In the capacity of contractor, and also assisting by his advice, he built the Great Eastern steamship, under the direction of the late Mr. Brunel, and constructed the paddle-wheel engines of that large ship.

His last work in naval construction was the steamer on the Lake of Constance, which carries railway trains between the termini of the German and Swiss railways.

Besides naval construction, Mr. Russell practised in other fields of engineering, one of his principal works being the great dome of the Vienna Exhibition of 1873.

Mr. Russell was appointed joint secretary with Sir Stafford Northcote of the Exhibition of 1851.

Although not a contributor to the papers in the Royal Society, yet he was the author of more than forty papers read at other Societies, including the Royal Society of Edinburgh, the British Association, and the Institutions of Civil Engineers and Naval Architects. In the latter Society he always took an active interest and was one of its earliest promoters.

Mr. Scott Russell was the author of the article on the steam-engine in the *Encyclopædia Britannica*, also a large work called the "Modern System of Naval Architecture for Commerce and War," and of a work on "Technical Education for the English People."

He was an accomplished linguist, and as a speaker possessed great clearness and skill in exposition.

W. H. B.

The subject of this memoir, COLONEL J. T. SMITH, R.E., the son of George Smith, Esq., of Edwalton, Notts, and afterwards of Foelallt, Cardiganshire, was born in or about the year 1805.

Destined for a military career, he was educated at Addiscombe, and in 1825 proceeded to India as an Officer of Engineers.

Upon being appointed to arrange a system of lights for the South