Cape Colony from 1892 to 1915, and for the greater part of that period he served as a member of the council of the University.

THE Royal Academy of Belgium announces that a triennial prize of 2500 francs, to be known as the Prix Joseph Schepkens, for the best experimental work on the genetics of vegetables, has been established.

THE Research Chair of Medical Psychology in the University of Queensland, Brisbane, has been filled by the appointment of Dr. J. P. Lowson, University Demonstrator in Experimental Psychology at Cambridge. It is expected that Dr. Lowson will arrive in Brisbane early in this month.

THE Hull Corporation recently endeavoured to purchase nineteen acres of land on the outskirts of the city, adjoining the Hull Training College, for the purpose of a Technical College, the present building, near the centre of the city, being too small and inconvenient. The Board of Education, owing to national financial stringency, turned the matter down. The Rt. Hon. T. R. Ferens, formerly M.P. for East Hull, has now purchased the land for ten thousand pounds and presented it to the Hull education authority. Mr. Ferens has previously given about 40,000*l*., for the erection of a new Art Gallery, 10,000*l*., for the purchase of pictures, besides other amounts for the erection and endowment of almshouses, and in numerous other ways has placed the citizens of Hull under a deep debt of gratitude.

THE interest in the eighth report of the Carnegie United Kingdom Trust for the year ending December 31, 1921, centres round two schemes to which the Trust has definitely committed itself—(a) to provide facilities for reading in the rural districts, and (b) to supplement the resources of library authorities throughout the United Kingdom by regional centres of book distribution. The launching of these two schemes was preceded by a very careful survey of the whole question of library policy, the results of which are beginning to bear fruit. There are now 39 county schemes in operation in Great Britain, *i.e.* schemes administered from county headquarters, from which boxes of books are circulated to the village centres—the distributing agent in the village being usually the local teacher. Thus the county library and education authorities are brought into direct connection-the local teachers working under the direction of the county librarian. This method has worked satisfactorily. Past experience, however, teaches that little value is to be placed on initial success. When the novelty of the experiment and of the books circulated wears off, the interest of readers wanes and the system falls into disuse. Against this the Trust has wisely provided by the provision of regional book stores-of which three centres are already established in London, Dunfermline, and Dublin—the last named being still in its embryo stage. In Wales the National Library at Aberystwyth has for some years supplied this want. In these centres a large and well-selected stock of books has been accumulated which should go far toward satisfying the requirements of serious readers not only in the villages but also in the smaller borough and urban districts. Thus equality of opportunity now exists throughout Great Britain for self-education, and this result has been secured with a minimum expenditure on the machinery of administration. Amongst the miscellaneous grants we note with pleasure that a generous, though final, donation has been made to the Library Association in respect of its "Subject Index to Periodicals." We understand that the Class List "Science and Technology" for 1917–19 is in the press and will be issued shortly.

## Calendar of Industrial Pioneers.

March 23, 1875. Thomas Lloyd died.—Trained as a shipwright at the School of Naval Architecture at Portsmouth, Lloyd was detailed by the Admiralty for duty with the early naval steam vessels, and ultimately became the first Engineer in Chief of the Navy, a post he held from 1847 to 1869. He was born in 1803, and his services extended from the introduction of steam into the Navy to the development of the first mastless steam ironclad, H.M.S. *Devastation.* 

March 24, 1879. Karl Karmarsch died.—Born in Vienna in 1803, Karmarsch founded, and for fortyfive years directed, the Polytechnic at Hanover, and wrote valuable works on mechanical technology.

March 25, 1864. Francis Baird died.—Second son of Sir Charles Baird, the founder of the wellknown works at St. Petersburg, Baird for many years was sole proprietor of the establishment, and as such carried out numerous important contracts for the Russian Government.

March 25, 1905. Bruno Kerl died.—A distinguished German metallurgist, for thirty years a professor at the Berlin School of Mines, Kerl was the author of valuable treatises, and for thirty-eight years edited a mining and metallurgical journal.

March 25, 1912. Antonio Pacinotti died.—One of the pioneers of the dynamo, Pacinotti was educated at Pisa, where his father was a professor. He served in the Garibaldean wars, and on his return to Pisa in 1860, at the age of 19, constructed the ringarmature dynamo, a form of dynamo re-invented ten years later by Gramme. Though unnoticed at first, Pacinotti's work ultimately received recognition and he was awarded various honours. He held professorships at Florence, Cagliari, and Pisa, where he died.

March 26, 1865. Thomas Hancock died. — The great pioneer of the British rubber industry, Hancock took out his first patent in 1820. He afterwards perfected a process of mastication, and in 1843, having seen samples of the "cured" rubber of Goodyear, patented a method of "vulcanising" rubber by sulphur, and was the first to make vulcanite or ebonite. With his brothers he founded the firm of James Lyne Hancock. In 1857 he published his "Personal Narrative of the Origin and Progress of the Caoutchouc or Indiarubber Manufacture in England."

March 26, 1858. John Seaward died.—In 1824, after experience in many branches of engineering. Seaward opened the Canal Ironworks at Millwall, and became one of the principal builders of marine engines for the Navy. Assisted by his brother Samuel, he made many improvements in paddle-wheel machinery, and introduced the "Gorgon" type of direct-acting engine.

March 28, 1919. Henry Wilde died. — Left an orphan at 16, Wilde began life as an engineering apprentice in Manchester. In 1856, at the age of 23, he set up in business as a telegraph and lightning conductor expert, achieving his first success with an alphabetical telegraph. In 1863 he began his work on the dynamo, which with his electro-chemical discoveries laid the foundation of his fortune. He retired from business in 1884, devoted much time to scientific research, and became well known for his generous gifts to scientific institutions. E. C. S.

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