

# ADVANCEMENT OF SCIENCE.

## Inter-State Congress in Adelaide.

### Leading Officials and Delegates.

Among the distinguished visitors who will attend the meeting in Adelaide next week of the Australasian Association for the Advancement of Science, one of the most notable is Professor Grafton Elliot Smith, M.A., Litt. D., M.D., F.R.C.P., and F.R.S. It was not known that Pro-



Professor Grafton Elliot Smith.

Professor Smith contemplated making a visit to Adelaide until after the full programme for the conference had been arranged. Consequently, a prominent place, such as his attainments merit, could not be found for him. Probably some arrangement will be made for giving the conference and the public generally some advantage from his presence in Adelaide. He is Professor of Anatomy in the University of London (University College). He was for some time a Fellow of St. John's College, Cambridge, and has been Professor of Anatomy in the University of Manchester and in the Egyptian Government School of Medicine, Cairo. He was formerly Croonian Lecturer in the Royal College of Physicians, and Gale Lecturer of the Royal College of Surgeons; Morison Lecturer of the Royal College of Physicians, Edinburgh; and Montgomery Lecturer of the Royal College of Surgeons in Ireland. He was president of the anthropological section of the British Association, 1912, and was awarded the Prix Fauvel of the Societe d'Anthropologie de Paris, 1911, and the Royal Medal, Royal Society, 1912. He is an hon. member of the Anthropological Societies of Munich, Paris, and Rome, and Institut Egyptien. He has written and published memoirs on anatomical subjects, chiefly dealing with the comparative anatomy of the brain and the evolution of man, with contributions to the study of anthropology, especially with reference to Egypt, the art of mummification, and the early history of civilisation. An interesting feature of Professor Smith's career was that he entered Cambridge University at the same time as Sir Ernest Rutherford, F.R.S.

#### Other Distinguished Visitors.

Major-General Sir Charles Rosenthal, K.C.B., C.M.G., D.S.O., who is to represent the Institute of Architects of New South Wales, is another delegate who has a brilliant war career to his credit. He left Australia with the A.I.F. in September, 1914, as Lieutenant-Colonel commanding the Third Field Artillery Brigade of the First Australian Division, and served through Gallipoli, where he was twice wounded. He was mentioned in despatches and received the C.B. in 1915. He was transferred in February, 1916, to the Fourth Australian Division, appointed C.R.A., with rank of brigadier-general, and served with the Fourth Division in Sinai, France, and Belgium, including operations at Fromelles and on Somme, 1916; Bullecourt and Messines, 1917. He was transferred in August, 1917, to the command of the Ninth Australian Infantry Brigade, and assumed command of the Second Australian Division on May 22, 1918, and was appointed major-general. His fighting with this division included operations at Hamel, Villers-Bretonneux, and onwards to the Hindenburg line, including the capture of Mont St Quentin, Beaurivage line and Monthrehain. The capture of the last-named village constituted the final battle of the Australian corps during the war. He was five times wounded and seven times mentioned in despatches. Major-General Rosenthal was awarded the Belgian Croix de Guerre in 1917, the French Croix de Guerre with Palmes in 1918, and the French Legion of Honor in 1919.

Mr. R. W. Cambage, of the Linnean Society of New South Wales, is a surveyor, but has written many papers on botanical subjects, dealing especially with the relation between the native flora and geological formation upon which it grows. He has also contributed papers to the Royal Society on acacia seedlings. He is a member of the councils of the Royal and Linnean Society of New South Wales, was president of the Royal Society in 1912, and has been honorary secretary since 1914; president of the Wild Life Preservation Society, 1913; elected fellow of the Linnean Society of London, 1904, honorary secretary of the Australian National Research Council since August, 1919. He is the author of "Exploration Beyond the Upper Nepean."

Dr. Charles Anderson, of the Royal Society of New South Wales, had a brilliant career as a student of science in Scotland. After leaving the Edinburgh University he had charge of the Ben Nevis Observatory, where he displayed special organising skill. In 1901 he went to Sydney to take charge of the Mineralogical Department of the Australian Museum. His investigations have been principally crystallographical, and for his researches in this untrodden field he was awarded the D.Sc. degree by his university.

Professor Lancelot Harrison was educated at the King's School Parramatta, where he was a Barton scholar and dux of the school in 1898-9. At the Sydney University, in 1913, he received the B. Sc., with first-class honors, and the University medal for zoology, and is also a John Coutts and Exhibition of 1851 scholar. He is an Exhibitor in Science of the Emmanuel College, Cambridge, 1914, B.A. (Cantab), 1916; was vice-president of Cambridge Union Society, and president of Cambridge Natural History Society. He was attached to the Army Medical Service with the British Forces in Mesopotamia, attaining the rank of a captain. He is lecturer and demonstrator in zoology at the Sydney University, and is editor of the "Australian Zoologist."

Professor L. A. Cotton, M.A., D.Sc., the son of Frank Cotton, the inventor, received his B.A. at the Sydney University with first-class honors in mathematics in 1906; B.Sc., with first-class honors in mineralogy in 1908, held the Macleay Fellowship in Geology in 1909 and 1910, received his M.A. degree in 1916. He obtained his D.Sc. with first class honors and the university medal in 1920, for a thesis on earthquake frequency with special reference to tidal stresses in the lithosphere. He was appointed lecturer and demonstrator in geology at Sydney University in 1911, and assistant professor of geology in 1920. He represented Sydney University at the Pan-Pacific Science Congress at Honolulu in 1920.

Professor Oscar Ubric Vonwiller, B.Sc. (Sydney), is an associate professor of physics in the Sydney University. He was assistant lecturer and demonstrator from 1903 till 1913.

Sir Henry Barraclough, K.B.E., B.E. (Sydney), M.M.E., M. Inst. C.E., M.I. Mech. E., has been Russell professor of mechanical engineering in the University of Sydney since 1915; formerly lecturer 1897-1908, and assistant professor, 1908-15. Early in the war he was on the censor's staff in Sydney, and then proceeded to England, where he was officer in charge of Australian munition workers, with the rank of colonel, being absent from Australia on active service for four years. For his services in the United Kingdom he was created C.B.E., and in 1920 received the honor of K.B.E.

Professor Charles Edward Fawsitt, D.Sc. (Edin), Ph. D. (Leipzig), was lecturer in chemistry in the Glasgow University and demonstrator in chemistry at the Edinburgh University. He has been pro-

cessor of chemistry in the University of Sydney since 1909, and was president of the Royal Society of New South Wales 1919-20.

Mr. C. A. Sussmitch, F.G.S. (New South Wales) after passing with honors in geology, mining, and metallurgy at the Sydney University, entered the Education Department in 1899. He was appointed lecturer in charge of the Department of Geology and Mining in 1905, and principal of the Technical College, Newcastle, in 1914. He was president of the Newcastle division of the Institute of Engineers in 1920, and has been a member of the Royal Society of New South Wales since 1910. He is a Fellow of the Geological Society of London, and of the Sydney Technical College.

Professor E. W. Skeats, D.Sc., A.R.C.Sc., F.G.S. (Victoria), has been president of geology and mineralogy in the University of Melbourne since 1905. He was president of the geology section of the Science Congress in Brisbane in 1909; president of the Royal Society of Victoria, 1910-12; dean of the faculty of science in the Melbourne University since 1909. He has conducted a considerable amount of research

The secretary of the New Zealand section, Professor C. Coleridge Farr, D.Sc., F.N.Z., Inst. Canterbury College, Christchurch, is another Adelaide old boy, who has a distinguished career to his credit. He is the son of the late Ven. Archdeacon Farr, M.A., LL.D., Cantab., headmaster of St. Peter's College. Professor Farr graduated in science in the Sydney University in 1888; secured the Angus Engineering Scholarship in 1889; was lecturer in mathematics and physics, St. Paul's College University of Sydney, 1891-95; lecturer electrical engineering University of Adelaide, 1896; undertook a magnetic survey of New Zealand in 1898; was engaged thereon till 1904; established Magnetic Observatory at Christchurch for the New Zealand Government; lecturer physics and surveying, Canterbury College, University of New Zealand, 1904-10.

Professor Owen Giblin Shann (Western Australia) was a James scholar, 1901-3 and Wyelaskie scholar in constitutional history and economics at the Melbourne University, 1904. He was acting professor of Philosophy at the Adelaide University in 1906; research student at the London School of Economics in 1909-10; lecturer in charge of history and economics in the University of Queensland in 1911; and has been professor of history and economics in the University of Western Australia since 1913. In 1910 he was offered the chair of political science in the Imperial University of Peking.

Professor Alexander Ross (Western Australia) after a distinguished scholastic career in Glasgow, accepted the professorship of mathematics and physics in the University of Western Australia in 1912. He received in April, 1914, from the Glasgow University the Kelvin gold medal and prize in natural philosophy, the highest honor that university can bestow in science—the professor was the first recipient of this distinction. He is the author of many papers on magnetism, spectroscopy, metallography, and astronomy.

Major E. A. Le Souef (Western Australia) has been director of the Zoological Gardens in Perth since 1897, the principal veterinary officer for Western Australia since 1912, and associate lecturer in veterinary science in the University of Western Australia since 1917. He is a member of the council of the R.A.O.U. for Western Australia. He was an officer commanding troops and veterinary officer steamer Barunga, 1916, and veterinary officer to 2nd Brigade 1st Anzac Mounted Division.

Major L. F. Giblin, D.S.S., M.C. (Tasmania) was M.H.A. for Denison (Labor) at the outbreak of the war. He served with the 40th Battalion, A.I.F., from March, 1916, to October, 1919. He is now Government Statistician for Tasmania.

Mr. Clive Errol Lord (Tasmania) is curator of the Tasmanian Museum; was hon. secretary of the Tasmanian Field Naturalists' Club for 10 years, a commissioner of Fisheries for Tasmania, secretary of the Royal Society of Tasmania, and a member of the National Park Board. He is the author of various scientific contributions published in the proceedings of the Royal Society of Tasmania.

#### ARRIVAL OF DELEGATES.

Among arrivals by the Melbourne express on Friday were the following delegates to the Science Congress:—Professors L. A. Cotton and W. R. Browne, Messrs. H. G. Raggatt, W. G. Osborne, and G. Halligan, Misses Shepherdson and Quodling (Sydney University), Dr. C. Tilley (Cambridge University), Dr. Mahoney, Messrs. R. Harvey and Butchers (Melbourne), and Mr. E. C. Andrews, permanent honorary secretary of the Australasian Association of Science.

Mr. Andrews said the association was a public movement, and was open to membership by anybody sufficiently interested. The movement had the support of the greatest leaders of science in Australia and New Zealand, and its importance was attested by the eminence of the men who had been chosen to be presidents. The president elect was Sir John Monash, the retiring president was Sir George Knibbs, and the predecessors of these gentlemen were men of the standing of Sir Baldwin Spencer, Sir Edgeworth David, Sir David Masson, and Sir William Bragg.

The object of the association was to advance the interests of science, by meet-

ings held each second year, when social questions were discussed and all scientists could take part in conference. Practical subjects of interest to scientists and associated with the public welfare were brought forward, such as the breeds of wheat, the necessary co-ordination of knowledge of soils, the native races, and the results of independent research. In respect to research the need for finance had been a great trouble, though the association was supported generously by the public. The various State Governments had helped liberally by the free printing of the proceedings and pamphlets. The association had the patronage of the Governor-General of Australia (Lord Forster), the Governor-General of New Zealand (Lord Jellicoe), and the Governor of South Australia (Sir Tom Bridges).

The true function of the association was the education of the public to the needs of science. The association sought the material and moral advancement of the people, and better opportunities for developing independent research.

The approximate number of members of the association who had joined for the present congress were:—South Australia, 400 to 500; Victoria, 140; New South Wales, 100; Queensland, 15; New Zealand, 20; Western Australia, 15; and Tasmania, 12.

#### AMENDED LIST OF DELEGATES.

The following corrections and additions have been made to the list of delegates:—Commonwealth.—Commonwealth Institute of Science and Industry, Sir George Knibbs and Mr. Gerald Lightfoot.

New South Wales.—N.S.W. Association of Master Pharmacists, Mr. L. W. Smith and Mr. L. J. Thompson; British Astronomical Association, Mr. J. Nang; Naturalists' Society of N.S.W., Mr. Edw. Cheel; Australian National Research Council, Sir George Knibbs and Sir Edgeworth David; Institute of Engineers, Australia, Headquarters, Sydney, Professor R. W. Chapman (Adelaide), Mr. H. G. Jenkinson, and Professor Sir Henry Barraclough; Institute of Architects of N.S.W., Professor Leslie Wilkinson; Veterinary Association of N.S.W., Dr. Sydney Dodd; British Medical Association, N.S.W. Dr. J. S. Purdy and Dr. Harvey Sutton; Pharmaceutical Society of N.S.W.; Mr. W. J. Archer (vice Mr. A. Wadsworth).

Victoria.—Field Naturalists' Club of Victoria, Mr. F. Chapman, Mr. C. Daley, and Dr. C. S. Sutton; Historical Society of Victoria, Mr. S. H. Roberts and Mr. C. Daley; Incorporated Association of Secondary Teachers, Dr. J. P. Wilson; Microscopical Society of Victoria, Mr. J. Sheppard; Royal Society of Victoria, Dr. J. M. Baldwin and Dr. A. E. V. Richardson; University of Melbourne, Professor W. E. Agar and Professor A. C. D. Rivett; Actuarial Society of Australasia, Mr. C. H. Wilkins; Australian Forest League (Vic. branch), Mr. R. T. Patton; Pharmaceutical Society of Victoria, Mr. A. R. Bailey, Mr. C. L. Butchers, and Mr. W. H. Fleay; Royal Victorian Institute of Architects,

Mr. L. Laybourne-Smith (Adelaide); Society of Chemical Industry of Victoria, Mr. P. F. Thompson, Mr. E. S. Richards, and Mr. W. R. Jewell; Victorian Institute of Engineers, Mr. Thomas Hill and Mr. W. Reid Bell; University Chemical Society, Mr. G. Ampt; University Science Club, Professor W. E. Agar; Royal Australasian Ornithologists' Union, Dr. C. S. Sutton, and Mr. Edwin Ashby (Blackwood); Veterinary Association of Victoria, Mr. F. J. Bordeaux and Mr. W. A. N. Roberson.

New Zealand.—New Zealand Institute, Professor D. M. Y. Sommerville and Mr. A. M. Wright; Wellington Philosophical Society, Professor D. M. Y. Sommerville.

Queensland.—Australian Chemical Institute, Q., Mr. F. B. Smith.

Western Australia.—University of Western Australia, Mr. E. de C. Clarke (vice Professor Shann).

South Australia.—Institute of Engineers, Australia, Adelaide Division, Mr. E. V. Clark (vice Mr. H. Owen Fox); The Education Society of South Australia, Miss W. F. Barry.

#### PRESIDENTIAL ADDRESSES.

The times of delivery and titles of presidential addresses have been arranged as follows:—

Section A (astronomy mathematics, and physics)—Tuesday, 10 a.m., "The Development of the Ideas of Space and Time," Professor D. M. Y. Sommerville.

Section B (chemistry)—Tuesday, 11.30 a.m., no title yet given, Professor A. C. D. Rivett.

Section B (subsection pharmacy)—Thursday, 10 a.m., "Pharmaceutical Progress," Mr. E. F. Gryst.

Section C (geology and mineralogy)—"Volcanic Activity in Queensland," Dr. H. C. Richards.

Section D (zoology)—"Some Problems of Evolution and Genetics," Professor W. E. Agar, no time given.

Section E (geography and history)—Tuesday, 2 p.m., "Sailing Directions," Captain J. K. Davis.

Section F (ethnology and anthropology)—"Origin and Relationships of the Material Culture and Decorative Art of the Maoris of New Zealand," Mr. H. D. Skinner.

Section G (social and statistical science)—Tuesday, 3.30 p.m., "Monetary Policy and Its Reaction Upon Australia," Professor Copland.

Section H (engineering and architecture)—Tuesday, 11.30 a.m., "Efficiency in Modern Life," Professor H. E. Whitfield.

Section I (sanitary science and hygiene)—"Vitamines and Fruit in Diet," Dr. J. S. Purdy.

Section J (mental science and education)—Tuesday afternoon, "Vocational Guidance," Mr. J. Nangle.

Section M (botany)—Tuesday, 10.15 a.m., "Ecologic Conditions of Vegetation in Tasmania," Mr. L. Rodway.

#### COMMONWEALTH CLUB LUNCHEON.

The following members of the Australasian Association for the Advancement of Science will be entertained by the Commonwealth Club at a luncheon in the Town Hall on Tuesday:—Sir John Monash (president), Sir George Knibbs (retiring president), Professor Sir T. W. Edgeworth David, Professor Grafton Elliot Smith, Mr. David Carment (hon. general treasurer), and Mr. E. C. Andrews (permanent hon. general secretary). Speeches will be delivered by Sir John Monash and Professor G. E. Smith.