Ragiales.

ADELAIDE TO-DAY

Two Specific Aims.

such thickly populated confinents as Europe. Such intellectual reaction was fundamental, and for that reason meetings such as that of the Australasian Association for the Advancement of Science were very important and stimulating to the intellectual and scientific efforts of the whole community. Most of the advances achieved in the last hundred years had really been due to the application of science to industry.

Finance and Benefits.

Incidentally in modern Europe and in the United States of America the people recognised the necessity for institutions which were prepared to take the great national problems of the country on their shoulders. Research institutious were characteristic features of American development, and the liberality of wealthy Americans to such institutions was remarkable. He hoped that such liberality would also soon be characteristic of Australians, and, looking to the future, it seemed to him that the time when that would be was not so far off. The development of such a society as theirs meant much to Australia's future, and it was to be hoped that would be recognised by the people in the proper way-by financing its activities. An adequate subsidy would make all the difference to the calibre of their work and incidentally to the amount of good that they would be able to perform for the people of Australia.

TO-DAY'S ACTIVITIES.

There will be a meeting of the Australian Science Council at the Prince of Wales lecture hall at the University at 9 o'clock this morning. The council has taken advantage of the presence of so many of its members in Adelaide at the one time to hold a general meting to decide on its future work. The meeting will be occupied by members and associate members of the Science Congress registering themselves at the University. The only section sitting during the day will be the social and statistical science section, at which Mr. E. T. McPhee will deliver a paper on "The Drift of Population to the Cities," and there will also be a discussion for the forming of an Australian Economic Association. At noon, there will be a civic reception by the Lord Mayor at the Adelaide Town Hall.

The afternoon will be taken up by the general council meeting, and in the evening the retiring President, Sir George Knibbs, will induct the President-elect, Sir John Monash, and the latter will then give his address on "Power Development."

FINANCIAL SUPPORT REQUIRED.

To Widen Association's Scope.

Lack of Funds a Handicap.

Lack of funds severely handicaps the work of the Association for the Advancement of Science. What is wanted in Australia is something on the lines of the liberality of American magnates, who subscribe liberally to the funds of the great associations of that country.

That view was expressed by both the President (Sir George Knibbs) and the permanent secretary (Mr. E. Andrews) on Saturday morning. Mr. Andrews put the position very clearly. He said that from a small beginning, when Professor Liversidge inaugurated the association in Australia, it had now grown to a very large membership. The engineering section alone, at the present time, had a membership of over 2,600 members, and the chemists were almost as large a section. Then there was the British Medical Assodistion with its huge membership, and the various Royal Societies. Before the inauguration of the Association for the Advancement of Science, those bodies were often pulling against each other. When the society was formed it did not ask the various societies to sink their individualities, but to work together harmoniously for the advancement of the social and material welfare of the people. In that way also it was pointed out they would learn to know and appreciate the difficulties which confronted each other. That was done, and it had meant the elimination of discord, and the various societies pulling together with one strong pull. The forces of science were then best able to work for the common good.

There were two specific aims before the association. The first was for its members to attempt to solve the problems confronting the peoples of Australia and New Zealand. That work took such lines as the improvement of stock by discovering the best methods of breeding, improving the quality of wheat by experimenting in that direction, the institution of quarantines to guard against the invasion of Australia by pests from outside, the overcoming of the prickly pear and boll weevil problems, and other such material bene-

The other aim is the improvement of the social status of the people by a process of education. The association first gained the confidence of the people by attending to their material welfare, and then went on to attend to their social welfare. As they became more and more educated, so their material needs became more and more improved. Therefore the improvement in the social condition of mankind was a big step in the solving of all their difficulties.

Benefactor Wanted.

The whole of the work of the association is carried on by honorary officials. "What we want is a great benefactor," Mr. Andrews continued. "If the people knew of our work they would help us willingly. The trouble is that they do not know. We do not advertise our achievements, so that, while the people feel the benefit of them. they do not give thought to whence they come. Meetings such as the present bri the matter before the people of a certain State, but owing to our holding the conference only once every two years, and in a different city each time, it is only once in a very long while that one city has our conference. That makes for forgetfulness. What we need is an endowment, and I think it will come as soon as the public becomes aware of the great work the association is doing for mankind. Such an endowment would mean that we would be able immensely to increase the scope of our activities, and consequent greater benefit to the people of Australia. "The endowment would mean we could

have a permanent office with a permanent paid secretary and assistants. Highly important, also, would be the fact that we could then run a publication on the same lines as the great American publication 'Science.' That work covers the activities of the entire science world. Every new discovery is almost immediately recorded in its columns in such a manner as to be easily understood. That would mean that both scientists and the general public could follow the discoveries of the scientific world almost day by day, and the great benefit that would be is apparent to Sufficient money at our command would also mean that our investigations could also take on a greater scope, and would generally be a great aid in the advancement of science, and through them in the betterment of the people."

Similar sentiments were expressed by Sir George Knibbs (retiring President). "I reiterate all Mr. Andrews has said," he remarked, "and I am sure that if the people of Australia only knew what benefits we are giving them they would come readily to our assistance."

AUSTRALIAN NATIONAL RESEARCH COUNCIL. Adelaide Meeting To-day.

Taking advantage of the fact that many of the members are in Adelaide for the Australians opened the great counter meeting of the Australasian Association for the Advancement of Science the Australian National Research Council will hold a meeting at the Prince of Wales Theatre this morning. In the absence of the President (Sir Orme Masson), Sir George Knibbs will preside over the deliberations.

Research Council, which was formed in London at the close of the war, and which received his G.C.M.G. and K.C.B. distincincludes almost every country in the tions, and was a'so made a Grand Officer world. The activities of the council are of the Legion of Honour, Grand Officer in the direction of correlating the science of the Order of the Crown of Belgium, and of the world, and keeping scientists in touch with the progress of scientific subjects the world over. The council might be described as a League of Nations of Science. Sir Edgeworth David was its first President, and on his retirement the position was taken by Sir Orme Masson. During his absence in England, until the end of December, Sir George Knibbs will direct the activities of the council. The council consists of 100 members, and as many associate members as it cares to elect. The qualification for an associate member is that he must have published some work of interest to science. The Vice-Presidents are Sir Baldwin Spencer, Sir Edgeworth David, Sir George Knibbs, engineering, law, Argus scholar, and and Mr. J. H. Maiden. Mr. R. H. Cam- honours in engineering. He adopted civil bage is the hon, secretary. The Federal engineering as his profession, and from Government officially recognises the coun- 1884 practised as an engineer in railway, fil, which acts in a sort of advisory capa- road, bridge, and water supply design city to the Government in scientific mat- and construction. About 1900 he specia-

THE CONFERENCE

LEADERS

SIR JOHN MONASH.

AN ENGINEERING GENIUS.

Perhaps the most interesting figure at the conference is the President (Lieut. General Sir John Monash, G.C.M.G., K.C.B., V.D., B.A., D.C.L., D.Eng., M. Inst.C.E.), the Chairman of the State Electricity Comsion of Victoria. To the general public Sir John is best known for his great war services. His highly trained mind, persistence, and administrative ability carried him right to the front military rank. At the outbreak of war he was chief censor for Australia, and proceeded to the front in command of the 4th Brigade, A.I.F., and was also in charge of the second expeditionary force convoy. He served at Gallipoli from the landing on the memorable morning of April 25, 1915, until the evacuation, being mentioned in despatches on three occasions, securing his C.B., and having Monash Valley at Anzac named after him. Until April, 1916, he served in the Suez Canal defence zone, and then took



SIR JOHN MONASH, President-Elect of the Congress.

his brigade to France. In July, 1916, he was given command of the 3rd Australian Division, which gained never-to-be forgotten laurels at Messines and Passchendaele, and on Albert-Amiens front after the launching of the great German offensive of 1918. He succeeded Gen. Sir William Birdwood in command of the Australian Army Corps in France in May, 1918, and it was under his directions that the offensive, won added laurels, and contributed so greatly to the success of the Allies during that hectic period. On the cessation of hostilities he became Director-General of Demobilization. Sir John received his major-generalship in 1916, and his lieutenant-generalship years later, being one of a very The council is a unit of the International few citizen soldiers of the Empire to attain that rank. In 1918 he received from the President of the U.S.A. the Distinguished Service Medal in recognition of his having led the 27th and 30th American Divisions in the capture of the Hindenburg line in September, 1918.

Meritorious Civil Career. His civil career has I in equally meritorious, and he ranks as one of the greatest of Australians in the world of science. He was born in Melbourne on June 27, 1865, and was a son tical instruments, and of large monograph of the late Mr. Louis Monash, on "The Mathematical Theory of Pop of St. James Park, Melbourne, bution," "The Census of Wealth," &c. He received his education at Scotch College, Melbourne, and the Melbourne University, where he graduated in arts,

lized in reinforced concrete construction,

Monier Pipe Company, introducing reinforcing methods into Victoria, Tasmania, and South Australia. From 1913-15 he was President of the Victorian Institute of Engineers, was director and Chairman of a number of commercial and industrial companies, and a member of the university council. The degree of D.C.L. was conferred on him by Oxford University in 1919, and the degree of LL.D. by Cambridge University the same year. The latter degree was also conferred by the Melbourne University in 1920. He is the author of "The Australian Victories in France, 1918," and it was that work which, being submitted as a thesis on the subject of engineering as applied to modern warfare, to the professors in engineering at the Melbourne, Sydney, and Adelaide Universities, that secured him the degree of Doctor of Engineering. That was the first occasion on which a candidate qualified for that degree in any Australian university. In 1920, after his return from his war duties, Sir John was appointed by the Victorian Government as general manager of the Morwell electricity scheme for a period of five years. Under his supervision this huge scheme, whereby the hitherto useless brown coal of Morwell, in Gippsland, has been utilized for electrical purposes, and is now supplying Melbourne, and will later supply the whole of Victoria, with electricity, was brought into being. The scheme is described by all as a triumph for modern engineering in general, and for Sir John Monash in particular.

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A GREAT STATISTICIAN.

SIR GEORGE KNIBBS.

The retiring President of the association (Sir George Knibbs, C.M.G., F.R.A.S., Hon, F.S.S., M.I.I.S., Hon, M.S.S., Paris; Hon. M.Am.S. Assoc., Director of the Commonwealth Institute of Science and Industry) is also a figure who has long been prominently before the public of the Commonwealth. On his figures as to cost of living depend the basic wages of every State, and he also came very prominently before the public in connection with the recent census. For 15 years, from 1906 to 1921, Sir George held the position of Commonwealth Statistician, and only vacated that position to undertake his present duties. His public work commenced in 1877, when he joined the staff of the Trigonometrical and General Survey Department of New South Wales, and he continued in that department for 12 years. In 1899 he was independent ecturer in the Department of Engineering at the Sydney University, and in 1905 was Acting Professor of Physics at that scat of learning. From 1905 to 1906 he was the New South Wales Director of Technical Education, and from 1902-6 was a Royal Commissioner on Education, studying all branches of education and visiting the United Kingdom, the Continent, Canada, and U.S.A. He was President of the New South Wales Royal Society in 1898-9, and was hon, secretary of that body for nine years. The presidency of the New South Wales section of the British Astronomical Association was his from 1897-8, and of the Sydney University Engineering Society for the same years. He was President of the Institution of Surveyors 1892-3 and 1900-1, and President of the Society for Child Study 1903-5 Sir George was a delegate of the Australian Government to five international congresses in Europe in 1900, a member of the royal commission on life, fire, and other insurances 1909-10, and of the Royal Commission for Trade and Industry during the war. He was consulting member of the Committee for Munitions of War in 1915, and Chairman of the Royal Commission on Taxation of Crown Leaseholds 1918-19. He is the author of Report on Social Insurance, Europe, &c." (1910), and of numerous monographs on pure mathematics, geodesy, and geodetical instruments, and of large monographs on "The Mathematical Theory of Popu-