

Leading Officials and Delegates.

advertisement

20 AUG 1924

Interest in scientific matters is being quickened as the time approaches for the opening of the seventeenth meeting of the Australasian Association for the Advancement of Science in Adelaide on Monday, August 25. Some people regard the gathering as beyond the sphere of ordinary folk busy with the cares and doings of every day life. They look upon the scientist with awe, and picture him as a man who lives in an atmosphere far removed from the work-a-day world. This estimate may be true to some extent but, apart from their special studies, scientists are human beings with thoughts and feelings not very different from those of other people. The studies of the scientists are mostly devoted to the pursuit of knowledge that will make life full of understanding and happiness for the vast majority of people. Science has been described simply as all the knowledge of facts that men have proved and have regulated, so that it can be used to ascertain the fixed order of things and the relations of cause and effect. These

LL.D., D. Eng., M. Inst. C.E. (chairman of the State Electricity Commission in Victoria), the president of the congress, is best known to Australians as a soldier, but, as the story of his career discloses, he is also distinguished as a scientist. His life is a striking illustration of the manner in which war sometimes opens up, to men not searching for it, the road to fame. Sir John Monash was known for years amongst professional associates and military comrades as a man who could not tolerate a job half-done. It has been said that he might have taken for a motto the words, "without haste and without rest," as he went on from year to year appearing successively in military orders as a captain, a major, a colonel in that little army whose cradle he helped to rock, before anyone dreamt that it was to play a part in the most momentous affairs of the world. In his profession as an engineer Sir John Monash advanced in much the same manner. On Gallipoli he shared the risks, the trials, and the privations of that campaign of glorious failure. He gained prestige as the war went on, and new responsibilities and new honors came upon him in quick step, until he was made a brigadier-general, and then a lieutenant-general in charge of an army corps.

Sir John Monash gave early indications of the possession of a brain of more than ordinary brilliance. He was educated at Scotch College, Melbourne, and matriculated in 1879, when only 14 years old. Two years later he was dux of the college in succession to James Whiteside McCay, subsequently Major-General Sir James McCay. As a citizen soldier, Sir John first joined the Victorian forces as a lieutenant in the Garrison Artillery in April, 1887, and was promoted captain in October, 1895. In 1903 he gained his majority, and was commanding the Australian Intelligence Corps from March, 1908 to March 1, 1914. As soon as war broke out he added soldiering to the two professions in which he was already qualified, law and engineering. As a civil engineer Sir John Monash has taken a leading position. He is an authority on reinforced concrete. He carried out many important works, the principal, perhaps, being the Monier Bridge, on the Yarra. For his work on the Gallipoli Peninsula Sir John Monash was made a Companion of the Bath, and later was raised to the rank of K.C.B., being the second Australian to gain that distinction on active service.

Sir George H. Knibbs, C.M.G., F.R.A.S., Hon. F.S.S., M.L.S.S., Hon. M.S.S. (Paris), Hon. M. Am. S. Assoc., Director of Commonwealth Institute of Science and Industry, Melbourne, is regarded as a remarkable statistician, whose eminence in this



Sir John Monash

Who will deliver the Presidential Address on Monday evening.

they call the laws of nature. What we owe to the manifestations of the scientist cannot be calculated; the benefits humanity is yet to receive it is impossible to forecast. Some people, and perhaps a few scientists, consider the chief duty of the scientist is to study abstract problems and experiments just for the mere pleasure of making discoveries with no particular purpose. But the more noble view, and that now more commonly accepted, is that expressed by Lord Kelvin in the words, "The life and soul of science is its practical application." Science does for men what neither philosophy nor literature could do. It gives them power. In proportion as science grows our power increases. If its growth has no limit, our power has no limit. The dream of the scientist devoted to the task of exploring into the unknown is to banish mystery with the light of truth, establish a future moulded by science, so that humanity may be triumphant, extending its mastery without limit and without end.

On the other hand there has been some discussion on the tendency towards using science for destruction, instead of constructive purposes. The death-dealing inventions, such as poison gases and electrical rays, by means of which a countryside may be laid waste, have been instanced as the uses to which science may be applied. "Every advance in knowledge and power," said Sir Oliver Lodge, "can be used to evil ends. The conditions have now grown so phenomenal in prospect that surely humanity must revolt against them." Professor Sir William H. Bragg, F.R.S., formerly of Adelaide University, speaking recently on this phase of the subject, said a scientist was an explorer in a new country. It was his business to pick up and record what he found. He could not shape his course to any particular end. In the course of his work the scientist found something new and published the fact. The doctor seized upon the discovery and applied it to surgery. The military man saw the chance of using it in war, and did so. Yet the scientist had thought neither of medicine nor of war. The duty of the scientist was to discover nature's secrets, and put them to the use of men. This definition, most people will agree, is sufficient for all practical purposes, and that it may be correctly applied to the important deliberations in Adelaide may be confidently expected. Some personal particulars in regard to the leading officials and delegates from the other States should be of interest.

Lieutenant-General Sir John Monash, C.M.G., K.C.B., V.D., B.A., D.C.L.,



Sir George Knibbs. The Retiring President.

department of science is acknowledged throughout the world. He has an undoubted genius for the collection and compilation of figures. The Commonwealth Year Book stands as a tribute to his capacity. His first experience was gained in the General Survey Department of New South Wales. In 1899 he was elected president of the Royal Society of New South Wales. Few Australians have been deputed so frequently to represent their country abroad. He attended the International Congress on Life Insurance in Vienna, a special committee for the revision of nomenclature of diseases which met in Paris, a congress held in Copenhagen on the scientific testing materials, the International Institute of Statistics in Paris, and the Geodetical Congress in London. In 1920 he attended the British Empire Conference of Statisticians in London, which drew up a plan for making statistics uniform throughout the Empire.

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GRADUATES' ASSOCIATION.

One of the objects of the Graduates' Association of the University of Adelaide is to secure to the community the full benefits of the work of the University, and the meeting arranged for Thursday evening will be useful in giving evidence of what has been done, and is still being done, by University men who are engaged in research work on the Rockefeller foundation. Sir James Barrett is well-known throughout the Commonwealth as a writer and lecturer on subjects connected with public health, and treatment of disease, and he has consented to address the association on the subject of "The Significance of the Rockefeller Foundation." The lecture will be illustrated by lantern views, and the recently elected president of the association (Professor E. Harold Davies) invites all graduates with their friends to be present, and extends an invitation also to all the visitors to the Science Congress.

The Advertiser

ADELAIDE: THURSDAY, AUGUST 21, 1924.

ADVANCEMENT OF SCIENCE.

Monday next will witness the inauguration of the seventeenth Congress of the Australasian Association for the Advancement of Science. Like the British Association, on whose model it was fashioned, it has more than one claim to consideration. In the first place, it brings together the acknowledged leaders of many forms of investigation, familiarising them with the labors and achievements of one another; and, in the second, it serves as a link between the world of science and learning and the general body of the community. Either purpose would alone justify the claim to existence and respect of this important body. An obvious danger to the scientific enquirer is avoided when, released from the trammels of an exclusive specialism, he meets, and compares notes with the workers in other fields of research. Men who are toiling at one object, the pursuit of truth, and the discovery of the secrets of Nature, are not likely to pull together with the best effect unless each knows what the rest are doing. The geologist, the chemist, or the physicist wishes to learn, not merely what discoveries have been added to the common stock, but what lines of investigation promise the most valuable results. It was one of the favorite objections to the British Association in its early days that a periodical meeting of savants was not at all necessary for the purpose of recording completed discoveries. Every science, it was said, had some organ through which its professors could publish the results of their labors, without travelling at stated intervals to a common trysting-place. But those who indulged in this shallow kind of criticism overlooked the important fact that an enquirer may derive much more useful assistance from a knowledge of the aspirations and speculations of a fellow-worker than from a bare narrative of his most triumphant achievements.

As a means of kindling popular interest in scientific progress the Congress has an importance also which cannot easily be exaggerated. Those engaged in the multifarious activities of everyday life have neither the time nor the capacity to keep in touch with the progress made in the various fields of scientific research and experiment. The average man seldom penetrates far into the domain of the savant, and therefore probably does not always realise sufficiently what he owes to the laborers in this field. Yet it is all-important he should know, especially in a democratic country, if scientific research is to receive from the State the assistance so often claimed for it. It is here that the wisdom is shown of the itinerant or migratory character of the Australasian Association, a feature borrowed from the parent body. Just as the latter holds its meetings now in one city of the United Kingdom, and now in another, now in one part of the Empire, and now in another, so it has been the rule of the Australasian Association never to hold its rendezvous in the same capital twice running. Sydney may be the favored city on one occasion, Dunedin on the next, and Hobart another time. There is no possibility of exaggerating the effect of such an arrangement in awakening the intelligence of a free-

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locality to the value of scientific work, and thus obtaining recruits to the body of those actively concerned in its prosecution. That the Congress has a social as well as a purely scientific side is no doubt in part explanatory of its popularity; but neither is there any doubt that the 500 members of the association whom Mr. Keith Ward, the local secretary, hopes to have enrolled by the end of the week will include no small proportion who are very much interested in the work of the organization and grateful for an opportunity of contributing to its success. Not for nothing has Adelaide been designated the City of Culture, for no attentive reader of the newspapers can be blind to the many evidences of the estimation in which art and literature at least are widely held. If we are a little weak, it is perhaps on the side of science, for it is possible to be well-informed in literature and to possess a highly-developed taste for music and the work of the draughtsman and the painter, and to be unable, without obvious adequacy of information, to converse in the most rudimentary fashion on such subjects as the nature of molecular structure or the transmission of light, or the still-debated question of the part played by natural selection in the evolution of species.

If, as some enthusiasts hope, the outcome of next week's Congress will be the inauguration of a movement to keep permanently alive the interest in science and its claims which the gathering may be expected to kindle, the gain to all concerned—and not least the general community—will be incalculable. The advancement of science is a subject with which all mankind are concerned, but in these States, where attention is necessarily devoted very largely to utilitarian pursuits, the widest diffusion of an interest in research is one of the most urgent needs of the day. To science we owe more than to any of the branches of learning which compete with it for public attention, for there are no limits to what it has done and can do to promote the general health, well-being, and prosperity of the people. If the present generation suffer less from the ravages of disease than their forbears, if when prostrated by illness they can be cured more rapidly and certainly, they owe these benefits to the efforts of men who work with test-tube and microscope to lay bare the mysteries of the ailments that afflict poor humankind. If we can move more rapidly from place to place it is owing to the achievements of the modern engineer; if not merely the written word but the voice can overcome instantaneously the barriers of space, let us not forget the arduous labors of the electricians who have made it possible; and if, as all hope, a remedy for present economic ills is found in the further yoking of the forces of nature to industrial processes, that again is a benefit we shall owe to the giant minds which are struggling with this problem. But it is in the field of primary production that Australians feel the most lively interest in the activities of science. Already the agriculturist has had his calling revolutionised by them, and though he may fall or not even try to comprehend the significance of a laboratory experiment, he knows enough to be aware that the chemist is no less his friend than the mechanical inventor who has done so much to lighten his toil. But utilitarian as Australians are, they are not so dull or unimaginative as to have no regard for the victories won in the realm of "pure" as distinguished from "applied" science, if any distinction can be drawn between them, and they do not at some stage merge the one into the other. Our past neglect of scientific research for its own sake and without regard to material results has driven to other fields some of the most brilliant of Australasian savants, who have found too restricted the scope this side of the world could offer for abilities never surpassed, and in some cases never equalled. The land that reared them may have gained by the advertisement they have given it, but in a young and sparsely-populated country geniuses in the nature of things are not so plentiful that it can afford to part with any one of them.

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Dr. A. E. V. Richardson, M.A., who was recently appointed director of the Waite Research Institute at Urrbrae, will take up his duties there at the end of the year. He will attend the Science Congress next week.