

should be revised and more money spent on their upkeep. He was in favor of greater facilities for education in the out-back districts. The Adelaide University was suffering from lack of funds. For several years it had been in receipt of a regular grant from the Government of only £4,000, besides a subsidy on endowments. That subsidy last year was £7,000. The total income of the University was only £30,000, and notwithstanding its limited funds the institution was one of which the State could well be proud. As the Government representative on the Council of the University, he could say that it was starving for money to provide buildings and equipment for students in engineering and physics, who were enrolled there or were making application to become enrolled next year. He was hopeful that the Government would realize the necessity for meeting the immediate needs of the University and increase the annual grant from £4,000 to £10,000. He also recommended the Government to provide £25,000 for the erection of schools of engineering and physics. The Government proposed to bring down a measure for preferential voting with the existing districts, the object being to defeat the party to which the members opposite belonged. He looked upon it as being "a second best" measure; it would not be a final and satisfactory solution of electoral reform. He favored proportional representation, but if that was not carried this session the proposal of the Government was a wise one. The great need of South Australia, in common with other countries, was the spirit of harmony among the people. They had to face problems as great as in time of war. It was the duty of every member to do his utmost to prevent class bitterness and to bring the whole of the people together. Mr. Gunn secured the adjournment of the debate.

Adv. 6-8-20

THE IRISH QUESTION.
From the Rev. DAVID J. KNOX, Waverley:—I listened last night (August 4) to Mr. Heaton's remarks on the Irish question. In my opinion he has a very imperfect knowledge of the question he is attempting to handle. He favors an Irish Republic. I wish to ask Mr. Heaton to give his reasons for advocating an Irish Republic. I heard no reasons last night. What the speaker gave to the public was, in my judgment, not the mature conclusions of a student of history or the practical observations of a man of affairs, but largely an artificial concoction, a mixture of the party tract and the political pamphlet. For the rest—prattle. At the present time the Ulsterman has the almost daily knowledge of friends shot down by the deliberate assassin. Men, the very flower of our race, falling in the path of duty—dying in agony and blood. But what is this to the carpet-slipper philosopher? The only Irishmen whom Mr. Heaton found time to praise were James Larkin, the notorious agitator, and James Connolly, the "commandant-general" of the Dublin rebels, who was hanged as a traitor on May 12, 1916. Has Mr. Heaton ever heard of a great war that was on in 1916? And does he think it would have been possible to win that war with a hostile Power ruling the whole of Ireland? Or does he consider, e.g., what would happen to Australia if the British Empire were broken? Has he counted the number of days it would take for the foot of the foreign invader to reach these shores? Playing with fire may amuse the dilettante, but practical men whose houses are in danger will view the matter differently.

Adv. 4-8-20

THE IRISH QUESTION.
From H. HEATON, University of Adelaide:—The Rev. D. J. Knox takes me to task in "The Advertiser" of August 6 for my lecture on the economic background of the Irish question. He says I have a very imperfect knowledge of the subject. I admit that willingly. He says I favored an Irish Republic. He has a very imperfect ear-drum. If we lectured (or preached) only on those subjects on which we possess a very perfect knowledge, there would be few lectures (or sermons). What I said on Irish economic developments was drawn from well-known and standard works, such as Lecky, Plunkett's "Ireland in the New Century," Cunningham's "Growth of Industry and Commerce," Porter's "Progress of the Nation," Pratt's "Agricultural Organisation," Fay's "Co-operation in Agriculture," and a swarm of smaller recent books on different aspects of the subject, e.g., Hackett's "Ireland," and Connolly's writings on labor affairs. Has Mr. Knox read any of these books? I did not favor—or disfavor—an Irish Republic. I was not dealing with political issues, but with economic ones. Hence my only references to a republic were when I described Connolly's views on a

Socialist Republic, and when I suggested the nature of the problems that would claim the attention of legislators when, sooner or later, the Irish Parliament—Republican or on Dominion lines—was established. The rest of Mr. Knox's letter is cheap and irrelevant to the subject of my lecture, and therefore merits no reply.

Adv. 11-8-20

A GRADUATES' ASSOCIATION.
It has been proposed to form a Graduates' Association of the University of Adelaide. Such associations in the United States and Canada have proved an effective means of bringing the University into closer touch with the public and promoting the development of a corporate spirit among the students and graduates. A meeting of graduates will be held at the Prince of Wales' Theatre next Monday evening, at which the Premier will move the resolution that such an association be formed. The resolution will be seconded by Mr. T. A. Caterer and Professor E. Harold Davies. Other speakers will be Professor T. Brailsford Robertson, Mr. W. A. Magarey, Dr. F. S. Hone, and Dr. Dorothea Pavy. The objects of the association will be to secure publicity for the needs and achievements of the University and to promote recognition by the State of the services of the University, to act in aid of the Council of the University in matters affecting the physical, moral, and social welfare of the students; to use influence to promote the social aspects of University life, and to assist the graduates to obtain useful and profitable employment, to the end that the services of the University may find their full expression in the practical life of the community.

Reg. 13-8-20

In Executive Council on Thursday Professor T. Brailsford Robertson was appointed Honorary Bio-chemist at the Adelaide Hospital; Dr. A. R. Southwood was selected as Assistant Bio-chemist, and Dr. W. Ray as Honorary Assistant Physician. Dr. G. W. Smith was appointed medical officer at the Clare Casualty Hospital.

Reg. 13-8-20

SIDELIGHTS OF OXFORD.
South Australian Doctor's Experiences.

Fresh from the broadening experiences of intensely interesting medical work in England, Capt. H. Whitridge Davies, A.A.M.C. (son of Professor Harold Davies, of Hutt street, Adelaide), who has just returned home after an absence of three years, gave a representative of The Register on Thursday some absorbing facts concerning certain aspects of medical and social life at Oxford. "I was always keen to get to the research side of medicine," he told the pressman, "and when I was with the 3rd Pioneers in France I met a Sydney engineer, named Keatinge, who said to me, 'You ought to meet my cousin, Mrs. Haldane, wife of Dr. Haldane, the physiologist at Oxford.' I eventually got a letter of introduction to the doctor, who, by-the-way, is a brother of Lord Haldane. As a result of this I was transferred to the Ashurst War Hospital, just outside Oxford, and did interesting work in connection with the physical basis of neurasthenia and shell shock, in association with Professor McDougall, who has gone to Harvard University, America."

—Haldane's research.—
"What did research into the physical conditions reveal?" the reporter asked. "We found," Capt. Davies replied, "that you get a very definite syndrome, in which shallow breathing is the main feature. It occurs in 'soldier's heart,' neurasthenia, and invariably in chronic gas cases." The young doctor stated that he remained at Ashurst for some time, after which he went into residence at Oxford, and spent about a year at New College, working with Dr. Haldane in the latter's private laboratory. Dr. Haldane had done much research on the medical side of coal-mining, mine rescue apparatus, and deep-sea diving, and calcium disease. "With regard to dust inhalation," he explained, "we took certain kinds of dust, in order to determine whether they had the effect of producing miners' phthisis, and other kinds to see whether they would neutralize the harmful sort. Of course, we used guinea pigs to experiment upon. It has been definitely proved that coal dust is harmless. It clears itself out of the lungs remarkably quickly, and is the

means of expelling other dust—flint, for instance. Haldane was the first man to go to the front to investigate the use of gas. When he first smelt the odour of the German gas, it did not take him long to ascertain that it was Chlorine. He thereupon designed a respirator similar to that which was ultimately adopted. He also did a tremendous amount of work for the Admiralty in connection with pure air in submarines.

—Success of Australians.—
"You met many Australians at Oxford?"
—Yes, I shared 'diggings' with Henry Brose, who nearly lost his life at Ruhleben owing to bad food conditions while he was a prisoner there. Brose, who took his M.A. degree, soon after his return, is very much engrossed in Einstein's theory of Relativity, which is practically going to revolutionize physics, and he has issued a small pamphlet on it. Two of his translations have been published by Oxford and Cambridge. He is also writing a thesis—a critical and historical account of Relativity—for the degree of Doctor of Philosophy. Brose is a brilliant physicist, as well as a musician, and he is secretary of the Oxford Mathematical and Physical Society. I met another Rhodes scholar—Cairns—who is working with Dr. H. C. Bazett on the Physiology of Training, and is doing much in this respect as applied to rowing men. Lindon (Rhodes scholar) is doing physiology for the F.R.C.S. with Professor Sherrington, and demonstrating in anatomy. Oswald Riehbeth, formerly of Adelaide, who has taken his M.A. at Merton College, was the moving spirit in forming the British-Australian University Association. It will be extended to all the other universities in the United Kingdom, at which there are, and have been, Australians. An interesting personality who came out on the boat with me was Ralph Seguit, a Broken Hill boy. He went to the war as a private, and finally got a commission as an Intelligence officer. After the war he went to Oxford, and did the geology course—which usually takes three years—in 12 months. He had never touched the subject before in his life, and got through with second-class honours, and his attainment constitutes a record. He intends to return to Oxford to carry on with research.

—The Social Side.—
Capt. Davies said the Australians were most popular at Oxford now, and the man most talked about was Reg. Bettington, formerly of Sydney. When the cricket season opened he got into the Freshmen's team, and took about eight wickets for a phenomenally small number of runs. He subsequently played for Oxford, and gained his blue shortly after. Just before Capt. Davies left, Bettington had the second best bowling average in England. Dealing with the social side of university life, Capt. Davies said the newly formed Graduates' Association in Adelaide was a step in the right direction. The disadvantage of the Adelaide University, he contended, was that the social side was absolutely uncatered for. The little informal gatherings at Oxford marked the difference between the real university and what might be merely a glorified technical school. The universities here took no interest in politics, even in an amateur sort of way. At Oxford they had the Union, at which debates took place once a week, and the university was doing a great part in producing men learned in the art of running a country. In addition to the Union, practically every college had its own political debating club. There was every shade of politics, from High Toryism to out-and-out Bolshevism. There were also all sorts of social clubs. Capt. Davies will return to England in November, and next January will do research work in clinical physiology at Edinburgh University for at least a year.

Adv. 18-8-20

LOANS FOR UNIVERSITY STUDENTS.
A University Bill introduced into the Victorian Parliament provides for an increase of the endowment from £21,000 to £20,000 and for a complete system of loans to students throughout their courses, if it were thought necessary that they should be assisted. Commenting on the matter on Tuesday, Professor Mitchell, Vice-Chancellor of the Adelaide University, said the suggestion probably came from the original Carnegie bequest to the students in the Scottish Universities. Mr. Carnegie made available a large fund from which students could draw for their fees, and it was left to them whether they returned any sum received. The advantages of such a plan were obvious. Many a student, in order to continue or carry further his education, would be very willing to accept loans of such a kind. It would be useful in the Adelaide University.

EDUCATIONAL BEQUESTS AND SUCCESSION DUTY.

Among the Bills of which notice has been given in the House of Assembly is one to exempt the University from liability to pay succession duties on certain bequests. The question first arose in relation to the generous offer by Mr. Peter Waite of his Urubrae house and grounds for the furtherance of agricultural science. One of the conditions was that the gift should be subject to the life tenancy of his wife and himself, and that the University should not be liable for succession duty when the property passes into its hands. In 1918 Mr. Waite made a second gift by transferring the equivalent of 5,800 shares in Elder, Smith & Co. in trust. During his life the income is to be paid to Mr. Waite. In round figures the gift represented £90,000, and it is a matter of great importance to the University that it should be free from a heavy deduction under existing legislation. It is pointed out that the State Succession Duties Act of 1893 does not provide that bequests to institutions for educational purposes shall be exempt from duty, except in the case of books, prints, pictures, statues, gems, coins (not being current coins of the realm), medals, specimens of natural history, and other specific articles, to be kept or preserved, and not for the purpose of sale. The Federal Estate Duty Act, however, encourages public-spirited citizens by providing that duty shall not be assessed or payable upon any bequest for religious, scientific, charitable, or public educational purposes.

Adv. 23-8-20

Mr. A. E. Dawkins, B.Sc., who has been awarded a science research scholarship by the Royal Commissioners for the Exhibition of 1925, will leave for London early in September. The scholarship is of the value of £200 per annum, and is tenable for two years. It is to enable students who have given distinct evidence of capacity for original research to continue their studies. Mr. Dawkins graduated in science in 1913 with first-class honors in chemistry. He is a son of the late Mr. Alfred Dawkins, formerly secretary of the South Australian Gas Company.

Adv. 26-8-20

CLAIMS OF STUDENTS.
The Minister of Education informed Mr. Allen, in the House of Assembly on Wednesday, that it was not his intention to take into consideration the claims of students attending the University Training College with the view to increasing their annual allowance on similar lines to the allowance made to qualified students dated from July 1, 1920.

Reg. 30-8-20

STRAIN AND STRESS.

PROBLEMS FOR SCIENCE AND ENGINEERING.
LONDON, August 26.
Professor C. F. Jenkins, in an address on engineering delivered at Cardiff before the British Association for the Advancement of Science, said the time had come to thoroughly overhaul and revise the fundamental data on which computations of the strength and suitability of materials were based. During the war aeroplane construction revealed remarkably how inadequately the problems of stress and strain had been solved, especially in regard to un-isotropic materials, and in a lesser degree with isotropic materials. There was practically no theory in a form available for the engineer by which the strength of timber could satisfactorily be calculated. The outcome of researches during the war had yielded some reasonably accurate data. Professor Jenkins urged the necessity of undertaking the fullest research work on the subject.