

trical engineer, who organised and controlled those great schemes of electric supply that meant so much to their comfort and convenience. The list could be multiplied. There were the irrigation engineer, the marine engineer, the mining engineer, and so on.

#### The Angas Scholarship.

It was interesting to note that one of the early benefactions received by the University was one of £4,000 from the Hon. J. H. Angas for the purpose of founding the Angas engineering scholarship, the object of which was to "encourage the training of scientific men, and especially engineers, with a view to their settlement in South Australia." (Cheers.) The scholarship was now awarded every two years, the scholar going to England or America for that period to gain further engineering education and experience. Eighteen awards had been made, and of those scholars all but four were in Australia. Dr. Duffield, the Angas scholar of 1901, was in charge of the new Solar Observatory at Canberra. (Cheers.) Five of the scholars were in South Australia, three as engineers in the Government service, and two as lecturers at the University. When the Angas scholarship was first given the University had to award it to men trained in arts or science, and they had to begin their engineering education when they went away. Now the award was made to men already trained as engineers, and the scholarship was utilised to enable them to gain experience abroad. The University of Adelaide, under Professor Chapman, had turned out many capable engineers. With that great new school and equipment, they might confidently look forward to an even more brilliant future. The ambitious young men of South Australia whose thoughts turned towards that important profession were indeed fortunate in having that magnificent building and equipment placed at their disposal. The Government willingly voted the sum of approximately £5,000 so that they could fully equip the building. The opening of those lecture rooms and laboratories in physics and engineering undoubtedly marked one of the most important forward movements recorded in the history of the University. (Cheers.)

#### "A Triumphant Phase."

Professor Chapman, in moving a vote of thanks to the Premier and the Minister of Education, said they were pleased to see them, not only on personal grounds, but as a tangible indication that the Government extended their sincere sympathy to the Council of the University, which was the great school for the dissemination of knowledge and the main inspiring force for the intellectual progress of the State. It was the first time in the history of the University that the Government had shouldered the full responsibility and cost of the efforts necessary for its development. The building was handed over free of debt. (Cheers.) It was to be devoted to physics and engineering. So far as the engineering side was concerned, to-day marked a triumphant phase in a very long struggle. Soon after engineering night classes were started in 1890, they put the engineering subjects into the B.Sc. degree course. They proved popular and they started full diploma courses. By 1900 they had full diploma courses in mining and metallurgy. They extended them and soon had diploma courses in all departments of engineering. With them they gave the degree of B.Sc. When the University Act was amended they were given power to grant degrees of engineering. They had been working for a long time under great disadvantages both in regard to accommodation and equipment. The Government had removed the accommodation disadvantages, and the Council of the University was generous to the school in the equipment which it was providing. (Cheers.) They now had a building and equipment which would compare worthily with those in the other Australian States. Although they had been deficient in equipment it would be a mistake to think that they had not turned out fine students. They had every reason to be proud of the way in which their engineering graduates had held their own in the Australian States and throughout the world. They had no reason to be ashamed of them, but every reason to be proud of their records. (Cheers.) It would be obvious to them that the engineering school must work in close co-operation with the Government Departments, because so much of the engineering work in the States was done by the Governments. In South Australia they had had Governments who preached the benefits of scientific and technical instruction, and who had been generous in providing for that instruction, but did not practise what they preached in their own departments. Competent engineers must have a scientific as well as a practical training. Men for Government departments should be recruited mainly from the sources which they supplied. Some time ago he had conferred with the heads of Government departments, and it was decided that before young men could enter the engineering departments they must pass in certain scientific subjects. However, they must work in still closer co-operation. He paid a tribute to the Architect-in-Chief, who had been most anxious to do the work well in connection with the new building.

#### Hard Thinking Necessary.

Professor Kerr Grant, in seconding the motion, which was carried with acclamation, said for many years there had been an extreme need for improved conditions for the teaching of engineering and physics at

the University. The conditions at the old building were almost intolerable; they certainly were exasperating. Now those departments were amply provided for for some time to come, but the provision was not too ample. They had enough, but not a bit too much. Already, every room in the physics department of the building was occupied either by teachers or used for experimental work. One result of the improved facilities had been that already four men were doing post-graduate work, and he hoped there would be many more. Physics was a most important science, and it was becoming still more important. That was evidenced by the large sums of money which were being spent in physics laboratories and apparatus connected with other universities. Physics was a difficult subject for the student, and he had often been asked whether he could not make the course soft, popular, and spectacular, but his reply had always been that if he did that he would only be robbing the subject of its real value. To turn out one man who could think hard was much preferable to turning out 100 men who could only think "soft." A lot of soft thinking was going on, not only in the University, and at times was attended by disastrous results. So long as he occupied the Chair of Physics he intended to think hard. The teaching of physics was a thankless task, and he received little gratitude for it; more often it was the reverse. It had been proved in recent years that the use of radium alleviated, if it did not cure, the sufferings of people with malignant diseases; but its use required special manipulation, and there was need for a properly equipped central station in the State. The radium for that alone would cost £10,000, and the purchase of plant would probably run into several thousands more. He intended to go for a holiday, and while away would make enquiries so that when he came back he would be in a position to ask the generous public of South Australia to assist in raising £10,000 or £15,000 for the installation of a radium plant. The fields of research were wide, and they might devote more attention to the exploration of the inside of the atom. What was partly necessary to do that would be to have a machine capable of the generation of electricity at very high voltages. He believed the construction of such a machine was only a matter of time, money, and hard thinking.

The visitors were afterwards entertained at morning tea, and an inspection of the building was made.

## THE JUBILEE DINNER.

### A BRILLIANT GATHERING.

At the invitation of the Chancellor, the Vice-Chancellor, and Council of the University of Adelaide, nearly 200 guests were present on Tuesday evening at the jubilee dinner held in the Adelaide Town Hall. It was a brilliant gathering, and four long tables ran at right angles to the table where the Chancellor (Sir George Murray) presided. All the tables were beautifully and lavishly decorated, chiefly with sweet peas, primulas, irises, and maiden-hair ferns, and the view of the stage and organ gallery was blocked by an arrangement of palms.

The Chancellor was supported on his right by his Excellency the Governor (Sir Tom Bridges). Also seated at the head table were the Vice-Chancellor (Professor W. Mitchell), the Chancellor of the University of Sydney (Sir William Cullen), the Chancellor of the University of Melbourne (Sir John MacFarland), the Vice-Chancellor of the University of Sydney (Sir Mungo MacCallum), Sir Henry Barrington, the Premier (Hon. J. Gunn), the Minister of Education (Hon. L. L. Hill), the Chief Secretary (Hon. J. Jelley), the Commissioner of Crown Lands (Hon. T. Butterfield), the Attorney-General (Hon. W. J. Denny), Sir Josiah Symon, K.C., Sir Laucelot Stirling, Sir Langdon Bonython, Sir Joseph Verco, Sir George Brookman, Senator Sir Henry Barwell, the Lord Mayor (Mr. Wallace Bruce), Archdeacon Whittington, and Professors J. R. Kay-Mouat, E. H. Rennie, R. S. Wallace, and H. Darnley Naylor.

#### The Governor Honored.

The Chancellor, after proposing the loyal toast, which was heartily honored, submitted that of his Excellency the Governor, who, he said, was not only the official Visitor of the University, but a great deal more besides. His Excellency was endowed with literary gifts of a high order, and he would forgive him (the speaker) for saying that he had heard nothing more beautiful than the speech made at the dedication of the soldiers' cemetery at West-terrace, and had read nothing more graphic than his account of the battle of Waterloo, written for a magazine some years ago, and published in "The Advertiser" on last Waterloo Day. His Excellency was also a great soldier, and he had it on the authority of Lord Allenby that his Excellency was one of the most brilliant cavalry leaders during the Great War. (Cheers.)

#### The Governor's Reply.

His Excellency, in responding, said he felt very diffident in addressing them. As an ignoramus, however, he was much impressed by a remark of Sir Henry Wilson, who was assassinated in London,

During the war he had to go through a ceremony, such as that which they enjoyed on the previous day, and he was very much harassed at the time. Sir Henry was a member of the War Council, but could not get anybody to see eye to eye with him. He rather electrified the dons by solemnly propounding that they should found a chair of stupidity. (Laughter.) It was his experience that if you were only stupid enough you could get anything you wanted. (Laughter.) The big business of the celebrations was now over. The shouting and the tumult had died, and the Titans were now at play. Even the Chancellor did not look so austere as he did on Monday. Referring to the official mace, his Excellency said the Chancellor now had his "battleaxe" behind him instead of in front. (Laughter.) It was a very great pleasure to have so many friends of the University present that night, especially those who had come from over the borders. Dr. Johnson said they must keep their friendships in good repair, and how better could that be done than by making merry together? He thanked the Chancellor for the graceful way he had proposed the toast, and for the many flattering things he had said. His Excellency concluded by remarking that he felt sure there was some answer to it, though, for the life of him, he could not think of it. (Laughter.)

#### The Parliaments of Australia.

Professor Mitchell, in proposing the toast of "The Parliaments of Australia," referred to the early history of the University, and said he had remained in London he would, last week, have spoken at a conference of Empire universities on the relationship between the State and the university. Had he been there he would have outlined the policy of the University of Adelaide for the past 50 years, from the time when it was regarded as a flower until it realised that it was really the root of the life of the State. The history of the University of Adelaide would have answered the suggestion of fear that the universities might be controlled by Parliament and that they would not be financially supported. Universities had nothing to fear from democratic Governments. The University of Adelaide, from the first, was granted freedom, but at the same time responsibility was placed on those appointed to control the institution. In the original Act provision was made that those who should direct its affairs were people who had passed through a university. Later on, members of Parliament were included on the council. They saw the efficiency of the universities of Germany and then looking to the universities of America, they found some with huge capital. That was hardly the ambition of Adelaide. Turning away from those Universities they had seen State Universities of the United States, 30 of which had multiplied their income ninefold in 18 years. That showed that those universities were doing good work. Professor Hammond arrived at Adelaide, and said he had not found a university in Australia, meaning that the Australian Universities were confined to what in America was called college education instead of carrying on post-graduate work for the advancement of science, or research. Then they approached the Government of the day with a request for assistance in the direction of continuing the 5 per cent. payment on all bequests to the university beyond the specified limit of £10,000. Sir Henry Barwell, as head of the Government, had taken their request to Parliament, and the then leader of the Opposition (now the Premier) had wholeheartedly assisted in getting the necessary legislation passed. (Cheers.) The learning had been sound at the University throughout. What would the country have been if the institution had not been equal to its pretensions? It would have been a danger if the University had professed to produce professional men, but had turned them out in an inferior manner. After the assistance afforded by Parliament, the University could say that whatever Parliament might be in other respects no party spirit had been shown in regard to it, and that the members of the Parliament had been in the deepest and most literal sense of the word statesmen. (Cheers.)

#### The Federal Parliament.

Sir Henry Barwell, in acknowledging the toast, said the Vice-Chancellor had not made much reference to the Federal Parliament, possibly because there was not a great direct connection between that body and the Universities of Australia. The assistance he, as a former Premier of the State had been able to give was limited, only by the financial resources of the State. He had no doubt some of their guests would pin their faith to one party and some to another, and some would say "A plague on all your parties. We will have none of them." Yet there were men they could all agree with without regard to party. For instance, they would all agree that in Mr. Bruce they had as Prime Minister a man of transcendent intellect, strength of character, depth of conviction, and virile patriotism. Whether or not they agreed with all Mr. Bruce said, they knew he was wholeheartedly devoted to the interests of the Empire. No man could have a stronger conception of the destiny of the British Empire, or more faith in it. The Federal Parliament had just concluded a session which had been productive of more important legislation than any which had preceded it. There were matters he could speak of, but dare not, such as the Referendum—(laughter)—but there were some others that deserved

public notice. He mentioned the North Australia Act, the Oodnadatta Railway Act, the Migration Commission, and the Science and Industry Research Act. As they knew, Mr. Gunn had been appointed a member of the Migration Commission, an appointment that would give satisfaction to every section of thought in South Australia. (Cheers.) He could quite understand that it would give satisfaction to the leader of the Opposition (Mr. Butler) and to Mr. Gunn himself, because he believed the Premier had discovered that the office was not a bed of roses. He could congratulate him on having escaped from the worries and troubles of office, and at the same time at having been appointed to an office of high responsibility. The Science and Industry Research Act, passed last year, was an important measure. These departments had been placed under the control of a central council, and it was the duty of the central council to advise the Government on all matters requiring scientific investigation. It was gratifying to know that the chairman of the State committee associated with that council belonged to their own University, Professor Bradford Robertson, who thereby became one of the members of the central council. The Federal Parliament would meet in Canberra next year. In this connection it was indicative of the strong loyalty of the people to the throne of England that intense satisfaction should be felt and expressed at the coming visit of the Duke and Duchess of York. (Cheers.)

#### Value of the University.

The Premier, responding on behalf of the State Parliament, said the proposer had spoken of the sympathy of Parliament towards the University, and he agreed with Professor Mitchell when he said the University had nothing to fear from a Government or Parliament elected by a democracy. He believed any Parliament elected in South Australia would recognise the value of the University. They were all proud of the fine buildings that had been erected on North-terrace. That might be the last opportunity he would have of making a speech as a politician, at least at a public gathering. Sir Henry Barwell had been good enough to make reference to his transition from State politics to the Federal Development and Migration Commission. It had cost him a great deal of thought, but he had felt that he could not refuse the wider field after he had been called on as one of four men to report on the development of Australia. (Hear, hear.) It was too big a field from which to stand aside. They knew of the need there was for concentration on the development of Australia, because their national debt was mounting up. One thing that would redound to the credit of the Commonwealth Government was the fact that they had concentrated upon that very great problem of further development and the absorption of greater population in Australia, and he hoped to play a worthy part in it. (Cheers.) He was pleased to have taken part in the great jubilee. All connected with the University had reason to be proud of the achievements of the past, and his earnest wish was that success would be their lot in the future. (Cheers.)

#### Question of Financial Assistance.

Sir Mungo MacCallum proposed "The University of Adelaide." It was, he said, an inspiration to remember that within a century and a quarter, and within 60 years of the settlement of the different States, a University had been established in each. Each one was doing excellent work, and was destined to do it more excellently in future. Adelaide had good reason to believe in the injunction, "Rejoice in they youth." She had honored founders, and men on her staff whose work was an abiding heritage. She had had the munificent support of large-hearted well-wishers. All through her career down to recent benefactors, she had, like the rest, subsidies from Governments. The University had shown herself worthy of the thought and money devoted to her well-being. Their great position had been attained in half a century. It was the first step that cost the money. The progress of the Melbourne and Sydney Universities after their jubilees was out of all proportion to what it was before, and probably the position would be the same in connection with Adelaide. He wished to express their pride that six Universities were established in this new country so early in its history. Much as they had received from various Governments, it was little in comparison with the grants made by American legislatures. Splendid as were the gifts from private benefactors, the number was small in comparison with the multitude in America, and such benefactors stood out as honorable exceptions rather than as typical figures. Nevertheless, the Australian Universities were doing yeoman service. They were in many cases understaffed and under-equipped, and some of them staggered under burdens they could hardly carry. The harvest was plentiful, but the laborers were few. They must, however, pray to the lord of the harvest—in this case the people of Australia—to provide them with the requisite tackle. (Cheers.)

Professor Rennie responded. He was glad the toast was proposed by the Vice-Chancellor of the University of Sydney, of which he was a graduate. If he might be pardoned for saying so, he was, with few exceptions, the oldest member of the University of Adelaide. With the exception of the Chancellor and two others (Messrs. C. R. Hedge and Fuller)