

he was the oldest person connected with the staff. As a member of the council and staff for 40 years, he could explain what the Chancellor meant when he alluded to the absence of friction between the council and staff on the previous day. There had been differences of opinion, but no real unpleasantness, and that was due to the fact that the chief committee comprised not only members of the council but professors of the University. It would be difficult to find men to govern a university in Australia without having some experience of teaching, and in regard to the question of finance, in which the professors took no part, he might say that even university professors might have some common sense. As in Sydney, much progress had been made at the University of Adelaide, and he was thankful to the Government for assistance rendered in the provision of the new building opened that morning. More attention should be paid to the facilities for the department of chemistry at the University. (Cheers.)

"Sister Universities."

Sir Joseph Verco said he esteemed it a personal honor and a pleasure to propose "Sister Universities." He could assure them that those universities had their heartiest goodwill and their best wishes for continued progress and prosperity. Delegates were present representing Oxford and Cambridge, which were 800 years old; Naples, about 700 years; Pavia and St. Andrews, between 500 and 600 years; Glasgow and Aberdeen, between 400 and 500 years; Columbia (New York), about 170 years; and then followed 28 below the century. Twenty had been founded since he was born, so that they would not be very old. (Laughter.) Only last year another little sister was born in the mandated territory of Palestine, and they wished her every possible blessing, a sturdy childhood, and a splendid maturity. Last of all came the University of Reading, founded in 1926. Who had not felt proud and pleased as he had trodden the cloisters of those universities, which for centuries were seats of learning. Yet could they not feel pride and pleasure as they regarded their more recent Universities. The Adelaide Medical School at the University was forty years old, and in it more than 300 bachelors of medicine and surgery had graduated. (Cheers.) On the medical register in South Australia there were 428 names. Of them 224 were Adelaide graduates, and 93 graduates of the Universities of Sydney and Melbourne. Thus nearly 75 per cent. of the lot were of Australian manufacture—and a splendid brand it was. (Cheers.) Of the remainder, about 20 had "gone west;" half a dozen lady graduates had abandoned medicine for matrimony, several were on the mission fields, and some were in the other States. On the lecturing and teaching staff at the University, and on the honorary staffs of the Children's Hospital and the Adelaide Hospital, were 43 Australian graduates, and only six who were trained elsewhere. It was clear, therefore, that the Australian product was replacing the imported. The Medical School was merely a sample, and claimed a superiority over the other schools. The Adelaide University recognized the high standard of the sister Universities, and their desire was that by conferences such as had been held, and by collaboration between the representatives of the several faculties, they might each adopt that which was best in every University, and so maintain all on the highest level of efficiency. (Cheers.)

Professor R. S. Wallace, in responding, thanked the speakers for their kindly references to the sister Universities. They were all in very good heart. They were invited even in their poverty. After all a university might be too rich. As an arts professor he thought even a little Bohemianism was not a bad thing in learning.

Professor J. R. Kay-Monat replied on behalf of British and foreign universities. The tables at the dinner were most beautifully decorated with flowers arranged by ladies connected with the University.

REG. 18.8.26

"MENTAL DISCIPLINE."

A Professor on Physics.

Speaking at the opening of the new physics and engineering building at the University on Tuesday, Professor Kerr Grant said that to learn physics was hard mental discipline. He had frequently been asked whether he could not make the subject a little bit more easy and attractive. His reply had been that he could easily make it more interesting and spectacular. He could make it "soft," but in making the study of this subject spectacular and soft they would only breed trouble. A man who could think hard was of more value to the community than one who could think "soft" and so long as he oc-



PROFESSOR KERR GRANT.

cupied the Chair of Physics he would try to train men to think hard. It was a somewhat thankless task, and he did not reap gratitude for it; more often it was the reverse. There were compensations, however. Two of the best students they had had in physics had asked him if he could find any way by which they could proceed with the subject. They had to make their living, and they wanted to carry on because they said they were just beginning to find out what a splendid subject it was. These were the compensations of the teacher's life.

Radium in Disease.

Professor Kerr Grant went on to say that there were certain matters which were cognate of physics, which would add considerable expenditure, but which he thought should be undertaken by the University. To cite one specific illustration, it had been proved during recent years that by the use of radium certain diseases, if they had not been entirely cured, at any rate had been alleviated by the use of radiations from radium. In the latest form of treatment that radium had to be used in a special way. It was rather expensive, and required expert manipulation. Once so installed it could be used in a much more effective way than was the practice here at present. It required only one central installation for the needs and treatment of the whole population of the whole state. Radium was put into certain vessels and the active gas which came off from it was pumped off, sealed in tiny tubes, and sent to any part of the State, where it was wanted. That was a thing which he hoped before many years would be installed here. It was going to be very expensive. The radium alone would cost more than £10,000, and the additional plant £7,000. They would like to have that. He intended to make all enquiries about this particular matter in other countries, and when he return he hoped they would raise the money to install a special radium plant.

The Inside of the Atom.

Professor Kerr Grant said that another item of research just being opened up was the field of exploration of the inside of the atom. This would open a new world in physical research. What was partly necessary for that was a machine capable of developing electricity at very high voltages—about 10 times as high as the lowest we were producing here; about 10 million volts. He was absolutely convinced that the construction of such machine was only a matter of time and money and, of course, hard thinking. That was a field of research, which he hoped they would open up here before long, and when they did he intended to ask the citizens of South Australia for money to support it.

REG. 18.8.26

UNIVERSITY DEVELOPMENT.

PHYSICS AND ENGINEERING.

FINE NEW BUILDING OPENED.

The principal function on Tuesday in connection with the University jubilee celebrations was the opening by the Premier (Hon. J. Gunn) of the fine new physics and engineering building, which has been erected by the Government to provide more adequate accommodation for the teaching and study of those subjects.

There was a large gathering in the spacious lecture theatre, which will accommodate 300 persons. The Chancellor (Sir George Murray) presided, and in addition there were present the Premier, the Commissioner of Public Works (Hon. L. L. Hill), the Chancellor of the Sydney University (Sir William Cullen), the Chancellor of the Melbourne University (Sir John McFarland), Sir Mungo MacCallum (Vice-Chancellor of the Sydney University), Sir Henry Barraclough, Professor W. Mitchell (Vice-Chancellor of the Adelaide University), Professor R. W. Chapman (Engineering), and Professor Kerr Grant (Physics), the Chief Secretary (Hon. J. Jelley), the Director of Education (Mr. W. T. McCoy, B.A.), Mr. W. J. Young, members of the professorial staffs, and others.

An Important Ceremony.

The Chancellor, in introducing the Premier said that the ceremony to be performed that morning was not the least important in the programme arranged by the University for the celebration of its jubilee. This building had been erected with funds provided by Parliament, and under the direction of the Architect-in-Chief, to provide more adequate accommodation for the teaching and study of physics and engineering. (Applause.) It had taken a long time to construct, but the end having now been reached, the Premier had kindly consented to formally hand it over to the University, and to declare it open. (Applause.) When the University had begun its career in

it had had no power to great degrees. (Applause.) In 1907 Mr. Chapman had been raised by the University to the dignity of Professor of Engineering, and in 1910 Mr. E. V. Clarke had been appointed lecturer in electrical engineering, and Mr. H. W. Gartrell, lecturer in mining engineering. Diplomas in these subjects had been granted, but the only degrees which could be conferred were the bachelor and doctor of science. In 1911 Parliament authorized the granting of the degrees of bachelor and master of engineering, and these had been given equal status with those granted by other Universities in the Empire by Royal Letters Patent in 1913. To prevent overlapping in the work of the two institutions, agreements had been entered into between the University and the School of Mines under which students of the University received their instruction in mining, metallurgy, surveying, and building construction at the School of Mines, and students for the fellowship course of the School of Mines received instruction in physics, chemistry, geology, and mineralogy at the University. Now, thanks to this splendid building, the pressure from want of space would be removed, and not only would Professor Kerr Grant and Professor Chapman be given greater facilities for their work, but the students of both the University and the School of Mines would be benefited, for the arrangements for co-operation will continue.

Expressions of Appreciation.

The equipment of the building, the Chancellor concluded, would involve both time and expense, but they already had to acknowledge many valuable gifts of machinery and apparatus from various donors, for which they were deeply grateful. He would not attempt to describe the building. Personal inspection would convey more than any words of his could do. But he would like to express appreciation of the design and workmanship for which the credit was mainly or wholly due to the Architect-in-chief (Mr. A. E. Simpson). (Applause.)

In handing the Premier a souvenir key to the building the Chancellor facetiously observed that he had been told that it would not admit the Premier at other times should he be disposed to try to get in.

Recognition of Engineering Degree.

The Premier, in accepting the "handsome presentation," added that it would always bring back to him a pleasant memory of the declaring open officially of that fine building. There had been a time when universities would have little to do with such practical subjects as engineering and commerce, and it was interesting to know that the first engineering classes held in connection with the Adelaide University had been evening classes in electrical engineering, and these had been started about 1890. At first the University did not have the power to grant degrees in engineering, and the authorities had had to be content to give the men who qualified in engineering the degree of bachelor of science. This state of affairs had been rectified in 1911, and Parliament amended the Adelaide University Act, which authorized the granting of the degree of bachelor of engineering. It would thus be seen that the engineering graduates were comparatively young men, but many had already shown evidence of their ability, and held important positions in the various States of the Commonwealth. Of the earlier students many had been mining men, and some of these had played an important part in the development of Broken Hill. The engineering school catered for the various branches of engineering—civil, mechanical, mining, and electrical. Up to date 151 students had obtained engineering degrees, and at present there were about 100 students. The Adelaide University and its students were indeed fortunate in having at the head of the Engineering School such an able teacher in the person of Professor Chapman, who had been connected with the subject of engineering at the Adelaide University from the beginning. (Applause.)

A Post-War Necessity.

After the war there had been a large increase in the number of students, and the necessity for increased accommodation had become acute, especially in those departments dealing with pure and applied science. So far as the biological sciences were concerned, this had been met in a large part by a handsome donation towards the construction of a suitable building by the late Mr. John Darling, and medical sciences.



PROFESSOR R. W. CHAPMAN.

1876, the possibility of laboratories such as these being required within 50 years had not been dreamed of. For the Professor of Mathematics, to whom also had been assigned the duty of lecturing on physics, only these comparatively small rooms had been provided in the original building. To others in the basement had been afterwards fitted up for electrical work. This has been the whole of the accommodation Professor Lamb and his successor, Professor Bragg, had had at their service. Yet, here it was, he might observe in passing, that they had begun their researches in gravity and radioactivity for which their names had since become famous. No further laboratories had been provided until the Prince of Wales Buildings—of which the foundation stone had been laid by His Majesty the King when Duke of Cornwall and York in 1901—had been completed. A set of rooms then had become available for Mr. Chapman, the lecturer in applied mathematics.

Steadily Increasing Growth.

The growth of the University had been during all this time steadily increasing. The classrooms had become overcrowded. Lectures had had to be duplicated. The need for special training in the applied sciences, mining, metallurgy, electrical and civil engineering had become insistent. The School of Mines and Industries, founded through the liberality of Sir George Brockman, and presided over and added to by Sir Langden Bonython, had lessened the situation to some extent, but

REG. 21.8.26

Lady Mawson, accompanied by her two children, left Adelaide on Friday afternoon by the express for Melbourne, where they will leave by the Ballarat for Europe. Sir Douglas Mawson, who is attending the Science Congress in Perth, will join the boat at Fremantle. Sir Douglas and Lady Mawson will be absent from Australia about eight months. Sir Douglas will lecture in America for two months at the beginning of next year.