

The witness replied that the work had not been neglected. Professor Chapman had never ceased to carry out the duties since he had been appointed. If they got another professor Professor Chapman would have entire control of the engineering, and the new man would take charge of mathematics. He was personally interested in adding the subject of astronomy to the latter chair.

SCHOOL OF AGRICULTURE.

Sir Samuel Way went on to say, in answer to questions from the chairman, that the council would gladly welcome the attachment of Professor Lowrie to the University as Professor of Agriculture. Already there was a course of agriculture at the University, and the teaching at the Roseworthy College was accepted as part of the course, and several students had already graduated in agriculture. One great ambition of the University was to have a chair of agriculture, and it was fortunate for the State that the Government had secured the services of such a qualified man as Professor Lowrie.

QUESTION OF INCOME.

The witness said that the efficiency of the University did not depend so much upon grants as upon an assured income, and he regarded as a wise suggestion the proposal of the chairman that an arrangement should be made whereby the Government would guarantee the University an income of a certain amount sufficient to cover its expenses. He thought it would be advisable for the commission to visit other universities in Australia, accompanied by an expert, in order to ascertain what was being done in those institutions.

SCHOOL OF MINES.

The witness highly eulogised the work that had been done by Sir Langdon Bonython and the School of Mines. In establishing a course of mining the former had done a great work. It was a professional course that had been recognised, and had given the number of young men in South Australia a professional training in engineering, and enabled them to embark upon useful and honorable careers. This admirable work had been loyally seconded by the University of Adelaide. From the outset until the present time the University had supplied the backbone of the teaching of the School of Mines. If they divided it into halves a great deal more than half would have to be placed to the credit of the University. But they had never been anxious to diminish the credit due to the School of Mines. The University professors had given their advice, and the students of the school had had the benefit of it.

The Chairman—Have you studied the Education Bill recently introduced?

The witness said he had not yet had an opportunity to do so. Continuing, Sir Samuel remarked that apprenticeship had died out, and the School of Mines was furnishing the instruction that apprenticeships used to do in a less perfect degree. In doing that it was an important factor in the industrial community.

PROFESSOR MITCHELL'S EVIDENCE.

Professor Mitchell said he had been connected with the University for 16 years. He was first engaged for five years, and since then he had been appointed from year to year. In his opinion an education board for the purpose of advising the Minister would be very useful. Regarding the University extension movement, the demand had been very great, and South Australia had been most successful in this direction.

The Chairman—Touching upon the Rhodes Scholarships, does this movement to take away our best scholars and leave them in England meet with the approval of the University?

The Witness—That result is unfortunate, but it is a very great stimulus to students to know that the Rhodes scholars can make a name in England.

The Chairman—Do you think something might be done in the way of the Government insisting that the scholars should return at the end of a certain period?

The Witness—It is the deliberate resolve of the Rhodes trustees that the scholar ships should be unconditional. The Government has no say in the matter. We might, say, however, that if a certain course was adopted by the student a certain course would be taken by the Government.

PROFESSOR CHAPMAN.

Professor Chapman, M.A., professor of mathematics and mechanics, confirmed what the Chancellor had said in regard to the teaching of engineering. The fact that they did not have a chair of engineering was due entirely to want of funds. He would lay it down as a fundamental principle in seeking to establish any scheme of higher education that the highest technical education should be given in connection with the highest scientific instruction. Regarding agriculture, they did not want to put

an ordinary farmer through the ordinary University course, but provision should be made for giving scientific education in agriculture, and this was best done in the University. An agricultural expert required a knowledge of chemistry, biology, and botany, all of which were essentially University subjects.

CENTRAL SCHOOL OF ENGINEERING.

Mr. Styles—Is the present agreement between the University and the School of Mines satisfactory?

The witness said that in that sense that the students attending the present course were getting good instruction, the arrangement was satisfactory. But the agreement really represented the only solution of a serious difficulty that was possible under the present constitutions of the University and the School of Mines. But it was a most unsatisfactory thing on which to build a permanent system. These two institutions had been established side by side, and the result of their growth and development had been that they had become competitors in the teaching of certain subjects. The friction that might have resulted had been reduced by the framing of this agreement. But there were the gravest objections to that agreement when viewed as a permanent solution of the trouble. What it meant at present was that certain portion of the higher engineering education was allotted to the University, and the rest to the School of Mines. All should be done in one

school of engineering, as the present system meant that neither institution could really develop a great engineering scholar. They would always suffer from this divided control. They should look to the establishment of one great central engineering school that would be a real help to the student. If they could do that their efforts would be concentrated and not divided. No matter what the future prosperity of the State might be, the present agreement crippled any attempt on the part of the University to develop a school that would rival those of Melbourne or Sydney. There was no good engineering laboratory in Adelaide. To get one was going to be a very costly thing, and the question was—Where was it going to be put?

In answer to Mr. Styles, the witness said that at the time when the University started teaching engineering it would have been impossible for the School of Mines to have started one.

AVOID OVERLAPPING.

The witness said that the proposal of the Minister of Education that the Government should take over the control of the technical schools in the country was unavoidable. In the one place they would have a high school, and in many cases a technical school, and they would be teaching the same subjects. If the two were under separate control friction could not be avoided.

THE UNIVERSITY'S NEEDS.

The following statement of the council regarding the University's needs was tabled:—"The needs of a university are determined not so much by the number of its students as by the standard of its degrees and by the courses of instruction which it should offer. The number of students at this university is relatively large compared with the population of the State, but the buildings, laboratories, and the numerical strength of the staff are not adequate to the work that is now undertaken, and still less to the work that is waiting. It is to be remembered, too, that a university exists not only for instruction, but for the promotion of knowledge. In our State many problems for research present themselves, the solution of which is of great practical and national importance. It would be an obvious advantage to the State that there should exist trained bodies of men capable of investigating such problems, and it is of the utmost advantage to students to have experience of the methods of dealing with them. At present even the best students, once they have taken their degrees, leave the University immediately, and it would be very desirable to retain them for a year or two, during which time they could specialise, carry out researches, and, what is very important, give assistance in teaching and laboratory practice. The council and the professors earnestly desire that the university should be regarded as the scientific centre of all departments of the national life. The needs of the university may be set out under the following seven heads:—(1) Increase of present salaries; (2) additions to the staff; (3) new buildings; (4) complete equipment of laboratories; (5) additional annual equipment; (6) university grounds; (7) exemption from land tax.

"Unless salaries are raised towards the level of those in other Australian universities Adelaide must suffer in prestige, and it will be impossible to have a staff of equal efficiency. The professorial salaries offered by the recently established University of Queensland are £900 a year, and even if the salaries here were made the same they would still be well below those of Melbourne and Sydney. A superannuation fund, which is essential, might be formed by retaining 10 per cent. annually. There are five lectureships of £300 or £400 per annum, each of which ought to be increased to £400 and £500 respectively. These increases all together amount to £3000 a year, and consequential increases in other salaries and wages, including those of the registrar's department, would bring the additional annual expenditure under this heading to, say, £4000.

1. Faculty of Arts.—The faculty has two needs, viz.:—(a) Lecturers, at, say, £400 a year each, to assist the three present professors; (b) a professor of French and German at £900 a year. The annual cost of these requirements will amount to £2100.

2. Faculty of Science.—This faculty has three needs, viz.:—(a) Replacement of cadets in the laboratories by paid assistants. This will cost £400 a year. (b) Additional assistance in physics and chemistry. This will cost £300 a year. (c) A professorship of engineering. This is contingent on all the higher engineering work being done at the university. The salary would be £900 a year. The institution of this chair would relieve the chair of mathematics, to which might then be attached the subject of astronomy. The annual cost of the three requirements would be £1600. In addition, it is essential that there should be, as in other universities, provision for instruction in zoology and botany; and the question of establishing these departments might be considered in connection with the institution of a school of agriculture and veterinary science at the university. As the university already possesses facilities for the teaching of chemistry, physiology, microscopic anatomy, and materia medica, a school of agriculture, if provision were made for the teaching of zoology and botany, might be established without much difficulty; such a school, the council believes, would be of great advantage to the State. If this were done there should be a professorship of zoology and a lectureship on botany. The lecturer on botany, who should have special knowledge of vegetable pathology and parasitology, might also hold the position of Government Botanist; but if this were not the case the salary from the university should be £400 per annum. About a year ago the Government expressed a desire that there should be such an appointment, and the council has received a donation of £500 from Miss Stuckey towards the encouragement of this subject. Salaries of professor of zoology and lecturer on botany, £1300.

3. Faculty of Law.—Besides the professor of law there are four lecturers—all of them in practice. Their total salaries amount to £350 per annum, provided by a private benefaction which expires in 1911. An annual sum of £400 per annum will be necessary in the future to meet this cost.

4. Faculty of Medicine.—The essential needs are a professor of pathology at £900 a year and a lecturer in bio-chemistry at £400 a year. In bio-chemistry a lecturer only is needed, but he should be a teacher who is fully capable in research work. It is also desirable to have a paid demonstrator in anatomy, at, say, £100 a year. The additional annual cost of these requirements will be £400; £6800.

The following additional buildings are necessary—(a) Additions to the library, in accordance with plans now prepared, say, £6000. (This sum does not include cost of book stacks and furniture, which will probably amount to between £500 and £800, according to the style adopted and the completeness of equipment.) (b) buildings for geology, mineralogy, zoology, and botany, say, £7000; (c) a new building for the physics and engineering