

MR. CHARLES SCHILSKY.

SCIENCE'S PROBLEMS.

MONKEY GLANDS.

EXAMINATIONS IN ENGLISH.

Musical Talent in Adelaide.

Professor Woollard on Anatomy

Professor H. H. Woollard, lecturer on anatomy at the University of Adelaide, has no illusions concerning the claims of Professor Voronoff. He gave his views on the subject with no uncertain voice in an extension lecture on anatomy on Tuesday evening. The use of sex glands or their extracts as a cure for senility, he said, was a relatively old idea, which had recently become notorious as Voronoff's "monkey gland" operation. The facts appeared to be that the grafting of the sex gland did appear to exert its hormonal effects. It quickly underwent degeneration, however, so that the effects were temporary. It had no rejuvenating effect upon the tissues of the body, which remained in their senescent state. Such unwanted strain upon a senile body often produced sudden death. More recently Voronoff had made far reaching claims for the economic value of sex gland grafting in cattle and sheep. Those claims had been investigated by a commission in England and pronounced not proven. Scientists of a sanguine temper like Julian Huxley predicted that those results heralded a biological revolution greater than had ever been seen. Professor Woollard reminded his audience, however, that all their experiments so far had only succeeded in bringing the deficient up to normal standard. If the normal were exceeded in one direction it fell below in others. Analysis was infinitely more difficult than mere description, and in the study of growth and differentiation they were only at the beginning of the analysis problem. Only those actively engaged in scientific research realized the enormous labour that might lie behind a result that could be announced in three lines. One series of experiments entailed the counting of 20 million flies. There would be progress, but it would be slow, hesitating, laborious, and difficult.

TEACHERS AND THE FACULTY.

REPLY BY SIR ARCHIBALD STRONG.

Sir Archibald Strong has invited teachers of English to submit papers containing the types of questions they consider best calculated to test their students' knowledge.

As a result of complaints regarding the English paper set at the last leaving certificate examinations, a deputation of teachers waited on the Professor of English at the Adelaide University (Sir Archibald Strong) on Saturday. On Wednesday afternoon the convenor of the delegation, Mr. J. C. McDonnell, of St. Peter's College, reported the result of the delegation to the teachers attending Mr. R. C. Bald's English lecture.

Mr. McDonnell stated that the following resolutions had been submitted to Sir Archibald:—

"This delegation is in full sympathy with the aims of the examiners in English, and with the new and improved methods of studying out literature. We also offer our loyal co-operation in maintaining, in this State, a standard at least equal to that of Sydney and Melbourne. The delegates feel that the paper set at last year's leaving examination contained questions, which, in our considered judgment, were beyond the ability of the average candidate (in this State). As English is a compulsory subject it is felt that the standard should at least not be above the standard of other subjects. We therefore ask that questions should be set in a simpler and more direct manner."

"With regard to the syllabus, the delegation considers the length is satisfactory, provided the standard is not too high. As to the nature of the syllabus—(a) A balance of narrative and lyrical poetry should be maintained, and in setting the examination papers due weight should be attached to the longer poems, which was not the case last year. (b) Authors of essays should be chosen who present no unusual peculiarities of style. Students should be asked to reproduce the matter and its arrangement, rather than the style of the author."

The delegation made the following recommendations with regard to examination papers:—"1. Set essay—There should be at least three subjects, one narrative, one descriptive, one reflective. 2. The novel—There should be a separate question on this. 3. Poetry—The questions on appreciation should not be so framed as to bewilder the student, but should conform to the Victorian type, as was the case in the 1925 leaving paper. 4. Examiners' report—It was felt that constructive, rather than destructive, criticism would be welcomed. Delegates would welcome a specimen of the scansion desired by examiners, and also specimens of what the examiners consider fair, average answers in dramatic criticism and poetic appreciation. It was felt that too much importance was attached to mistakes in spelling, which are often simply due to pressure of time. English should be preferably a morning examination."

The members of the delegation considered that in a compulsory examination the greatest consideration should be paid not to a possible credit winner or a potential Tennyson medallist, but to the average hard-working student. They believed that some of the questions were too long or too involved, and that, in consequence, the student, being bewildered, expressed himself in bewildered English; whereas, had the question been framed in a simpler manner, he would have given the examiner a better conception of his abilities. They asked, therefore, that questions should be

The news that Mr. Charles Schilsky has tendered his resignation as teacher of the violin at the Elder Conservatorium cannot fail to cause regret not only among his students, but among music lovers of Adelaide who have heard him play as soloist or as leader of the Elder Conservatorium String Quartet Club. His lecture on "The Teaching of the Violin," a little while ago, showed what a high standard he set for himself, and those who have learned from him know best how thoroughly he has lived up to his own precepts. However, as this popular violinist will not be leaving until the end of this year, there will yet be a few more opportunities of hearing him, and his Adelaide friends have not yet to think of actually saying goodbye.

During a chat with a representative of The Register, Mr. Schilsky admitted that it was with real regret that he had arrived at this decision. "I am intensely sorry to leave," he said. "I have loved the people here—do still, and always will. This is my fifth year here, and I should have stayed three years more—having been appointed for three years, and then for five more, but the University authorities have been so considerate as to let me go at the end of the year. Until then, all being well, I intend to carry on."

Australians and Talent.

"You had been in Australia as an examiner before you came to the Conservatorium, so you have had an opportunity of studying the musical tendencies of the young Australian from two points of view. What is your opinion?"

"So far as musical talent is concerned, Australians are among the most gifted people in the world. They have also a real desire for what is best in training. What they lack is a set purpose. They possess an extraordinary facility in music, and, as is often the case, for that very reason are apt to lack power of sustained effort. I have found many exceptions, but that is my impression. The climate does not make for great energy."

"You were in America before you came here? How do the students of the two countries compare with each other?"

"I had two seasons in America, besides paying several shorter visits. I may say that there I found any amount of energy, but very little talent, and here find any amount of talent and very little energy. I am speaking of music, you understand. Australia has unbounded energy in other directions. As I said before, there are exceptions. I have been privileged to teach many young violinists of considerable talent. Among them may be mentioned Gwen Moss, Katie Yoerger, Louise and Hansie Hackendorf, Esma Roach, Gladys Vereco, Mary Hancock, Harry Hutchens, Eric McLaughlin, and Arthur Wilson. These and others have not only outstanding talent, but a true feeling for music, and wide scope in their musical sympathies. Among Adelaide violinists must be mentioned Doreen Stoneman, who played at the concerts of Clara Butt."

Adelaide Fortunate.

"I consider," Mr. Schilsky added, "that Adelaide has been rather unusually fortunate with regard to their school of violin playing. I found that much had been achieved by the quite excellent work done before my arrival by Herr Heinecke, Mr. Eugene Alderman, and Mr. Gerald Walenb, and I am quite convinced that Adelaide is going to produce some of the finest violinists in Australia. You cannot make a violinist; he must be born. Then a teacher can step in and develop his gifts. A very important thing is the influence which the teacher spreads. A good teacher will imbue his pupil with a religious attitude of reverence towards art. That, by-the-way, is a thing apt to be neglected. It is necessary that young students should develop the ideal side of music quite as much as the technical side. And, speaking of ideals, one cannot fail to recognise that those of the Elder Conservatorium are very high. Among things that are worth while is the String Quartet. One of the loveliest things that take place in Adelaide are these concerts. With all my heart, I hope these will go on, and continue to give the beautiful performances they do now. It has been the greatest pleasure to be associated with such fine musicians. I am sorry to be leaving Adelaide, but glad that for the rest of the year I shall be taking part in these concerts, and continuing my work with my students."

How strenuous constant teaching and frequent playing must be was easily to be imagined. The week after next Mr. Schilsky will be taking part in two concerts—on July 23, at the Conservatorium, and on July 25, also with the Quartet, at the Institute Hall. He throws his whole heart and strength into everything he does.

Drs. A. A. Lendon, B. H. Morris, R. S. Rogers, H. H. E. Russell, and Sir Henry Newland have been reappointed members of the Medical Board of South Australia.

"All the secrets of life, including the cancer problem, would probably be known if scientists could learn the causes of growth and differentiation of function," declared Professor H. H. Woollard on Tuesday evening, in the second of three extension lectures on anatomy, at the University of Adelaide. He also stated that death was not inevitable in living tissue. It was conditional.

Professor Woollard dealt at length with a number of modern improvements in the microscope, which, he said, had effected a considerable increase in its magnifying and resolving powers. In the adult upon the elements of the body often showed little resemblance to cells, but when their growth was traced it became clear that it was derived from those elementary units, and that during growth their form changed and their function became specialized. The great, and indeed the fundamental problem of all medicine, was to account for the growth and differentiation of cells. The growth of the body was the story of the transformation of a tiny speck of protoplasm about one one hundred and twenty-fifth of an inch in size into the form with which they were familiar. The first stage of development was the formation of a large number of cells, the next, the change of the mass of cells into a vesicle consisting of three layers, known as "organ forming" layers. Out of those layers systems were blocked out, and became transformed into actual working mechanisms. Thus, along with growth, there was differentiation for the performance of special functions. Growth was greatest at the beginning, continually fell off, and then a stage of equilibrium, or maturity, was reached, was followed by senescence, and ended in death. That cycle appeared to be true in all animals, although there were certain cases in which it did not occur. Minute animals like the protozoa grew and multiplied without ever producing a corpse or new-born infant. They were immortal. Human bodies consisted of two kinds of cells, body cells or soma, and germ cells. The soma die, and the germ cells were immortal. Tissues could be made to grow outside the body indefinitely, and a piece of chicken at the Rockefeller Institute in New York, which was more than 12 years old, had grown to be larger than a St. Bernard dog. Cells like cancer, if transplanted from host to host, continued to live indefinitely. Death was not inevitable in living tissues; death was conditional. Growth could be shown to be dependent upon temperature, upon vitamins, and upon certain kinds of food. Growth depended upon minute traces of certain substances, a conspicuous example of which was iodine, contained in the secretion of the thyroid gland. With continued growth and differentiation the power of regeneration was lost. Although the causes of growth were not fully understood, it appeared to be a problem in chemistry. There was also the problem of differentiation. A fertilized egg, up to the period of the formation of the three organ forming layers consisted of a mass of cells outwardly much the same, but inwardly containing the developmental factors. The act of fertilization localized the developmental factors, and they became regularly distributed among the cells subsequently formed. Recently it had been shown that the distribution of the developmental factors depended upon a special organ occupying a definite place in the embryo. The special cells were called "organizers," and the discovery of their qualities constituted one of the greatest advances in embryology. The organizer exerted its influence right at the beginning of development, but ceased with the formation of the organ forming layers. At that stage the embryo was blocked out into the organ systems which developed independently. After that stage there followed co-ordination and functional adaptation of the parts. As an example of that, the nervous system and muscular system developed independently before birth. After birth the removal of the nerves from a muscle brought about the destruction of the muscle.

Ductless Gland Magic.

The professor said that Sir Arthur Keith believed that racial differences were due to the differences between the balances of the secretions of the ductless glands, and Bolk, the Dutch anatomist, believed that differences between man and the anthropoid apes were largely due to the differences in the times they took to reach maturity. The chimpanzee was matured in six years. The delay in reaching maturity in man, he believed, gave him his pre-eminence and was due to the effects of the pineal gland. It was well established that the sex glands produced chemical substances or hormones. One of them, that of the ovary, had been isolated in a concentrated form. By means of these hormones it was possible to produce the mental and physical qualities of the appropriate sex when the sex gland was absent. Moreover, it was possible to reverse the sex by changing over that gland.

AUSTRALIAN STUDENTS.

Offers of Advanced Training.

The trustees of the Science and Industry Endowment Fund are offering a further seven studentships to graduates or people of equivalent training) who in the opinion of the professors or others under whom they have been trained are likely to develop into first-class research workers. Each studentship is of the value of £300 a year, and is tenable for two years. Travelling expenses are provided to and from the country in which the required training will be sought. In addition £100 will be made available during the two years to cover fees and to permit of visits being made to other laboratories, attendance at congresses, and so on. Successful students are required to give the trustees an option over their services for three years after the conclusion of their training at salaries of not less than £400, £500, and £500 each year respectively. In making an appointment the trustees will be guided almost solely by the advice given them by the principal teacher under whom the applicant has studied, either at a university, technical college, or other institution. The seven studentships at present available are one in the application of statistical methods to agriculture, suitable for a graduate in mathematics, tenable probably at Rothamsted Experimental Station, England; one in dairy bacteriology, and one in dairy chemistry, both tenable probably at Dairy Research Institute, Reading, England; two in animal nutrition work, tenable probably at the Rowett Institute, Scotland (suitable for graduates in physiology and biochemistry); one in veterinary work, tenable probably at the Pasteur Institute, France; and one in plant pathology or plant physiology. Applications close on August 6, and apprentices for training abroad will have to be prepared to leave Australia about the end of August. Further information may be obtained from the acting secretary to the trustees, 314 Albert street, East Melbourne.

Sir Douglas Mawson, who has been travelling in Europe for several months, is expected to return to Adelaide for the beginning of the third term at the University of Adelaide in the latter part of August.