

The New Minister.

Mr. Cowan is a native of South Australia, having been born at Redbank, near Two Wells, in the year 1868, and is the third son of Mr. Thomas Cowan, who represented Yatala in the Assembly for three years. He is a grandson of Mr. John Cowan, one of South Australia's pioneers, who arrived by the ship Epaminondas in 1832, and was one of the first to run public conveyances between North Adelaide and the city. Mr. Cowan was educated at Whimham College, North Adelaide, and after leaving there went to Milan, where he undertook the management of a property for his father. In 1881 he left Milan for Murray Bridge and he has been associated with the pastoral and farming industry in that neighborhood ever since. His property, "Glen Lossie," is about four miles from Murray Bridge township. He has been actively associated with the Mobilong District Council, of which he has been chairman several times. He was appointed a Justice of the Peace in 1887 and has held several public or semi-public positions in the district. In the Murray River question he naturally takes a great interest. He is a prominent Freemason, being a past master of the craft.

Registered
14 11 23

to a non-human or impersonal level. Much of the interest and ultimate impressiveness of a lecture was to be found in its actual associations, the personality of the speaker, his facial expressions, tricks of gesture, the environment of the occasion—in short all that indefinable atmosphere of immediate contact which impressed and convinced, when mere words were often inadequate. Where there was a subtle point to be negotiated, or an intimate meaning to be expressed, broadcasting would probably fail. With respect to music, he had often heard a great singer singing folk songs and ballads with inimitable spirit, and interpretative genius, but he was often woefully out of tune. To broadcast such things would be to painfully exaggerate casual defects, and wholly underrate the charm of a wonderful style, and a convincing truth of utterance. In a word, broadcasting must tend to de-spiritualize. On the other hand, one could not think of broadcasting without remembering the immeasurable value of the gramophone as an educational medium which had already done wonders in the spread of the art. The future of musical education lay more and more in the training of listeners, rather than performers. The drawback of the present system was that it turned out thousands of people who never rose above mediocrity, and wholly neglected to train the tens of thousands of hearers, who would make any kind of mediocrity impossible. Intent-listening alone could reveal the message of music to many, and listening, added to wise suggestion, and simple explanation, could immeasurably extend appreciation of the art. That was the sort of thing that could possibly be done by wireless. He imagined that there would ultimately develop a sort of psychology of broadcasting, with its special idioms clearly defined. The earlier stages of broadcasting would seem to present the most favourable opportunity for its serious use. Now few were talking and many listening, but later everybody would be talking, and nobody would be taking any notice.

Private Demonstrations.

Private demonstrations were given from the Bold Motor and Electrical Works in Pulteney street, and by Newton, McLaren, Limited, in Gilbert place, and were transmitted to each other and to the meeting at the University. Miss Comino played Raff's Cavatina on the violin, and Miss Ada Wordie sang "Robin Adair" from the Bold Motor Works. Prof. Kerr Grant, from the University, replied that both items "came through" exceedingly well, especially the violin solo. Miss Comino and Miss Wordie then proceeded to Newton, McLaren's station in Gilbert place, and rendered items. Miss Comino's violin solos were heard almost as plainly as though she were performing in a large hall. Miss Wordie sang "Robin Adair" and "May morning," and she was heard perfectly at Pulteney street. Miss Battye gave a banjo selection, which was heard without a fault. All the items were applauded, and the applause was heard at the transmitting stations. It is probable that many amateur sets in the city and suburbs properly tuned also received the performances clearly. Several of the ships when speaking to the Adelaide radio station could be heard "Morsing." The set has a range of 5,000 miles.

Registered 14 11 23

EINSTEIN THEORY.

Confirmed by Investigations.

Cordillo Downs Records Measured.

As a result of photographs, taken at Cordillo Downs in September of last year, at the time of the solar eclipse expedition, the Minister for Education (Hon. T. Pascoe) stated on Tuesday that he had received a cable message from the Agent-General in London communicating the result obtained by the Astronomer (Sir Frank Dyston) from measurements of the Cordillo Downs eclipse plates sent to him some time ago by Mr. G. F. Dodwell, Government Astronomer of South Australia. "According to these measurements," said the Minister, "the deflection of light from the stars which were in the vicinity of the sun during the total solar eclipse in Australia in September last year, was 2.15

seconds of arc. This amount is very slightly greater than that predicted by Einstein's theory of relativity, and a little greater than the amount obtained by other expeditions, but it is so close to the Einstein prediction that it is regarded as a substantial confirmation of it. The deflection, according to that prediction, should be 1.74 seconds of arc. The Astronomer Royal states that the probable error or uncertainty of the results of the measurements made on the South Australian plates is large, but the exact amount is not given in the cable message. The Government Astronomer thinks from the scale size of the plates (about one-third that of other expeditions), whose instruments were of greater focal length, that this probable error or uncertainty would very likely be at most about half a second of arc, so that the true value of the deflection, so far as it is revealed by the Cordillo Downs plates, would lie somewhere between 1.65 seconds and 2.65 seconds. The plates thus indicate a real and definite deflection of the rays of light, and an amount which closely verifies the prediction. This probable error of measurement, though large to the astronomers, is an exceedingly small quantity from any other point of view, being approximately only one-ten-thousandth part of an inch on the photographic plates, a quantity only detected by the most exact and refined measurement under the microscope. It was for this reason that the plates were sent to Greenwich, for after preliminary measurements made here by the Government Astronomer, with the collaboration of Professor Kerr Grant, of the Adelaide University, it was found that the only measuring machine available in Adelaide was not good enough for such ultra-fine measurement."

Comparison of Results.

"The South Australian result is in good agreement with that of other expeditions," states the Minister, "as will be seen by the following comparison:—Sobral, May, 1919, British Expedition, deflection 1.98 seconds; Principe, May, 1919, British Expedition, 1.61 seconds; Wollal, September, 1922, American Expedition, 1.74 seconds; Wollal, September, 1922, Canadian Expedition, 1.91 seconds; Cordillo Downs, September, 1922, South Australian Expedition, 2.15 seconds, a mean of 1.88 seconds. In connection with the British expedition to Sobral in 1919, a considerable smaller value was obtained with another instrument, but was rejected, as the instrumental focus was not satisfactory, and the photographic plates obtained with it were consequently not capable of giving results of high accuracy."

South Australia's Prestige.

"It will be seen," the Minister proceeded, "that the South Australian result is exactly as much above the mean of all, as the English result at Principe is below. The Cordillo Downs' result is of value and interest, also in being on the high side, as it doubly tends to show together with the others, that the 1.8 deflection, which some authorities thought should result from the Einstein theory, is not borne out by actual observation. The success of the Cordillo Downs' results is not only satisfactory to the members of the South Australian Expedition, but upholds the prestige of the State in these scientific matters, as it was the only successful Australian contribution towards the testing of the Einstein theory at last year's eclipse. At Goondiwindi the New South Wales and Victorian expeditions had the misfortune of indifferent atmospheric conditions for such a test, which demands not only the highest class of instrumental equipment, but also perfect atmospheric conditions, while at Christmas Island the elaborately equipped expedition sent from the Royal Observatory at Greenwich suffered failure through cloud. South Australia, therefore, shared with Canada and America the honour of obtaining the desired results on this interesting and historic scientific occasion."

Generous Help.

The Beltana Pastoral Company, which owns Cordillo Downs Sheep Station, in the far north-east of the State, generously supported the South Australian expedition by providing transport to and from the station, and giving hospitality and assistance at the homestead. Mr. T. E. Barr Smith, Chairman of Directors of the company, has expressed much pleasure at the success of the expedition, a pleasure which is shared by other prominent citizens, who gave their support to the work, including Sir George Murray (President of the eclipse committee), and the Vice-Presidents (Sir Langdon Bonython, Sir William Sowden, and Sir Frank Moulden, who was Lord Mayor at the time of its inception). The instrument with which the photographs were taken was a very fine quadruplet camera, driven by clockwork, and lent to the expedition by Dr. Curtis, Director of Allegheny Observatory, U.S.A. Among other results secured were a series of very fine large scale photographs of the corona and prominences, taken with the Lick 40 ft. Coronagraph, and valuable magnetic observations by Mr. A. L. Kennedy, Chief Assis-

tant of the Adelaide Observatory, and formerly a member of the Australian Antarctic Expedition. The expedition was under the leadership of the Government Astronomer, and other members were Professor Kerr Grant (joint secretary of the eclipse committee), Messrs. A. L. Kennedy, E. A. Thrum, and A. G. Appleby. Others who visited the station and gave assistance in the observations were Messrs. T. E. Barr Smith, the late Mr. B. Iye, and H. R. Adamson, of the Beltana Pastoral Company, Professor Woolnough and geological party, including Lieut. V. D. Bowen (in charge of wireless apparatus), Mr. and Mrs. C. F. Murray (of Cordillo Downs Station), Messrs. Lindsay and Dehney (of Arrabury), and Dr. MacGillivray, with Messrs. Hayward and Riddell (from Broken Hill), also Mr. Kindler (of Innamincka).

News
14-11-23

STUDENT'S HEROISM COLLAPSES AT EXAMINATION Immediately Operated On

Just before lunch on Friday Melville Chinner, an old St. Peter's Collegian, who is in his fourth year of medicine at the Adelaide University, finished his practical examination in zoology and collapsed. He was evidently in great pain, and was hastily taken in a motor to the Adelaide Hospital, where it was found that he was suffering from acute appendicitis.

"I think they had to carry him out," said one of the sisters today. "He was fairly hustled into the hospital. I think his shirts were cut, but his clothes for the main part were taken off. Within an hour he was operated on, after quick preparations had been made. We had to call Dr. Malcolm Scott, who performed the operation."

"He had a rather bad two days," said one of the medical staff, "and then he picked up wonderfully. He is now doing quite well, and is out of danger."

News
14-11-23

University Magazine

A copy of "The Adelaide University Magazine" for November has been received. The "Magazine" is published once a term by the students, and is intended to be a record of University happenings and an outlet for literary talent. The current issue contains a number of sketches, one with two short stories, and numerous reports of sports and student activities. The Graduates' Association is represented, as is also the Conservatorium. There are numerous photographs of local and general interest. Grievances are freely and candidly discussed, and various local characters come in for satire. The only notable omission is that there are no caricatures in this issue. The cover bears a reproduction of a pencil drawing of the University main building. The black and white design is effective. The magazine is sold at 1/ a copy, and is obtainable at most of the booksellers or the University Office.

Registered 14 11 23

The Nobel Prize for Literature for this year has been awarded (say a cable message from our London correspondent) to an English writer, William Butler Yeats, artist, poet, litterateur, and novelist. Mr. Yeats, whose career opened with the publication of "The Wanderings of Oisín" in 1889, has since issued many works, some of his latest books being "The Wild Swans of Coole" (1919), "Michael Robartes and the Dancer" (1921), and "Seven Poems and a Fragment" (1922).

MUSIC FROM THE ETHER.

Broadcasting by Wireless.

Demonstrations at the University.

Members of the Graduates' Association of the University of Adelaide met at the Prince of Wales Theatre on Tuesday evening to discuss the advisableness of the University participating in broadcasting by wireless. The President (Professor T. Brailsford-Robertson) occupied the chair.

Professor Robertson said that the progress of wireless had been extraordinarily retarded in this country. The wireless telephone, in United States household was almost as much a convenience as the telephone. Universities in the States had been taking an active part in the propagation and use of wireless. The common form of amusement of the people generally—the moving picture—was not controlled by the best-thinking section of the community, and there was some danger of wireless falling under similar influences. The question was whether something better than, "Yes, we have no bananas," and "Mummy's little piccanniny from somewhere down south," should not be provided. University lectures should by no means stop at the lecture room. On learning that he was to have a wireless receiving set, he became much interested in the science, but when he found that he was to be tied down to one wave length, and his instrument to be sealed and tied, hand and foot, to the songs he had mentioned, he lost interest.

Lectures and Discourses.

Professor Kerr Grant endorsed the opinion of Professor Robertson with respect to the danger of wireless falling into mercenary hands. However, he instanced cases in Britain where lectures and discourses of a high standard were being regularly transmitted, and he was of the opinion that in such a way wireless could do a great amount of good.

Listening In.

During the evening instrumental and vocal items from various transmitting stations, demonstrating possibilities in the development of the science, were listened to with interest by the gathering.

Conditions of Broadcasting.

Professor Davies said it seemed to him that to be convinced of the utility of broadcasting for educational purposes they must first be assured of the perfect technique of transmission. The present difficulties in the way were those of atmospheric conditions, statics, and other conditions. Given absolute fidelity, it remained to be seen what kind of messages could be circulated with interest and advantage to the hearers. To him it appeared that all conditions of broadcasting tended to reduce the communications