-The New Spectroscopic Method .-

Mr. Dodwell said it was pointed

out in his report to the Government that

the International Astronomical Conference at Rome had done much to co-ordinate

future work, and that, in that particula:

branch, a recommendation had been made that epectograms already collected in

various observatories for other purposes

should be made available for measuring

stellar distances. In fact, that branch

of work had been then organized interna-

tionally. It was less than a century ago

since the first measurement of a star's

parallax had been made, and that was by

Bessel. The Royal Observatory, Green-

wich, the Radeliffe Observatory at

Oxford, and the American observatories

at Swarthmore, Allegheny, Yerkes, Mount

Wilson, and a few others, measured trigo-

nometrical parallaxes. Dr. Miller, ct

Swarthmore, told him he would very much

like to do that for southern stars for a

period of work in South Australia. There

were three ways of determining stellar de-

tances absolute measurement of the stur

by a scries of meridian observations;

measuring the star's position in relation

to its neighbours by a series of observa-

tions; photographing that part of the sky

at different seasons and measuring the

star's position with regard to its neigh-

hours on the series of the plates. Since

1914 the spectroscopic method had been

used. It depended on the fact that the

star's real brightness affected the lines in

its spectrum. Incidentally, measurements

had shown that, contrary to expectations,

the brightest stars were not nearest to

them. From a photograph of the spec-

trum of a star, its distance could be deter-

mined. There were a few observatories

in the northern hemisphere measuring spec-

troscopic parallaxes. No observatory in

Australia had an astrophysical depart-

ment. Mr. Dodwell concluded that if an

observatory were established at Alice

Springs it would give them an opportunity

to carry out that class of work, and would

be very suitable indeed for solar work as

well. It remained for private individuals

New Professor of Philosophy Advertises 1. 11. 22

Our Melbourne correspondent telegraphs:

-Dr. J. McKellar Stewart, Associate Pro-

fessor of l'anceopay of the University of

Melbourne, has been appointed to the

Chair of Philosophy at the Adelaide Uni-

versity, in succession to the Vice-Chancel-

for. He will take up his duties at the

commencement of the next academic term.

Dr. Stewart was born at Ballangeich, Vic-

toria, in May, 1878. He was educated at

the Universities of Melbourne, Edinburgh,

and Marburg, Germany, and won high

honors, taking the degrees of Master of

Arts and Doctor of Philosophy. He has

been on the staff of the Melbourne Uni-

versity since 1912, and is vice-chairman of

the Australasian Student Christian Move-

The Government have accepted the re-

signation of Mr. N. A. Webb as Deputy

resident of the State Todostral Court.

Mr. Webs is now Deputy President of the

Commonwealth Arbitration Court.

I Adu Register \$ 11.22

THE ADELAIDE UNIVERSITY.

recatly asked how and when the Adelaide

University was founded. The Register

(1/1/73, p. 4, c. 6, and 7/10/72, p. 12, c. 3)

gives particulars, and Act 20 of 1874

(assented to 6/11/74) legally founded the

University. The Union College was in-

augurated 30/5/72, mainly for educational

ministers for the Presbyterian, Congrega-

tional, and Baptist Churches. There were

three chairs-English literature, Greek Testament, mathematics and natural

science. The instruction was thoroughly

unsectarian, and all who desired were free

to attend. The college was a great success,

and from it the University was evolved.

The pre-iminary meeting to reform the

University was held 17/9/1872. Bishop

Short presided, and at the meeting it was

announced that Capt. W. W. Hughes had

said he would give £20,000 or £30,000,

certainly £20,000, within 18 months or two

years. The University Act mentions £20,000 to be contributed by Capt. Hughes,

1000 Tecord.

Fom A. T. SAUNDERS:-I was

to do something in the matter.

THE UNIVERSITY.

The Hughes Chair of Philosophy, which is to be vacated by Professor Mitchell at the end of the year, has, as stated recently in "The Advertiser," been offered to Dr. John McKellar Stewart, Associate Professor of Philosophy in the University of Melbourne, and has been accepted by him. Dr. Stewart graduated with firstclass honors in philosophy at Melbourne in 1906, and after acting for a few years at Ormand College as lecturer in logic and philosophy, completed his studies at Ediuburgh and Marburg. At Edinburgh he was given the degree of doctor of philosophy for a thesis, which was afterwards pubhished under the title "Critical Exposition of Bergson's Philosophy." Professor Boyce Gibson describes it as "the most penetrating and thorough study of Bergson yet published." Sir John Macfarland, Chancellor of Mel-

bourne University, writes regarding him:-"When the Melbourne Chair of Philosophy became vacant just before Dr. McKellar Stewart's return to Australia he had not attained the reputation which he has since won, but even then the committee of selection, in recommending the appointm at of Dr. W. R. Boyce Gibson, added the following to its report: - This committee desires also to report that it formed a high estimate of Dr. McKellar St wart's fitness to occupy the chair, and placed him second among the candidates."

Dr. Stewart's influence on the life of the

Professor Harrison Moore writes:-"I doubt whether there is any member of the staff who has so clos, a knowledge of the spiritual and intellectual life of the students. His influence with the students and his wise counsel to them, and to the professorial board, helped the University to pass through a period of some difficulty a few years ago. There is no man whose counsel is more valued by his colleagues. whether in the particular matters dealt with in the Faculty of Arts and the Extension Board, or in matters of general University interest and policy; no man who more consistently illustrates the valua of principle in its application to practical affairs."

Lecturer in Vegetable Pathology.

The council of the University at its recent meeting appointed Mr. Geoffrey Samuel, B.Sc., to the lectureship in vegetable pathology. The position is a new one, and the duty is chiefly that of research in plant diseases. The teaching work of the lecturer will be nominal, so that he will have sufficient time free from University duties to pay visits to study plant diseases in the field at any scason. He will also deal with enquiries concerning fungus diseas s of plants on behalf of the Department of Agriculture. work has hitherto been done by the professor of botany, but its increa e in amount and its importance to the producers of the State have necessitated this new develop-

ment. Mr. Geoffrey Samuel, who is the eldest

NEW APPOINTMENTS.

CHAIR OF PHILOSOPHY.

University has not been confined to his class-room. He has taken an active interest in all matters connected with the corporate life of the students. He has been chairman of the committee of the University Union, of the University Public Questions Society, and of the Australasian Student Christian Movement. He has taken a leading part in connection with the wirk of University extension, and for several years acted as honorary secretary of the board. He is a tuetful good organiser, and as he is unfailingly courteous, he is a valuable and pleasant colleague on any body of men working for a common object.

son of Mr. J. K. Samul, is just 24 years of age. After attending St. Peter's College, he entered the University in 1915. In October, 1917 he enlisted in the 3rd Light Horse, and served in Egypt and Palestine, Returning in February, 1919, he continued his University studies, obtaining the B.Sc. degree in December, 1921. During the past year he has been assistant lecturer and demonstrator of botane, and has devoted much time to research on plant disease and to study of the problems in the field. The recent discovery in South Australia of the brown rot of citure fruits is due to his work. The council of the University has granted Mr. Geoffrey Samuel eight months leave for further study. He leaves in December for a visit to Britain and Europe before he enters upon his new doties in the aboratory of plant pathology in the department of botany.

RECONSTRUCTION OF CABINET

MR. JENKINS THE NEW MINISTER

NEW TREASURER-MR. W. HAGUE,

Owing to the retirement of Mr. C. Ritchie, State Treasurer, Cabinet portfolios have been reshuffled. Mr. Jankins, member for Burra Burra, has filled the vacancy as Minister of Agriculture and Assistant Minister of Repatriation, and Mr. W. Hague, previously Commissioner of Public Works, has become Treasurer. Mr. Jenkins will be sworn in this morning at 10 o'clock. Mr. Laffer will be Com. missioner of Crown Lands, and Mr. Pascoe will take over the portfolio of Education.

The Premier (Sir Henry Barwell) when the House of Assembly met yesterday, said that he had no information to give Parliament, but later in the afternoon, he informed the press that he had conveyed the resignation of the Treasurer (Mr. G. Ritchie) to the Lieut. Governor, who had accepted it. Mr. Jenkins, the member for Burra Burra, had, at a Cabinet meeting that morning, been appointed to the vacancy in the Ministry, and would be sworn in this morning at 10 o'clock.

The Premier stated that a shuffling of portfolios had been occasioned, but those held by himself and the Chief Secretary (Mr. J. G. Bice) would remain as heretofore. The changes were:-

Mr. W. Hague, previously Commissioner of Public Works, to be Treasurer, Minister of Railways, and Minister of Industry.

Mr. G. R. Laffer, Commissioner of Crown Lands, to retain that office and be Minister of Irrigation; and Minister. of Repatriation.

Mr. T. Pascoe, Minister of Agriculture, to be Commissioner of Public Works, Minister of Mines, and Minister of Education.

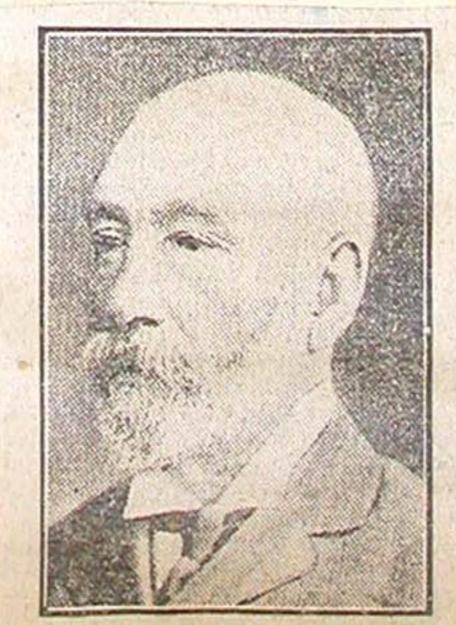
Mr. Jenkins, to be Minister of Agriculture, Assistant Minister of Repatriation, and to have control of the Local Government and Town Planning Departments.

Messrs. Hague, Laffer, and Pascoe will take charge of their new departments this morning.

Federal Conference W. E.a Register 10.11.22.

Dr. Heaton, Director of University Tutorial Classes, and Mr. G. McRitchie, General Secretary of the Workers' Educational Association, left by the Karoola on Thursday to attend Federal conference of the W.E.A. of Australia, which is to be held in Sydney from November 14 to 17. They expect to return by the same steamer, on November 24.

Gulfrom Elder Smith's Report.



The late Mr. Peter Waite.

PROBLEMS OF HIGHWAY CONSTRUCTION.

UTILISING MACADAM ROADS.

Mr. J. H. O. Eaton, chairman of the Adelaide division of the Institution of Engineers, presided at a meeting of that body at the Prince of Wales Theatre at the University, on Monday evening, when Mr. D .V. Fleming, Engineer of Routs and Bridges, and Director of the Local Government Department, delivered an addr. ss on road conntruction in America.

Mr. Fleming said one of the first esentials of the rural community was a reasonable opportunity for social gatherings, and well-kept highways were the chief encouragement to such gatherings. Such roadways were necessary also if the children in the country districts were to be afforded anything like the educational facilities of those in the city. They were also the most important links in the transport system of any country. Any reasonable expenditure on highway improvement, therefore, was a good investment, but naphazard expenditure in this direction was useless. The greater the cost of the roadway the greater was the care that should be taken in the choice of its design and construction. In all public highways the increasing motor traffic was a factor to be considered.

In California there were two main highways running north and south for the whole length of the State, approximately a thousand miles. These were splendid examples of national highways, which the State had taken over from the countles, which corresponded to the South Australian districts. The side routes were still left to the management of the counties. The whole of the great mand highway and most of the main coastal route, were asphaltic paved. The Columbia River highway was another fine asphaltic paved road. Snow had been lying on it for six weeks when he saw it, but the surface had not suffered in the least. It had been down for veven years, and had cost practically nothing for maintenance in that time The same could be said of other similar roads, which had been down for longer periods. The concrete roadways, on the other hand, had to be frequently repaired. Cracks usually appeared in the surface after a short period. These, at first, extended straight across the road, and then as the heavy traffic came on from the side big triangular pieces broke, and once the base of a concrete road had gone there was no stability left. A good deal of the trouble with concrete roads in Calfornia, at any rate, might have been traced to the fact that they were much too thin in the first instance. Whenever these roads were repaired it was necessary to barricade them for three or four weeks at the time. The State, however, spent large sums of money in experimental roadmasing, and the most elaborate tests were devised. A good deal was also done to beautify the streets and highways by plantation of trees on either side, and strips of laxu along the side-walk.

Mr. Fleming, who spoke strongly in favor of asphaltic paving, said the trouble hitherto had been to get sufficient bitumen into the wearing surface of the road. Undoubtedly sheet asphalt possessed a higher wearing quality, and the general opinion now seemed to be that a thin layer of fine sheet asphalt mixture should be added to the asphaltic concrete. There was also a great diversity of opinion regarding the respective merits of a concrete or macadam road foundation. In his opinion, a properly constituted macadam road should be able to carry the dead-weight of traffic, but water-bound macadam, of course, could not do this. There were some good macadam roads in South Australia, the wearing qualities of which were far from exhausted, and in his opinion these reads could be used as a basis, and two inches of asphaltic concrete applied to them should disswer the purpose. Such a plan would elfeet a considerable saving in preliminary

expense. Mr. Fleming was heartily thanked for hin instructive address, which was illustrated with views of the various highways he had seen on his travels. He also show d several exhibits of asphaltic concrete, and give a full and technical illustration of the methods of manuaraturing the same