Fourth Fixture Opened.

Nearly 50 farmers-nominoes from the various Agricultural Bureaus throughout the State-were present at the opening of the annual winter school at Roseworthy Agricultural College on Tuesday morning. The majority of the "scholars" were young men, who will remain at the institution for a fortnight, and undertake an interesting course of lectures by departmental and other experts. The college students are at present on vacation, and the visitors should glean much useful information in respect to proper farm management.

inter alia

Government Sympathy. mers, made progress with the Waite Research Institute, and had secured the ser- ing. vices of Dr. A. E. V. Richardson, a former graduate of Reseworthy College. (Applause). Any Government in power in South Australia must necessarily take an interest in the rural pursuits of this State, because, after all, we had to meet our Imbilities through our two great products -wool and wheat. We had no big mines or secondary industries, and we must, therefore, make ends meet from primary production. The Premier (Hon. J. Gunn) had been visiting the eastern States in an emleavour to get financial backing for a voluntary pool from the Federal Government

interalia

Important Suggestions. beyond the scope it had covered in pre- the best interests of the community. vious times. The difficulty they had in drawing up a curriculum was similar to that experienced in connection with the on these lines in the short period of a for and Professor of Agriculture at the Wane Research Institute. They looked forward to see the foundations of that institute well and truly laid, and hoped they would be able to pass through the made to place animal husbandry right in and reasonably secured to the aspirant. the forefront of the programme of the The important qualification of education institute. There was no more pressing was stressed by the Royal Commissioners, necessity than further investigation into "We believe," they said, "that for men his State. In the inside farming areas of eighteen and twenty-two and over, condescribe were becoming more apparent as

the numbers of succep mereased and holdings were being worked more intensely, and diseases would arise which did not exist under more open conditions. In regard to forestry there should be more she'ter belts in the agricultural areas extending to the Burra and beyond. The work could be done if they could impress upon students passing through the college the value of these shelter belts.

> advertises 16 JUL 1924

PUBLIC SERVICE NOTES.

EDUCATION OF THE CIVIL SERVANT.

By "A Member."

The subject of education demands at-The present Government was a Labour tention within the Public Service no less Government, Mr. Butterfield continued, than in other spheres of business activity. sympathy with the education of the The first requisite for efficiency is adefarmer, and educational projects all quate education. Like the rope's end in round. Those who supported the Labour the navy, the old idea of throwing a lad Party realized more than any other sec- into the hurly-burly of business and leavtion of the community the disadvantages ing him to battle against the tide of cirhimself, had been born in Victoria, of cumstances as best he may, aided only by people who had been on the land in poor such native shrewdness and faculty of circumstances, and he had to go to work adaptability he may possess, has gone by for a dairyman before he was 11. His the board. The muchinery of business -when other boys were going for their administration has grown too complex and holidays. He worked in the country all valuable to allow uninstructed 'prentice his lifetime. He ceased school when he hands to experiment with its working. was 11, and he, therefore, should be in a It is not sufficient that a lad be "good position with the varied life that he had enough for an office boy" if he desires to tion was a great drawback to anybody, evolve beyond that stage. That is cer-For those reasons he referred to the pri- tainly not a foundation upon which an vileges and opportunities the present zene- efficient Public Service may be builded. ration enjoyed, as compared with those The work of evolution must begin before available when he had been a boy. The present Government would do its utmost the office is reached. The training of the to advance the educational systems of this mind along the accepted lines of sound State in every possible direction, limited general education appears to give the only by the amount of money available, necessary understanding, elasticity, and An intelligent, educated man was the resourcefulness upon which initiative and most validable asset a community could wide outlook depend. Nothing, of course, have. He was pleased to learn that the can supply inherent deficiencies, but mon-University had, in the interests of far- tal mobility and intelligent consideration of problems are largely products of train-

the more thoughtful Civil Servants have ong realised that the standard set for entrance to the service is far too low, and from time to time committees have been appointed to make suggestions for general unprovement. Representatives of the Public Service Association have conferred With the University authorities, who are inxious to inrther all legitimate schemes for educational betterment, and the English Service Commissioner has been given a seat upon the Board of Commercial Studies. The main difficulty in the way of raising the cultural level of cadets is as ever the question of finance. It is found that when a lad has qualified beyond the level required he mevitably finds that greater rewards await him outside the service. Governments of the day have so far refused to enhance the inducements of can-Mr. Colebatch welcomed the presence didates to enter the service, or to proof the Minister, and added that the diffi vide adequate rewards for later developculty in the past has been to get sufficient ment. Naturally, young men take their visits from Ministers. Personally he acquirements to the best market offering, would be glad to see a little more per and at present commerce, because it be sonal interest shown in the proceedings af prepared to pay a fair price for efficient Roseworthy College. The winter school service, obtains the richer harvest of qualiwas one of the ventures which had fication and ambition. Unless the State ing from the Nullarbor Plain on the west prospered since its introduction at the is prepared to do the same thing, it must instigation of Mr. W. S. Kelly. The remain condemned to accept a lower grade college felt that it was able to reach of officer. Such a policy is surely not in

Capacity and Tact.

A recent report on the British Civil annual Agricultural Congress in Adelaide. Service pointed out that theoretically it He had gone carefully into the question is held that education in its fullest sense of holding winter schools, and had ob- can incurrate the capacity for assuming tained particulars from America on the responsibility, for acting individually, and subject. The Americans adopted the prac- for exercising the tact necessary in adtice of taking one particular section a ministrative work. This is the concluweek-say dairying for three or four sion to which the Royal Commission of days, and then fruitgrowing and wheat 1914 also came, and has indeed been the farming for similar periods. Perhaps that guiding principle of the Civil Service Commight be a good thing, but where we missioners of the old country since 1800. brought our students from all classes of "The best brains of the nation" is what ountry, rainfall, and soil conditions it the Commissioners have always aimed at was impossible to formulate a curriculum securing, and the decision of the Treasury to give persons who entered the service's fortnight. Reseworthy College was ex- noministrative division a reasonable fortnight. Reseworthy College was ex- of pay with a wide gap between minimum V. Richardson had been appointed Director things and maximum fitted well into the scheme of things, and made it possible for such young men to be engaged in work of semiapprentice nature in the early years of their service. By this means, we are assured, the State secured a body of wellcollege men so well equipped and trained ties they proceeded to adapt to specialised educated young men whose mental abiliconditions. But the inducements to enter on the staff of the institute. It was the service are there, made adequate and highly desirable that an effort should be the possibilities of advancement are known

the diseases of live stock, particularly who are later to be engaged in adminissheep, in which subject they were defi- trative work a four to six years' course cient. They relied largely upon sheep in of the highest education between the ages

stitutes a much better preparation than four to six years spent in junior clerical work, and that, therefore, the initial salary given to those who enter by the Class I. examination should be high enough to encourage them to take that course instead of entering the service at the earlier

Help for Young Officers.

Though it would not be possible (except in the professional division) to follow out that recommendation here, it is possible to devise a scheme for allowing young oilicers to attend a special course of study at the University with a view to filling eventually the better positions. The doors of the University are wide open for all who care to enter. Its authorities are known to be sympathetic with the needs and aspirations of the service in this matter, and it only remains for a workable scheme to be devised to raise the standard of educational achievement. But the Covernment must be prepared to recognise the fact that education and efficiency can not be separated.

16 JUL 1924

ARID AREAS.

CHARACTERISTIC VEGETATION.

The final of the course of three lectures on South Australian plants in their native haunts, by Professor T. G. B. Osborn, in connection with this year's syllabus of the Adelaide University Extension lectures was delivered at the University last evening.

The saltbush and arid Australian districts from Ooldea to the edge of Nullarbor Plain were described by the lecturer, who spoke from personal experience, having visited the localities mentioned, in addition to a number of sheep stations ranging from the Murray up towards Lake Frome, and also Broken Hill and country between Moree and Cooper's Creek. Attractive lantern slides from photographs taken by the lecturer were shown,

Professor Osborn said plants known as saltbush were some of the most characteristic vegetation of arid Australia. A number of conditions went to make up what was termed an arid climate. Of these the existence of a low rainfall was most important. A rough definition might be that an arid area was one baving 10 in. or less annual rainfall. On such a definition no less than five sixths of South Australia was arid. In round figures, out of a total area of 380,000 square miles 317,000 received 10 in, of rain or less in a year. That feature of their climate was either ignored or by many people regarded as something uncomplimentary to the State, and, as such, not to be mentioned by good patriots. Those attitudes he be ieved to be mistaken. No inconsiderable part of the State's wealth was derived from the exploctation of arid lands. A proper study of their vegetation was of great importance, not only because of its scientific inberest, but because of the economic advantages that would result. Efficient exploitation of arid areas from the grazing point of view meant that the natural vegetation must suffer as little as possible. Throughout much of arid South Australia there grew the well-known salt or blue bush. Especially was this so in the belt extendacross the whole width of the State to the Barrier Bange. That country was far from being a desert. Even in those parts that were as yet unsettled, for example, the western part, the barrier to occupation was not wholly the lack of fodder

Plant life in the salt bush country could be grouped into three classes. The an nual grasses and flowering herbs grew in amazing numbers after heavy rain. However, they as quickly died away and passed into seed. They formed no permanent plant societies to fix the soil. An abundance of grass was a characteristic feature of many true deserts. Valuable as such grass might be for feed, it was merely temporary. To maintain a large animal population in the area other longer lived fodder plants were needed. That was especially true when as in much of arid South Australia they had drought cycles extending over a period of years, and not a regular alternation of wet and dry seasons. There were also low trees and woody shrubs, and many, like the mulgi and sandalwood, were edible. Sheep and rabbits destroyed the seedlings of those plants, and unless some measure could be taken to allow seedlings to become established the ultimate extermination of such valuable trees could only be a matter of especially as mistletoes time, various kinds became thick older plants. The less palatable shrube. on the other hand, did not suffer to the same extent. There were many kinds of half shrubby juicy-leaved plants-the salt and blue bushes. They formed the most important plant covering over vast

areas. They were all more or less edible.

but varied greatly in their palatability and

Consequently if heavily reeding values. grazed the more nutritious kinds tended to be eaten out. In extreme cases they might wholly disappear. The eating out salt bushes made room for more grasses, but as they were only annuals, there might be long periods when the area was little better than desert. The term "desert" was rightly unpopular with Australians when applied to most of the interior. It was certainly a slander on the sait bush districts so far as their natural condition went, but heavy stocking reduced the permanent vegetation to an amazing degree, It was a widespread belief that salt bush was salt because of the presence of salt in the soil. Analysis showed that the best kinds of salt bushes flourished in soils with only very little salt in them (.05 per cent.). A quantity of sait was found in the leaves of salt bushes. This was sometimes over 30 per cent. of the dry weight. Experiments conducted in the Adelaide University botanical laboratories had shown that the salt in the leaves aided the plants in absorbing water from dew or very light rains, Salt bushes were thus able to take directly into the leaves a precipitation that was too small to affect the roots. Plants growing in arid regions in South Africa and South America stored water in their leaves and stems which became very fleshy. Such succulents were surprisingly rare in arid South Australia, However, the salt bushes, by their remarkable power of taking in water through the leaves, could use the light falls of rain that were often a feature of their arid areas.

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Captain of Industry

Mr. E. W. Holden, B.Sc. (managing director of Holdens Body Builders, Limited), is an enthusiastic. The works that he has built up after years of work constitute his chief interest in life, and it is a hard matter to get him to talk about himself.



Mr. E. W. Holden, B.Sc.

Mr. Holden was born in South Australia, where his family have lived for several generations. After many years at Prince Alfred College, he finished his ducation at the Adelaide University, where he graduated in science. While at the University he assisted in the leather business of Holden & Frost, and it was with this firm that he got the business training that was later to help him build up one of the largest industries in Australia.

In 1917 an embargo was placed on the Importation of completed cars to Australia, and realising the future ahead of motor body building he took over the management of the motor side of the husiness. Since then he has extended it from a small workshop to factories covering acres of ground and employing thousands of men. He modestly refrains from speaking of the years between, but they must have represented constant work and anxiety and tireless attention to detail.

Last year he visited Great Britain and America, still with the sole object of improving and extending his factory, and studied scientific business methods and plant organisation in the world's greatest factories.

Mr. Holden gives a great deal of the credit of the success of his firm to his father, Mr. H. J. Holden, and to Mr. Charles Irwin, the first director. The Bank of Adelaide also has been a great factor in the success of the company, having always backed its enterprises.

Golfing and tennis are Mr. Holden's

chief relaxations.