REG. 7. 2. 28

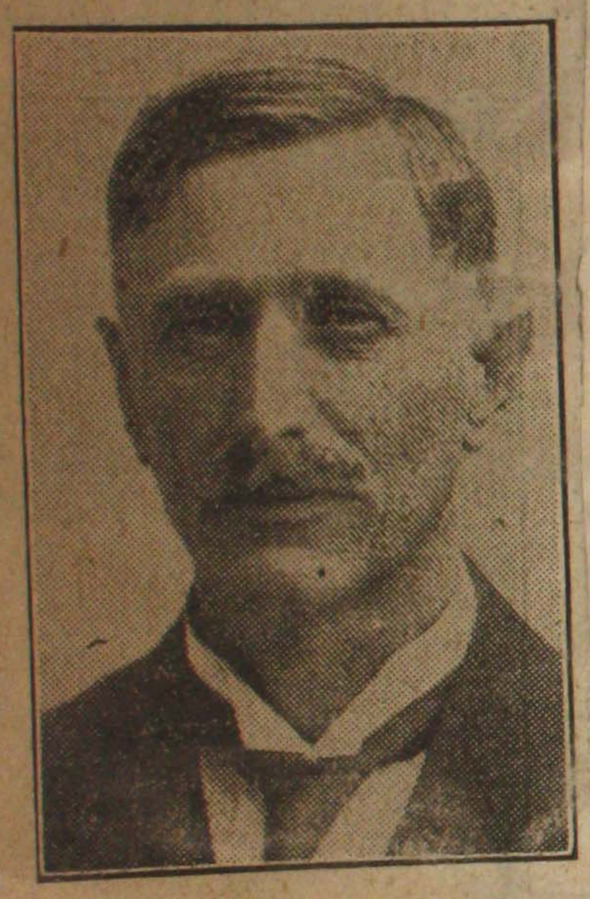
THE WORLD'S FUEL.

COAL PROBLEMS.

Dr. Ternent Cooke's Enquiries.

Dr. W. Ternent Cooke, who returned from England on Saturday, has a most interesting story to tell of his travels in England and on the Continent. Besides what he modestly calls "Having a look at chemistry generally," Dr. Cooke, on behalf of the Government, made a series of enquiries into fuel economy in England, France, and Germany.

He was the Australian delegate to the International Chemistry Conference in Paris, and, with his wife, was among the guests of honour at a reception by the President of the French Republic. Of the interesting experience which had fallen to him personally, Dr. Cooke had nothing to say, but he talked very readily on the great question of coal. With a Government commission, he had access to a wealth of information. "The question is, of course, very much to the fore throughout the world," he said,



DR. W. TERNENT COOKE.

"especially in England, where they practically eat coal. With only about two days' food supply produced within the country, they practically depend on their export of coal to pay for their imported food. Coal is being recognised as a national asset, which must not be produced and distributed wastefully. England is grappling with the problem very ably, and under excellent organization. I do not share the prevailing pessimism about England—there is plenty of life left there yet.

The Private Owner.

"The coal problem, which is very far reaching, is complicated immensely by private ownership. The Government can pass laws for safety and health, and can regulate the smoke nuisance; but in other matters, where vested interests are affected, it has to work very slowly indeed. The important boards which are concerned with problem have advisory powers only. They are, however, getting things done. The big business interests of England are involved, and the leaders of industry can see what has to come.

Land.

"One aim for securing economy is amalgamation of ownership of the land where coalfields are situated, so that an owner will not put down a shaft on a site from which he will have to carry the coal by private railway through private property, heavily increasing the cost of the coal, where it could just as well be put down at another place where there are none of these difficulties. This is a very big economic question. Amalgamation of buying and selling interests is also indicated. In Lancashire they have already begun to work on these lines. A number of big firms have amalgamated in order to limit production within workable conditions, to stabilize the output, so that mines shall not be closed in some districts, while there is over-production in others.

Distributing Power.

"The use of oil fuel is a highly technical matter, with which is bound up the prevention of the smoke nuisance. Another important measure is the linking up of the electrical supplies, so that there shall be a network of electrical supply depots throughout England, with systematically planned distribution. All things beieng equal, it is more economical to convert coal into power at the mines and distribute power to the factories in this form—rather than hauling the coal—but there is the difficulty that the breakdown of one depot means that a factory is cut off from power altogether. The depots will have to work in together."

Mining Machinery.

In reply to a question, Dr. Cooke said that the Government did not concern itself with the machinery in the mines except to ensure health and safety of the miners, but only with machinery for distribution. Much of the mining machinery was very out of date, and the Government had made great improvements in the direction of ensuring safety. The labour question, too, was not a direct issue. He believed it was a fact that that there were too many miners. England was at present producing coal in greater quantities than she could economically handle now that the export trade had dropped from about half to roughly one-third of the total output.

In Germany.

Dr. Cooke said that in Germany he was given every facility in his investigations. "There," he said, "the problem is different. They have not England's wealth of good coal, and they are pushing their brown coal for all they are worth."

"Did you find that they were at all interested in the situation in South Australia?"

Dr. Cooke replied that both in England and Germany he had found that people were interested in the Moorlands brown coal. Many were aware of the problems of South Australia, in having to bring its coal by sea from Newcastle. "The Germans," he said, "have a great and patient faith in scientific research, and they are pushing on research and applying its results with equal keenness. What they aim at is to make Germany independent of outside oil supplies. Exactly how successful they are it is difficult to say, because once enquiries get to a point like that they become somewhat secretive, but I believe they will do it. The German nation seems able to get things done, perhaps because the average German householder, when an innovation affects him, is inclined to be philosophical, and conclude that 'something has gone wrong, but people will soon put it right again.' The average English householder knows very little of science, but the moment any arrangement affects him, he is up in arms at once."

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Mr. R. Bronner, M.A., for six years assistant director of Tutorial Classes under the University Extension Board, and lecturer in sociology at the Melbourne University, left last Saturday for Freiburg (Germany), where he will write his thesis for a Doctor of Philosophy degree. At Freiburg, Mr. Bronner will join Professor Gibson (Professor of Philosophy at Melbourne University) who has gone there to do philosophical research. Professor Husserl, of the University of Freiburg, specializes in social philosophy, upon which Mr. Bronner will write his thesis. Mr. Bronner has resigned his position at the Melbourne University, but hopes to come back to Australia. He is a native of Adelaide. He studied at Adelaide University, and later went to Oxford for two years. He joined the English Army and spent two and a half years fighting in France, after which he returned to the Adelaide University as a lecturer in sociology for 18 months, and then went to Melbourne University in 1921. Mr. Bronner will be accompanied to Europe by his wife and daughter, aged eight years, and Mrs. Bartels, mother of Mrs. Bronner.

REG. 7. 2. 28

LEAVING EXAMINATION.

At the University and local centres a supplementary leaving examination will be begun to-day, and 209 entries have been received. The examinations will be continued until Friday. The supplementary examination is held for students of the University to pass in subjects permitting them to matriculate, and for persons who wish to enter upon courses of study at the University this year. Furthermore, all who have passed in four subjects at the leaving examination and require one or more subjects to obtain the certificate, and any student desirous of taking certain courses at the Teachers' College, are permitted to sit.

REG. 7. 2. 28

FIFTY YEARS AGO.

From The Register, Tuesday, February 5, 1878.

Dr. Joseph C. Verco, who has been appointed surgeon-superintendent to the emigrant ship Clyde, which left Plymouth in January last for Adelaide, has won so many honours in the course of his training as a medical student in London that a brief sketch of his career cannot fail to be interesting, particularly as he is an Adelaidean by birth, and received his early education here. In the course of about seven years, he has taken the following degrees:—M.B., M.D., and B.S., London; F.R.C.S.E., and L.R.C.P. He was a double medallist at the M.B. examination, and he was also a medallist at the M.D. examination, the gold medal being presented to him by Earl Granville, on the speech day of the London University. On November 24, he took his degree as a Fellow of the Royal College of Surgeons of England. A paper—the first he ever wrote—read by him at the Abernethian Society, before the students last year, was singled out from all the other papers as worthy of being printed in full in the hospital reports. His examiners for the Bachelor of Surgery examination were:—Mr. Savory, from St. Bartholomew's Hospital, and Mr. Cooper Foster, from Guy's; and on that occasion he gained a scholarship, with £50 a year for two years. Dr. Verco is a son of Mr. J. C. Verco, J.P., of North Adelaide; and all native-born South Australians will rejoice in the success and in the high honours he has won against what may be regarded as the competition of the world.—Ser...

REG. 9. 2. 28

GIFTS FOR UNIVERSITY.

Chair of Histology.

SYDNEY, Wednesday.

Mr. George H. Bosch, in response to the university appeal, has offered the University of Sydney £5,000 for the endowment of a Chair of Histology and Embryology, and £1,500 for the purchase of apparatus for the Department of Anatomy. The senate of the university has accepted the gifts with gratitude, and has expressed its wodm appreciation of the donor's public spirited action.

ADV. 10. 2. 28

UNIVERSITY STUDIES.

Dealing with faculties and boards, the annual report of the Adelaide University for 1927 states that the number of undergraduates was 770, of non-graduating students 878, and of post-graduate students 96. Of the non-graduating students, 57 attended from the School of Mines and 54 from the Pharmaceutical Society. The number of students studying for the B.A. Degree was 384, for the M.A. Degree 40, for the B.Sc Degree 81, for the B.E. Degree 103, for the LL.B. Degree 74, for the M.B. and B.S. Degrees 118, for the B.D.S. Degree 19, and for the Mus. Bac. Degree 5, and 381 students took the course for the Diploma in Commerce. Night lectures were given in the following subjects:—Botany, Inorganic Chemistry (Part I.), Elementary Organic Chemistry, Economics, Education, English Language and Literature, French, Geology, History, Latin, Logic, Pure Mathematics, Physics, Psychology, Accountancy, Australian Industries, Industrial and Commercial Law, Commercial Practice, Economic Geography, Economic and Commercial History, Public Administration and Finance, and Statistics. A special class in Botany was conducted by Mr. G. Samuel for the instruction of Pharmaceutical students and others, a course of lectures and demonstrations in Optics by Dr. J. J. O'Grady, and a course of instruction in Practical Optics by Mr. T. K. Qurban for students in Optometry. Six students attended the special course of instruction arranged to meet the requirements of the Massage Association.

NEWS 16. 2. 28

URRBRAE LANDS

Ministerial Inspection Made

With a view to ascertaining which portion of the Urrbrae Estate can be made available to the Department of Agriculture for tests in respect of the suggested Agricultural High School, a Ministerial inspection was made today.

The party was composed of the Hons. J. Cowan (Minister of Agriculture) and M. McIntosh (Minister of Education), and Messrs. A. E. Simpson (Architect-in-Chief, W. L. Summers (secretary to the Department of Agriculture), G. Quinn (Horticultural instructor), and W. T. McCoy, B.A. (Director of Education).

The utilisation of the land at Urrbrae will depend upon arrangements between the University authorities, the Education Department, and the Department of Agriculture.

ADV. 10. 2. 28

THE UNIVERSITY OF ADELAIDE.

REVIEW OF THE YEAR'S WORK.

SCIENTIFIC RESEARCH.

In the annual report of the University of Adelaide, which has just been issued, prominence is given to the visit of the Duke of York and the conferring upon him of the ad eundem degree of Doctor of Laws by the Chancellor on May 4.

Referring to the research activities of the University, mention is made of the work of the Waite Agricultural Research Institute, which began in March, 1925, and was further developed in 1927. Field experiments on the rotation of crops, cultivation of cereals, and the testing of varieties have been carried out for two seasons. The first group of permanent laboratories for chemical, agronomic, and plant pathological investigations was commenced during the year, and it is expected that they will be available for occupation in September this year. Investigations into plant pathology, of which tomato wilt is the major problem, and soil problems on the River Murray areas, are also being conducted. Reference is made to the work of the anthropological research board, which the report states is indebted to the Rockefeller Foundation for grants amounting to £250 for anthropological purposes, and to Mr. E. W. Holden for £100 towards the cost of the cinematograph picture. Smaller donations have also been received and have helped the work. The Rockefeller Foundation has made a further contribution for the coming year. The report continues:—

"The University is co-operating with the Council for Scientific and Industrail Research in investigations into problems of animal nutrition. Professor Brailsford Robertson has been appointed to direct the investigations, and a research laboratory is in course of erection on the land recently transferred to the University. Four working parties under the direction of Professor T. G. B. Osborn have visited the Koonamore Vegetation Reserve during the year. Photographic records have been made of all quadrats, and the 100-square-metre and one-square-metre areas have been charted. A large number of comparative observations have been made of the type of herbage growing within and without the reserve, and investigations have been made into the root system of mulga. The reserve was visited in December by Dr. A. W. Hill, Director of the Royal Botanic Gardens at Kew, in England. The experimental study of Polyuria in relation to kidney function has been continued by the Sheridan Medical Research Fellow (Professor C. Hicks) and Mr. Mark L. Mitchell. The thyroid gland research has been left in abeyance during the loan of the experimental animals for breeding purposes to the Council for Scientific and Industrial Research.

"In connection with cancer research, Dr. F. McCoy Hill has continued her investigation of the relationship of the white cells in the blood of mice to the occurrence of the remarkable tumors (lymphadenomas) which occur so frequently in these animals. The blood of numerous animals has been examined and the various types of white corpuscles have been counted at intervals throughout their lives, and it is proposed to correlate these findings with the occurrence of growths. At the present moment definite information has been obtained concerning the change of the relative proportions of different types of blood cells with age. The results of this work will shortly be published. It will then remain to correlate these findings with the pathological examination of the new growths found in these mice at death. As yet no definite correlation has been ascertained between changes in the blood, or the occurrence of growths, and diet.

"In accordance with the terms of agreement between the University and the Commonwealth Council for Scientific and Industrial Research, which was entered into last year, the chemist (Miss M. C. Dawbarn) engaged by the Animal Products Research Foundation to co-operate with the Council for Scientific and Industrial Research, has been working since February 1, on the analysis of thyroid glands of sheep. It is designed, ultimately, to determine the iodine content of thyroid glands from all the important pastoral districts in Australia, but Miss Dawbarn's time has been fully occupied during 1927 in standardising the method of analysis and in ascertaining the range of variation of iodine content in the thyroids of sheep."