

CROSSING METHODS

FUTURE OF THE SHEEP INDUSTRY.

Dr. A. E. V. Richardson is just now on travel, but it will not be out of place to recall some of his impressions regarding the sheep industry outlook and the development of grass lands (says an article in a recent issue of the "Stock and Station Journal").

He held the opinion that the use of superphosphate, and, in some instances, nitrate of soda, must eventually become general throughout the State, and lead to a tremendous increase in the number of livestock, particularly sheep, with a corresponding advance in the output of wool. He advocated the application of 1 cwt. to 2 cwt. of the fertiliser.

In referring to this a prominent sheep breeder remarked to a representative of the "Stock and Station Journal" last week end that he saw no reason why the strength of the flocks in Australia should not be increased by 50 per cent. and the output of wool doubled. The sub-division of large estates did not necessarily involve a reduction in the number of sheep or of the amount of wool produced, although he agreed that it did result in a diminished value for the wool. He strongly urged that great discrimination should be displayed by the authorities in the purchase of estates for subdivision. As an example of what could be done he quoted a Victorian district, in which 80 ex-British officers had been placed on three estates in community settlements. They had secured £57,000 for their wool clips in the 1924 season. Those men had improved their pastures by top-dressing and also growing special fodder crops.

The sheep man admitted he was not so well informed as he should be in regard to late statistics, but mentioned during the six years—1924 and previous—the Australian wool clip had brought into the Commonwealth £295,000,000 of outside money. Adding the value of the skins the total return was £300,000,000.

Referring to the decline in the number of sheep in the Commonwealth from 106,000,000 about 30 years ago to 72,000,000 in 1924, he strongly urged farmers to retain all the ewes and ewe lambs possible.

Another man interested in the industry maintained that what the world particularly wanted was combing or warp wools—that was wools which were shaggy and deep grown. It could be said that the Australian warp wools carried the short wools of the world.

Proceeding, he said that our wools were famous because of their strength and quality, which gave strength and quality, which gave strength to the manufactured materials. It was desirable that everything possible should be done to maintain these characteristics, and thus assure a continuance of the dominance of our wools.

He urged farmers to favor good robust sheep, which carried big bulky fleeces, as

they would prove the most profitable in the long run. It was quite possible to grow the class of wool indicated, and, at the same time, rear a tip-top lamb. Under existing conditions difficulty was experienced in securing good even lines of breeding ewes.

Where the animals were of mixed character, the owner should begin classing them immediately they entered his possession, with the idea of gradually building up a nice even flock. It was well to keep in the flock those ewes carrying an average or medium grade of wool, for that was the class of wool required to meet the needs of the great mass of people. Anything having a thin tippy type of wool should be discarded as soon as possible. A good policy when mating up was to turn in the best of the available rams for about 21 days and then introduce the remainder. The aim of the farmers should be not a big price a pound for their wool, or so much weight of wool a head but the biggest attainable return a head. Put in another way, efforts should be directed toward increasing both the quality and the weight of wool. He advocated hand feeding in seasons when there was a scarcity of natural feed.

Methods of Crossing.

The acknowledged superiority of our cross breed wool can be maintained only by consistently using rams of the long wool breeds found best adapted for the different class of country. A high standard quality can be reached and sustained only by sticking to one breed of rams. Cross breeding must be undertaken with care and its successful continuance involves a lot of attention. There must be a mating of the Merino and long-wool sheep. Different breeders adopt different methods in crossing. When carcass development is the chief objective, the long wool ram is put with the Merino ewe. If a more compact, finer, denser wool is desired and the country is not so good, a start is made by mating the Merino ram with the long wool ewe.

The progeny of either of these matings is a "first cross." For increased size and a stronger class of wool the long-wool sire is used on the first cross ewes. Though this second cross is not an ideal cross-bred, it forms an excellent foundation upon which to develop the fine cross-

bred by the use of Merino rams. Where the first cross is bred from the Merino ram and long-wool ewe and a long-wool sire is used to produce the second cross, if the ewes of this mating are put to a Merino ram they produce what are commonly known as "comebacks." These are a valuable class of sheep, growing dense fleeces of fine grade wool, and their meat is closer grained than that of the two crosses of long-wool rams to one of the Merino. When these comebacks have the English Leicester or Romney Marsh cross in them, they produce a class of lamb well suited for export, providing that they have been well kept from birth, as they are shapely, thick fleshed and nicely woolled. By a little careful attention this crossing and re-crossing can be extended with satisfactory results and the sheep will carry wool typical of the cross. When body development and length of staple are the points aimed at, it is necessary that large, robust framed Merino rams, carrying a lengthy staple of strong wool, should be chosen; but when the country will properly carry only a smaller, more compact framed sheep a deep thick set Merino ram carrying wool of extra quality and denseness should be used. Breeders must remember that one good ram does not make a flock. Other good ones must follow and the ewes must be regularly culled.

NEWS. 15.4.26

Dr. C. S. Hicks, who has been appointed to the Marks lectureship in applied physiology and the Sheridan Research Fellowship in Medicine at the Adelaide University, will arrive from London on the Mooltan on Saturday. He obtained his Bachelor of Science degree in 1913 and the Master degree with first-class honors the following year, while studying in New Zealand. The same year he was appointed national research scholar. Dr. Hicks saw service in the Great War



Dr. C. S. Hicks

who will arrive on Saturday to take up his duties as lecturer in applied physiology at the Adelaide University.

with a New Zealand division. In 1916 he was elected a Fellow of the Institution of Chemists, and in the same year obtained the degrees of Bachelor of Medicine and Bachelor of Surgery. Among other honors he has won the Beit Memorial Fellowship for medical research. He is the first New Zealander to have been awarded the degree of Doctor of Philosophy by the Cambridge University.

Adv. 17.4.26

DR. C. S. HICKS.

NEW PROFESSOR FOR THE UNIVERSITY.

A BRILLIANT CAREER.

Dr. Cedric Stanton Hicks, who has been appointed to the Marks lectureship in applied physiology and the Sheridan Research Fellowship in medicine at the University of Adelaide, will arrive from London by the Mooltan this morning. He was born in New Zealand 34 years ago, and has had a brilliant career. In January last he had the degree of Doctor of Philosophy conferred on him by Cambridge University, being the first New Zealander to achieve this distinction.

Until recently Dr. Hicks was engaged in research work at Trinity College, Cambridge. He graduated B.Sc. in 1913, and M.Sc., with first-class honors, in 1914, at the University of New Zealand. He was also appointed New Zealand National Research scholar the same year. In 1916



Dr. C. S. Hicks.

he enlisted in the New Zealand forces as a private and served abroad. While on service in 1918 he passed his examinations for admission as an associate of the Institute of Chemistry, London. He was elected a Fellow of the Institution of Chemists in 1922, and in the same year obtained the degrees of M.B. and Ch.B. He was awarded the Beit Memorial Fellowship for medical research in 1923. He is deeply interested in research work on the thyroid gland, clinically and otherwise, in relation to exophthalmic and endemic goitre, which researches he will continue at the Adelaide University.

"Bringing a Menagerie."

Before leaving London Dr. Hicks stated that he was bringing out with him a special colony of cancer animals, a gift from the Imperial Cancer Research Fund to the University of Adelaide, as well as a colony of his own goitre animals, or, as he put it, "quite a menagerie." In the middle of December, Dr. and Mrs. Hicks visited Germany and Austria. They were well received everywhere, especially in Vienna, where the problem of goitre has been studied for many years. Dr. Hicks had the privilege of meeting Professors Kolmer and von Furth, the latter being chiefly instrumental in persuading him to speak on the goitre work in England and America. He had already acquired a good knowledge of German, so that he was able to deliver his lectures in that language.

On his return to England Dr. Hicks said he had been greatly impressed with the uniform courtesy the Germans of all classes displayed to English travellers, and he was frequently told that English would be a universal language in Germany within ten years. He could not fail to be struck, too, with the regard most people had for England, this being particularly marked in Austria. They frankly admired British political ability. In Germany great industrial concerns of long standing were going bankrupt almost weekly. It was easy to get a wrong impression of the financial prosperity of the Germans, as they dressed well and crowded cafes in a manner not known in England. The fact was, however, that they really lived in cafes a great deal, and for a very small amount they could enjoy comfort and good music. In Vienna 33 per cent. of the people were without work of any kind, but to see the great and beautiful city, with spacious, clean streets, and no outward sign of difficulty whatever, a quite opposite opinion might be formed.

German Regard for Sport.

One thing, however, which struck Dr. Hicks as possibly the greatest tribute to Great Britain was the increasing regard for sport, which was fostered everywhere, and the admiration for what was termed "sport" in the Englishman was almost universal in Germany now. He was convinced for other reasons that the realisation of what was meant by "sport" was a big psychological step for people who had never understood it.

"There is little doubt," says one newspaper, "that Dr. Hicks will go far in his profession. He has already made more than a usually brilliant start, and he is an enthusiastic and keen worker. It is with some regret, naturally, that he and his wife are leaving the motherland, but the new chair which he is about to fill in the University of Adelaide will permit of considerable time each year for travel."

THE IMPORTANCE OF TEETH.

AN INDUSTRIAL AND NATIONAL QUESTION.

There was a good attendance at the weekly luncheon of the Rotary Club on Friday. Mr. N. H. Taylor presided. The speaker was Mr. H. Gill Williams, whose subject was "Dentistry, Industrial and National."

Mr. Williams said the question of industrial dentistry had been introduced in other countries by large firms in connection with their welfare movements. The employing firms of the United Kingdom had lost much time through sickness, and 50 per cent. of the absence and sickness was traceable to oral septicæ. Headache, earache, and complaints affecting the eyes were sometimes attributable to dental troubles, while a wide range of diseases, from indigestion, even to cancer, might be due to defective teeth. From an industrial point of view it was economically sound to see that employes had good teeth if it meant good health. More efficient production followed attention to the teeth of the workers. Lord Leverhulme had said it was a sound proposition to have the employes free from dental troubles. In

of the city firms employes were allowed to have their teeth attended to at the expense of the firm, to be repaid later. In other cases boys had to comply with dental treatment as a condition of employment. In others the time was "docked" from the employes when they were away from work to attend the dentist, but in most cases it was allowed. In many parts of England a large proportion of the people had declined to agree to dental treatment for their children. At Port Pirie an attempt was made to treat the workers for dental troubles, but peculiarly some of the workers with socialistic ideas had opposed the scheme. It had been said that the standard of education of the people might be judged by the people's teeth. One-fourth of the people who died in the United States of America had their lives shortened by from four to five years through diseases arising from the teeth. He would suggest to insurance companies that a certificate from a qualified dentist to the effect that the insured person's teeth were in good order every year should entitle that person to a rebate on his insurance premium. In Tasmania, Mr. H. W. Gepp, on behalf of the company he then represented, had been responsible for the establishment of a fine dental clinic. The cost was over £1,000, but it was found that as the result the health of the workers had improved, and what the dental clinic had cost would be more than saved in the decrease in payments on account of sickness. As business men he (the speaker) thought members of Rotary would recognise the importance of the question. Twenty years ago school dental clinics had been established in Sweden, and Germany had appreciated the importance of this phase of health. Unhealthy children were not an asset to the nation. He was pleased to see what was being done in South Australia by the Government. There was also an excellent scheme in operation in Queensland. In New Zealand special arrangements were provided for the training of young women in dentistry in order to treat the school children. It was supposed to be less expensive than employing fully-qualified dentists; but, on the other hand, there were countries where only qualified dentists were allowed to practise, because it was known that the care of the temporary teeth had an important bearing in the after life of the child. In New Zealand the staff attached to the dental clinics had performed over 60,000 operations upon the teeth of the children in one year. In South Australia 40,000 of the 80,000 children attending the State schools were in the metropolitan area. They could not get enough qualified dentists to do the work. He had never seen a better dental hospital than that established by the Government in Adelaide, where, under certain conditions, free treatment was given. In addition to treating the teeth the institution trained dentists, and 19 graduates had passed through the hospital, one of whom had secured the D.D.Sc. degree, and others the B.D.S. He was pleased to see the figures of the institution were increasing, and that it was hoped it would soon be self-supporting. Over 18,000 cases had been treated, of which there were 8,000 extractions, 3,000 fillings, and 789 radiographs taken. From a military or national point of view it was important that attention should be paid to the teeth. If men were wanted for an army to-day 25 per cent. would be unable to pass on account of dental defects. He thought the men who were compelled to undergo military training should also be required to be dentally fit. It was important to the employer, to the citizen, and to the nation. (Applause.)