117

REG 15-9-27

BUBONIC PLAGUE.

Lecture to Health Inspectors.

There was a good attendance of members of the Health Inspectors' Association at the Grosvenor, North terrace, on Wednesday evening. The President (Mr. J. Fairclough) occupied the chair.

Dr. F. S. Hone (Chief Quarantine Officer-General), in an instructive lecture dealing with bubonic plague, and the methods employed by the Federal Quarantine authorities to deal with the question, said their Commonwealth Department included the most recently established staff in Australia, and it was desired that their quarantine assistants should, in growing numbers, take the sanitary inspectors' certificate and become members of the Health Inspectors' Association. It was hoped that subsidies would be made available at the universities to enable men engaged in health work to advance in their knowledge. In matters of health, State boundaries should not be recognised. In tracing the history of the plague, the lecturer said reference was made to it in Old Testament times. In the fourth century B.C., a pandemic of plague fell upon Egypt, and practically settled the civilization of those times. In China, in the fifteenth century a pandemic also occurred. Another pandemic occurred in California in later years, being spread through the ground squirrels. In 1894 a pandemic in China spread to India, and 10½ million people died. In 1900 the plague reached Sydney, and that was its first known existence in Australia. During the next nine years it appeared in every State, and there were about 1,200 cases. In 1909 the disease was finally stamped out in Australia until 1921, when it reappeared in Brisbane, and spread to Sydney, and it was just as virulent and more rapid in its spread than previously. It was stamped out in two years, and the number of cases was less than 200. It did not spread south or west during that period. That was due to the spread of knowledge and the unity of control. He paid a tribute to the work of the late Dr. Ashburton Thompson, chief medical officer for New South Wales, in establishing the relation of infected rats to the presence of plague. In 1907 the health commission in India proved that the plague was conveyed to rats by the rat flea. In endemic centres the plague existed in a chronic state among rodents. It was dormant in the winter, and broke out in the summer. Through the flea biting the rat or a human being, the plague organisms were rubbed in from the wound and got into the blood. In dealing with the work of the Commonwealth Quarantine Department, he stated that to-day by the use of guinea pigs, they could determine the existence of a latent infection in any premises. The department kept in touch with the International Sanitary Convention in Paris, and with the League of Nations, and was thus notified of the existence of plague in different parts of the world. The lecturer dealt at length with means adopted to prevent the introduction of the plague from overseas, through the furnishing of detailed reports by captains of oversea vessels on arrival and precautionary methods while such vessels were in port. Since 1922 most of the Australian boats had remained rat-free, owing to the regular fumigations carried out by the department, and other precautionary measures. A tribute to their methods was indicated by the fact that their certificates of fumigation had been recognised by the authorities in Great Britain and the United States of America, and there was now a reciprocal arrangement on the matter existing between Australia and those two countreis. South Australia, because of its comparatively cold winter, and other climatic conditions, was far less likely to be subjected to the plague than New South Wales and Queensland. (Applause.)

At the close of the lecture, Dr. Hone answered a number of questions, and he was heartily thanked.

cont.

In 1884 Dr. Torr left for a year of travel in Europe. During his absence arrangements were made to establish a college to perpetuate the memory of the late Rev. James Way. When he returned Dr. Torr was offered the head mastership, and accepted on condition that he might first spend a few years in British residential colleges. This was allowed, and in five years at Oxford, Cambridge, and Dublin colleges, he secured his Master of Arts, Bachelor of Law, and Bachelor of Civil Law degrees, and was called to the Bar at the Inner Temple, London.

After a brief visit to Switzerland and Italy, Dr. Torr was called back to Adelaide in 1891, and took control of Way Memorial College. He performed his duties with marked success until 1902, when at the union of Methodism, Way College became the Methodist Ladies' College.

DR. W. G. TORR

Dr. Torr then left on a lecturing tour of Western Australia, Queensland, and New Zealand. In 1909 he opened the Methodist Training College at Brighton, where students of all denominations were trained for lay preaching and the ministry. He continued there until 1922, when the institution was taken over by the Methodist Church and became Brighton Theological College.

The hobbies of Dr. Torr include his work as "Old Oxford," through which he supplies books free of cost to people in the country districts, and bowls.

REG. 15·9·27

CENTRAL AGRICULTURAL BUREAU.

INTER ALIA.

A resolution was received from the Lyndoch bureau stressing the necessity for research work into the life history of insect and fungus pests which rob the primary producer of the best results of his labour. It was decided to notify the branch that arrangements were being made by the Waite Research Institute to obtain an entomologist to do this work.

ADV. 20·9·27

DISEASES IN PLANTS.

An inter-State conference, convened by the Victorian Minister of Agriculture (Mr. W. Slater), will meet in Melbourne to-day to discuss problems relating to the quarantine of plants suffering from disease likely to spread elsewhere. Professor T. G. B. Osborne, of Adelaide, who will represent the Commonwealth Council of Scientific and Industrial Research, said yesterday that one of the subjects to be considered would be the disease of powdery scab, which affected potatoes in Tasmania and New Zealand. The conference would also deal with the question of co-operation between the States in providing information regarding the occurrence of dangerous plant diseases for the first time, and also the publication of a census with regard to the prevalence of such diseases in the various States of the Commonwealth.

NEWS 14-9-27

Scholar and Philanthropist

After years of intense study and a brilliant scholastic career, Dr. William George Torr, M.A., B.C.L., LL.D., is living in retirement at Wattle avenue, Brighton. Well known for his philanthropic activities, he has been one of the foremost lay workers for the Methodist Church in the State.

Born at Tavistock, England, Dr. Torr arrived in South Australia at an early age with his father. Always a keen scholar he was at the age of 19 appointed master of Uloolon School. Promotion soon followed, and in turn he labored at Grote Street School, the Training College, and Moonta School.

MAIL 17. 9. 27

PROGRESS OF WAITE INSTITUTE

First Results of Three Years of Effort

PROBABLE CAUSES OF PLANT DISEASES DISCOVERED

After less than three years' work the Waite Agricultural Institute at Urrbrae is almost ready to announce its first definite achievements in agricultural research.

In the following article light is thrown upon the work of the Waite Institute past, present, and future.

It is expected that at the close of the present season the following definite discoveries will have been obtained:—

Probable cause of mysterious disease in oats which occurs in the South-East of South Australia.

Probable cause of tomato wilt.

Illuminating statistics on the effect of temperature and moisture on "take all," a disease of wheat.

Tomato wilt is the most destructive disease to tomato growing in Australia. It appears to have originated near Melbourne in 1916, and since then has taken increasing toll from growers all over Australia. Its cause has always been a mystery, and because of that the disease has been difficult to control.

Although the Waite Institute is not yet ready to disclose in detail its discoveries in regard to tomato wilt, it is understood that the cause of tomato wilt will eventually be found to be an insect, which carries the disease to the tomato plants as the mosquito does malaria to human beings, or as the bunchy top disease is carried to Queensland bananas by the banana aphis.

ANOTHER MYSTERY SOLVED

Another mystery which has been solved at Urrbrae, after nearly three years of effort, is the cause of an oats disease, which every year in the South-East for at least 30 years has caused great loss to farmers. It is expected that the probable cause of this disease will be announced at the end of the season.

Once the causes of the diseases are definitely known it will be comparatively easy to plan experiments which will lead to measures of control.

Since the Waite Institute began work in 1925 experiments have been conducted to find the effect moisture and temperature have upon "take-all" in wheat. These experiments, which were undertaken for the collection of reliable statistics, are nearly complete and will shortly be available to the scientists at Urrbrae as a basis for further experiments, aiming at the control of "take-all."

"NO GROWTH" DISEASE

Agricultural research is a slow and extremely painstaking task, and most of the experiments begun nearly three years ago at Urrbrae are still unfinished. The following table summarises experiments which are in an unfinished state:—

Study of soils.

Experiments on a "no growth" disease which occurs in the Murray mallee district.

Collection of main soil types of Australia.

Experiments to ascertain the best methods of planting cereals.

Experiments to ascertain the most suitable time for seeding wheat, barley, and oats.

Experiments to ascertain the best methods of manuring wheat, barley, and oats.

Breeding of new varieties of wheat.

Experiments to try and discover methods to improve the quantity of produce from pastures.

Experiments to discover a way to improve the quality of pastures.

Experiments in the top dressing and attention to pastures, and investigations of native grasses.

Study of soils in connection with investigations on tobacco, being conducted by the Commonwealth Government.

Study of soil problems facing settlers on the Murray, in conjunction with the Irrigation Commission and the Council for Scientific and Industrial Research.

STEADY PROGRESS

Some of these experiments are more nearly finished than others. It is expected that first results of the experiments on the manuring, planting, and seeding of cereals will be seen next year, whereas the collection of the main soil types of the Commonwealth, a work which is being undertaken in conjunction with the Council of Scientific and Industrial Research and with the various State Departments of Agriculture, is only just beginning.

Samples of South Australian soil are being collected and indexed at Urrbrae, and it is expected that eventually the laboratories of the Waite Institute will hold soil types from every part of the State. When that has been accomplished it will be possible to offer advice to almost every individual farmer in South Australia, but it will be some years before the collection and indexing of soils are complete.

Though an experiment to find the cause of a "no growth" disease which attacks crops of farmers in the Murray Valley is incomplete, the experiment has progressed far enough to allow the scientists of Urrbrae to speculate that the cause of the disease is not chemical.

MARATHON EXPERIMENTS

Among the first experiments begun at Urrbrae were those aiming at the improvement of the pastures of the State. The first two years on these experiments were only preliminary, and it is expected that this experiment will continue perhaps for 10 or 15 years.

Most of the experiments being conducted at Urrbrae have during the last 12 months been placed upon a more modern basis. The experimental fields have reached their possible limit of expansion on the Urrbrae Estate, and attention has been concentrated therefore on the improvement of the technique of the experiments themselves. In some of the newer experiments on cereal varieties and manuring these modern methods have been applied, and in one experiment each treatment is being repeated as many as 25 times in order to overcome the variations of the soil.

Though the Waite Institute is a South Australian institution, one of its objects is to form a link with other similar Australian organisations, and also with similar institutions of other countries. That is desirable to prevent overlapping in scientific research, and to show how South Australia is co-operating in work which affects other States besides South Australia. Prof. A. J. Prescott, in charge of the Waite Institute in the absence of Dr. A. E. V. Richardson, director, is at present in temporary charge of the collection of soil samples from the tobacco areas of Australia. The result of his investigations will be placed at the disposal of the Commonwealth Government, which is making an effort to stabilise the tobacco industry in Australia.

Soil problems of the irrigation settlements of the River Murray have recently been taken up by the scientists of Urrbrae, and eventually this work will extend to other river settlements in New South Wales and Victoria. This Murray soil work, which has only just begun, is being carried out with funds provided by the Council for Scientific and Industrial Research.

PROBLEMS OF THE FUTURE

The Waite Institute, though it is a magnificent addition to the agricultural organisation of the State, still labors under disadvantages. It has not, for instance, an entomologist upon its staff, and also lacks suitable laboratory accommodation, for some of its experiments. It is expected that the work of building the new Melrose laboratory will begin within a few weeks, and with adequate laboratories and an entomologist, important problems which will then be tackled are:—

Lucerne flea.

Codlin moth.

Dried fruit moth.

Breeding of wheat varieties with disease-resistant qualities.

It is expected that within the next year or two the staff of the Waite Institute will be doubled. That, however, does not mean that the work of the institute will become wider, so much as there there will be concentration upon existing experiments.

Growers Interested

At the invitation of an officer of the Waite Institute, a party of South Australian tomato growers, members of the South Australian Fruitgrowers and Market Gardeners' Association recently visited Urrbrae to view experiments which are nearing completion there, and which will probably disclose the cause of tomato wilt.

The experiments to ascertain the cause of tomato wilt have been conducted in