

An interesting account of the methods of investigation was given. A second kind of worm which infests Australian cattle was described. The lecturer spoke also of stomach worms in sheep. The need for further research work was referred to, and interesting lantern views were screened. Illustration of the nodules and the worms.

DISEASES OF CATTLE.

MONEY NEEDED FOR RESEARCH.

Speaking at the Prince of Wales Theatre, Adelaide University, on Tuesday night, on "Worm Nodule Disease of Cattle," Professor Harvey Johnston made a strong appeal for financial assistance to carry out investigations and research work. South Australia, he said, had some very fine researchers in various departments, and much had been done in this direction, but they were greatly in need of financial aid. The loss to the Commonwealth from stomach worms which affected sheep was in itself enormous. The work done by Professor Cleland in respect to the worm nodule disease was recognised throughout the world. Those who engaged in these researches got nothing from it themselves except hard work. He had been hopeful that his audience that night might have included a sprinkling of pastoralists, who would have seen the advisableness of supplying funds to carry on work which would have the effect of greatly diminishing the ravages of the parasites which did so much injury to the stock.

DISEASE IN CATTLE.

Urgency for Research.

Lecture by Professor F. H. Johnston.

Speaking at the third of his series of extension lectures in connection with the University of Adelaide in the Prince of Wales Theatre of that building on Tuesday evening, when he dealt with "Worm nodule disease in cattle," Professor F. Harvey Johnston gave vital statistics to show the depredations wrought by those parasites among the cattle of Australia, and stressed the necessity for research to combat the trouble. The lecturer, who was introduced by the Vice Chancellor (Prof. Mitchell), said the most devastating worm nodule which infested the cattle of this country was known as *Oncocerca gibsoni*, and was a very long species, varying in form and size. Proceeding, the speaker outlined the history of the discovery of the disease from 1880 until 1900, when he and Professor Cleland published a short article showing that the parasite was quite different from that in horses, which was not known to occur in Australia; and later a detailed account of their researches, describing experiments to ascertain its life history. Evidence was brought forward to show that meat which was infested was not in any way rendered unfit for human consumption.

Continuing, the Professor said the disease was most prevalent in the Northern Territory and North Queensland, lessening towards the south. It was apparently absent in Tasmania and Victoria. It had been stated that probably no cattle in Queensland were free from it, as so-called "clean" stations, on examination, showed from 20 to 50 per cent. of infestation. About 50 per cent. of the cattle slaughtered in Sydney in 1902, and at least 50 per cent. of all consignments from Queensland ports in 1910 were found infested by the Port of London authorities. That was extremely serious, when it was known that from 60 to 70 thousand from Queensland, mainly alone during one month—between July and October, 1910. The degree of infestation had certainly not diminished since then, and the export of frozen and preserved beef from Queensland had increased from about 167,000 head in 1910 to about half a million in 1915. Queensland official records showed from 70 to 80 per cent. had been infested in 1911 and out of 873,000 briskets of beef, the various meatworks

along the Queensland coast, between January, 1914, and June, 1916, about 74 per cent. had been infested. The heavy infestation of briskets had led to the compulsory removal of them from all export cattle. That meant a removal of about 100 lb. from an average carcase of 655 lb. The actual loss was carefully estimated in 1916 at about £1 a head, and the direct loss that year in export to Britain was £500,000. Owing to the lower price of meat recently, the loss was set down last year at 13/ a head. The mutilation of the carcasses also put the Australian product at a great disadvantage when compared with the beef from Argentine. The speaker went on to describe the various experiments made with cattle lice, ticks, mosquitoes, March flies and cattle flies, which have had for their object the determination of the transmitting agent of the disease, but said that no indication had been met with, which disclosed that fact. Until the carrier of the disease could be ascertained, no remedial measures could be taken. The lecturer also described another second type worm of nodule, which he had discovered, and said that although the disease it produced was comparatively insignificant, it was fairly common in Queensland, New South Wales, Argentine, Uruguay, Tunis, Algeria, France and the United States of America. A third kind of nodule was recently found by the lecturer in Queensland, and it infested from 50 to 100 per cent. of the carcasses in that State. The lecturer also spoke on stomach worms in Australian sheep. In conclusion, Professor Johnston said that the aim of the lectures was to point out the need for investigation. Parasites were probably taking toll of many thousands of sheep and cattle in Australia each year. A great deal of the loss was preventable. It was highly desirable that funds should be set aside by those particularly interested in order that effective measures could be taken to combat the problem. He pointed out that the Peter Waite bequest was almost entirely earmarked for work in connection with agricultural matters, and, although facilities for research would be available at the Urbrae Agricultural Research Station, yet the fund would not permit of the employment of investigators into veterinary and pastoral matters.

The Rhodes Scholars.

The flow of athletes from overseas, promoted by the late Cecil Rhodes under his scheme of Oxford scholarships, was interrupted in some degree by the influences of the war. Rhodes was out to attract the all-round men, who should be at once fine athletes as well as good students. While the war was in progress the best athletes could not always be secured, for the good and sufficient reason that they were among the first to volunteer for service at the front. This influence no longer obtains, and before long we may expect to see the effect on the athletic prowess of Oxford. It is the custom to give an annual dinner to these Rhodes Scholars. The function, I hear, will take place this year on the 16th of next month, the banquet being served in the town hall.

ILLITERATE PERSONS.

MR. MCCOY DEFENDS AUSTRALIA,

THE PROOF OF FIGURES.

LONDON, July 2.
Mr. W. T. McCoy, Director of Education in South Australia, at the Education Conference, combated Mr. S. A. Fisher's comparisons of illiteracy within the British Empire, given in an article in the "Empire Review," in which he implied that Australia was more illiterate than other parts of the Empire. Mr. Fisher based his calculations on the marriage registers in Great Britain, South Africa, and the census statistics elsewhere. Mr. McCoy pointed out that the Australian percentage was 0.16 as against Great Britain's 1.8 per cent. Mr. Fisher's calculation for Australia classed 239,780 children under the age of six as illiterates.

ILLITERACY AND INACCURACY.

Comparisons are never more odious than when they are wrong, and Mr. McCoy would have been fully justified if he had imparted a good deal of heat into his timely defence of the educational attainments of Australia, which is reported by cable this morning. The British Education Conference may well have been aghast to find a mere Director of Education from far-off South Australia better informed than a former Minister of Education in Great Britain. Mr. H. A. L. Fisher, it seems, has been discussing in The Empire Review the subject of illiteracy, and has fallen into an extraordinary error. His excursion into statistics appears to have been conducted with a recklessness which, in his youth, would have precipitated him to the bottom of a class in elementary arithmetic. There is just a possibility—although it should be admitted with great caution in the case of an ex-Minister of Education—that Mr. Fisher embarked upon his enquiry under the delusion that Australia is actually more illiterate than any other part of the Empire; but, in that case, it must be supposed that, with a degree of arithmetical skill proper to a gentleman in such a position, he supported a misconception which might have persisted for many years had not Mr. McCoy been on the spot to expose the error.

After all, the more charitable view is that Mr. Fisher failed both in arithmetic and "general knowledge," and that his unflattering picture of Australian culture was the outcome of lack of information rather than lack of candour. As a means of "cooking the accounts" to the advantage of Great Britain, the slandering of 239,000 helpless infants would have been altogether too audacious. Mr. Fisher should be informed that, despite the abnormal precocity of the younger generation of Australians, children under the age of six years are discouraged from attendance at night school in this country, and are thought to be sufficiently well advanced if always able to negotiate the *pons asinorum* across the local creek without falling into the water. But perhaps it would be better to leave Mr. Fisher alone, in the enjoyment of an ample opportunity to assimilate the facts offered to him by Mr. McCoy, and to realize the substantial nature of the beam that is in his own eye—the unsatisfactory amount of British illiteracy which exists in spite of the Education Department and an energetic trinity of influential associations formed with the object of disseminating the blessings of "the three R's." Australia, which does more, perhaps, than any other country to encourage, and even to compel, a general mastery of the essentials of education, will not suffer Mr. Fisher to endanger its reputation for culture, even although, in its defence, it must impair his reputation for accuracy.

ENEMIES OF EDUCATION.

"FEAR AND REPRESSION."

At the public meeting which took place on Tuesday evening in connection with the Teachers' Conference, Mr. A. L. Gordon Mackay, Assistant Lecturer on Economics at the Adelaide University, gave an address entitled "Fear and repression as enemies of education." He said at the outset that it was his purpose to attempt the task of showing that fear and repression retarded the development of educational work among both the teaching and administrative staffs of our various educational systems. The specific type of fear and repression about which he proposed to talk was that form which was instilled into the teaching service by bureaucratic methods resting on a basis of financial stringency. All had heard of unsympathetic methods of the central office towards the teaching staff spread throughout the country, and with that was coupled a whole series of petty economies which were both irksome and unnecessary. Then there was the matter of low salaries paid to men for doing the highest work which the Creator has given to man, and on top of it, in the interests of discipline and good government, there was a system of restraint which muzzled the teachers with regard to their public utterances. Further there was an inspectoral system which, although good in its way and necessary for efficiency, did not prevent the inspector from being a bloodhound, whereas his true function was that of a watchdog, or a guide, philosopher, and friend to the teachers.

Other Defects.

Then, too, there was the fact, and a very sad fact, that teachers were allowed to grow old in the service of the State to such an extent that they got out of touch with the younger members of the teaching profession, and with the children entrusted to their care. This, in the main, was due to the fact that a system of low salaries and insufficient superannuation had prevented them from putting by enough to retire at a fit and proper age. Then there was the incubus of routine, coupled with an insufficient number of periods off for relaxation, correction of written work, and preparatory reading. The absolute minimum of periods off should be 10, if teachers were to do their work properly. And finally there was an organized system of pendency, of unnecessary control and supervision, of a lack of faith and trust in the men who have been chosen to do the educational work of the State. If only a headmaster would realize that his true function was to co-ordinate the work of the staff, and to act as their Chairman and adviser, there would be less silent revolt against the domination of men with strong personalities. It must be understood, that in his critical survey of what he had called the "repressive system" obtaining at present, there were many exceptions to what he had said, as the comments did not apply to the administration of many schools, and to many headmasters and inspectors. He claimed, however, that his remarks were in the main, true. Those defects of compulsion by fear and repression were due not to the innate weakness of administrators or teachers, but rather to the fact that they were part of a grinding machine, whose driving power got its "punch" from the existing financial stringency.

Suggested Reforms.

Is South Australia were not to remain the black sheep of the Australian educational family, it must raise its annual educational expenditure to at least one million, and if it were to do educational work which should benefit the cultured State of Australia, the figure must go to a million and a half. One of the best ways of breaking down the driving force of fear and repression in the administration of our system was to decentralize education, in the matter of administration, management and expenditure. With regard to amuzzling the teachers in the matter of public utterances, at the same time as not to interfere with discipline, he suggested that the Teachers' Association be encouraged to become a sort of self-governing educational guild, whose ultimate aim may be the control and management of the Education Department, provided their control was mixed with that of parental and citizen influence. What was wrong with education in Australia—and in South Australia in particular—was not that we have not teachers of vision; not that our teachers did not know what ought to be done, but that they were prevented from doing their work to the full by an oppressive administrative system which had its basis on financial stringency.