

Cantabile was delightful, followed by the vivid effect of the Minuetto and the fine climax of the Molto Allegro." Gung'le waltz "Amorelten," with its charming melody and marked rhythm, was interpreted in a manner that brought out the composer's special qualities, and proved most popular with the audience. The three numbers for wood-wind specially selected and arranged from the world of three old-world piano masters were artistically rendered, and, although actually perhaps to be counted as chamber music, told admirably in the hall, and formed a pleasing contrast to the bigger works. The first was a charming thing, "Les petis moulins a vent" (Couperin) for flute, oboe, and bassoon. Most quaintly descriptive, this called for clever rendering from both flute and oboe, the bassoon giving well-balanced support. Next came Clementi's "Canone" (Gradus ad Parnassum) for two clarinets and two bassoons, the arrangement preserving admirably the characteristics of the composer, and the rendering being brilliant and effective. The group concluded with Scarlatti's "Allegro in B flat from Suite VIII," for flute, two oboes, two clarinets, two bassoons, and French horn. The soloists were:—Flute, Miss C. Pether; oboes, Miss M. Weston and Mr. McIntire; clarinets, Messrs. R. S. Kitson and W. Reynolds; bassoons, Messrs. H. Grabia and W. Honau; and horn, Mr. P. Gray.

There is always a charm about good ballet music, and Delibes' "Coppelia" ballet has an appeal of its own marked by lightness and grace, and well contrasted with the more dignified compositions on the programme. The light and graceful "Entr'acte et valse de Coppelia" was rendered with due expressiveness, and the "Valse de la poupee" admirably characterised. This group concluded with a descriptive and picturesque performance of the "Czardas Dance Hongroise." Another popular number was the Entr'acte "Barecarolle" from "Tales of Hoffmann." The players had to repeat a portion of the work in response to the recalls of the audience. The programme concluded with another composition by Mozart, the famous overture to "Don Giovanni." The interpretation made a fitting climax to an evening of artistic and striking orchestral music, and at its close Mr. Foote had to come forward and bow repeatedly.

REG. 7.6.26

## INTERESTING TRAVELS.

### Dr. L. J. Pellew Returned.

Dr. L. J. Pellew, who returned to Adelaide on Friday night from England, after having been absent from the State for about six months, demonstrated in the course of an interview on Saturday that his time abroad was fully occupied, and that he observed much more than does the ordinary traveller. His trip was not made solely for pleasure, for he combined the latter with business touching his profession. He was accompanied by Dr. E. W. Griffiths.

The doctor considers that Italy was the country in Europe least affected by industrial strife. That nation, he said, had advanced wonderfully during Mussolini's regime, and still continued to go forward. Perhaps they were the most economical people of all whom he had encountered. Their assiduity in the field of horticulture was amazing, and they extracted the most possible from their land. In Tuscany and on the plains of Lombardy, he saw an orchard of pear trees, about which vines climbed; around the vines were trellised climbing beans; and from all the bee gained sustenance and gave further profit to the producer. On every hand the people showed signs of prosperity.

#### Conditions in Germany.

Dr. Pellew was not impressed with the conditions industrially in Germany. The people there, he commented, were in a state of abject servility. They appeared to live in terror of any new move France might make. However, so far as he could judge, a strong pro-British feeling existed. The country was in a state of industrial stagnation, due principally to her loss of markets owing to the five years' ban on German goods subsequent to 1918. He failed to see how Germany could in a lifetime rehabilitate herself from her present chaotic state. "In Dresden," said the doctor, "of the first K factories I saw, only one was working. By reason of a shortage of capital, manufacturers have to pay from 15 to 20 per cent. for bank overdrafts. In turn, they have to give the retailer terms of from six to 12 months; frequently the latter declared himself bankrupt. If he cannot meet his liabilities he is occasionally given an extension of time. To indemnify himself against loss by insolvency of clients and extended

terms and increased bank interest, the manufacturer has to increase his prices by at least 50 per cent. For that reason, one can buy German goods in England, and America at about half the price at which they are sold in Germany. To escape the extra charges, British and American merchants pay cash."

"At Leipzig," he remarked, "I saw a demonstration of unemployed, 10,000 strong. They formed up in the street, four deep, and marched with the red flag in front to the central square. Some even did the 'goosestep' in derision. In many cases they were accompanied by women wearing red hats. There was not the slightest disorder, the police in every instance directing the traffic with perfect unconcern.

#### Bootlegging.

Dr. Pellew said he was not in a position to express an opinion whether prohibition in America was a success or a failure. Ideas on the subject differed in a most extraordinary manner. A manufacturer of boots in Chicago told him that since prohibition had been in force he had sold many thousands of pairs more of children's boots than ever before. There was no difficulty whatever in securing the whisky. The State police were more or less in the pay of the "bootleggers," but the Federal officers were almost incorruptible. In one saloon he saw that the windows to the street had not even been frosted, and the passer-by had an open view of alcohol being dispensed. A policeman kept watch at the door! Not infrequently men who were teetotalers prior to prohibition were now drinkers. Bootlegging was one of the recognised callings in America. "The American speaks of 'his grocer,' 'his doctor,' 'his dentist,' and 'his bootlegger.' Residents telephone their bootlegger in the same way as they call their tradesman. The rye whisky supplied is deadly; I only tried one! The Americans are like a crowd of overgrown school children. The scenes at the night clubs, where everyone goes provided with a hip flask, are reminiscent of Bachannalian orgies, the people behaving more like intoxicated blacks than reasonable whites."

The American liked to talk of his democratic spirit, but when he travelled to Europe he preferred to travel by the Cunard (A British) Line, and not on his own country's boat (although the fare was half the cost of the former) because the Commander carried alcohol, and in his (the American's) opinion, was better class than the American line.

#### Czecho-Slovakia's Richness.

The old Bohemia, which with the re-allowing of territory had been re-named Czecho-Slovakia, had made great advances, said the doctor. Her population of 20,000,000, although having belonged to Austria-Hungary for about 400 years, had retained most of its peculiar racial characteristics and national aspirations. One of the reasons of the country's progress was that she controlled all of the mines, which had been the main source of wealth to Austria-Hungary. He judged from the names of various business houses in Prague (the capital) that American money was being used to exploit the cheap Czecho-Slovakian labour. She manufactured almost everything in the hardware and textile lines. The greater part of the world's xylonite supply also originated in that country. Their leather and cut glass work was exquisitely beautiful.

The doctor was of the opinion that Austria had received the greatest blow of any of the combatants in the war. Venice was about the dirtiest city he saw, although the sights by night were entrancing.

Rome stood alone with respect to buildings, was the opinion of the traveller. It was incredible, he said, referring to some of the cathedrals, to think that man could conceive such architectural magnificence, and still more amazing that he could execute his designs. The church of Santa Maria Maggiore was perhaps the most beautiful of the many he saw. The ceiling was one mass of solid gold, carved in most exquisite patterns. The metal was given to the Pope by Queen Isabella of Spain, and represented soem of the wealth won in the conquest of Mexico.

#### At a Bullfight.

Dr. Pellew confessed that he had craved since childhood to view a bullfight, and during his short sojourn in the lazy land of Spain he had had his wish fulfilled. One Sunday he saw six bulls killed, and never, he said, had he seen a more horrible sight. The killing of the horses by the bulls, prior to the more serious business of infuriating the bovine, was revolting in the extreme. He did not, however, foresee any diminution in support for the sport; the attendances at the fights testifying largely to its popularity.

#### Art Galleries.

The art galleries of almost every country attracted Dr. Pellew. Those at Florence impressed him with their extent and with the variety and beauty of the treasures; but at Madrid, he considered, there were some of the finest works ever painted. Of approximately 135 works of Raphael probably 40 were in the last named gallery. Titian, Ineretto, Verones, Rembrandt van Dyck, Reubens, Velasquez, Marillo Goya, Lopez, and Elgreco (the migrator Greek) were all represented. The ar

works in the Florence Gallery, would, were they sold, realize more than enough to liquidate the British National debt.

The doctor had much to say about housing of the workers. Conditions in Leeds, Birmingham, and Manchester were appalling in their wretchedness, while the superiority of German conditions was only too evident in comparison. In Spain, in the village areas, the homes of the people were deplorable. They lived in squalid, windowless houses, whereas in the cities the state of affairs was the direct opposite, luxury abounding.

## AGRICULTURAL RESEARCH.

### ITS RELATION TO THE COMMUNITY

Sir Daniel Hall (Chief Scientific Adviser to the Ministry of Agriculture) delivered an address before the Graduate School of the United States Department of Agriculture on agricultural research in relation to the community. He dealt with many aspects which are also applicable to South Australia, where during recent years a great forward move has been made by the creation of the Waite Research Institute at Urrbrae. It is a common reproach, Sir Daniel remarked, that agriculturists have not made the same use of science as have those engaged in the other great industries—that farming is still a rule of thumb process carried out by methods which have their origin in the dark backward and abys of time. None the less, progress has taken place, and scientific development is going on. Under mediaeval systems of agriculture the yield from England's land was of the order of six to eight bushels of wheat to the acre. The enclosure of common lands, the introduction of a recuperative clover crop into the rotation, and of forage crops like turnips for the winter feeding of cattle and the making of farmyard manure, raised the level of production to about 20 bushels of wheat to the acre. This was about the average when agricultural science dawned nearly 100 years ago, say about 1840, when Liebig exposed his theory of plant nutrition, and Lawes began his experiments at Rothamsted. Growing scientific knowledge, and the introduction of fertilizers raised the level of English production by 50 per cent. During the next generation, so that by 1870 the average yield of wheat to the acre had become 32 bushels. At that level it has, more or less, remained down to the present day because a new factor then came into play, the importation of cheap wheat through the opening up of the middle west of the United States, and of Argentina and Australia. The economic factors of gold scarcity and rising costs of labour cooperated to limit the profit attached to high farming; the English farmer had to cheapen his production and lower his standard, so that he only obtains the same yield to-day, although the acreage under wheat has shrunk on to the better land. Latterly we have seen the yield creeping up a little, through the introduction of heavier cropping wheats—the products of scientific research.

#### Progress in Other Directions.

In other directions there has been progress. The introduction of the self-binder alone has meant great economies in manpower. By the use of machinery in one way or another English farming, with an equal or greater output, employs some 25 per cent. less labour than it did 50 years ago. Cattle feeding is more economic. Breeding for early maturity, better adjustment of rations, either for meat or milk production, have all tended to a cheaper output. There is still an immense margin for improvement. From scientific experiments one may calculate with some degree of confidence how much meat and milk a given quantity of fodder of one kind or another ought to yield. Yet when in the dark days of the war we took stock of our resources of cattle food because tonnage could no longer be spared for aught but human food, soldiers or munitions, it was estimated that in five years before the war the farmers of the United Kingdom at large only realized one-third of the meat and milk that was theoretically possible from the fodder that had been then available. Disease among animals is another field in which research has not been idle; enormous savings have been effected in the average efficiency of our flocks and herds. Yet in 1924 Great Britain had to pay a bill of approximately £4,000,000 to stamp out foot and mouth disease, and this was compensation only for slaughtered animals, and took no account of the losses the farmers endured by the break up of their businesses.

#### Greater Possibilities.

Great are the achievements and still greater the possibilities of agricultural research, but we must recognise that there are limitations to the effect of science upon agriculture which do not hold for the other industries. In the first place, in agriculture we are dealing with a living organism, and the amount of control that we have obtained over plant or animal, over that stubborn essence we call life, is far less than we can exercise over inanimate nature over iron or cement, over even the ether or the atom. When we attack vital problems we find that we cannot speed up processes or enlarge the unit in the way we can deal with the dynamo or spinning frame.

It still takes the wheat plant six months or nine months to develop, and cows bring forth their calves neither more quickly nor more numerously for us than they did for Abraham. We see no way of growing three or four crops a year under temperate climatic conditions. The organisms we are dealing with will go through their cycle, and you cannot hurry them. When you start hustling you find you let in secondary troubles of all sorts. These limitations lie in the nature of things, and although on looking back we can count up the immense advances that agriculture owes to the application of knowledge, we must not hope for sudden developments or revolutionary changes such as have been seen in flying and wireless. In fact, for the time being agriculture is actually suffering from the rapid developments and scientific achievements that have distinguished other industries. Agriculture is the fundamental industry, because we must all be fed, and yet you cannot point to any part of the world where agricultural wealth is being turned out and find the producers in a flourishing condition.

#### Rewards in Agriculture.

The rewards in agriculture, whether to the capitalist entrepreneur or to the labouring man, are not commensurate with those obtaining in industry or commerce, and so men are being drawn away to the towns, and capital is being diverted from the farms. The movement is one common to all civilized countries, its sources are social as well as economic. The lure of the town has been secular, modern facilities of communication and transport have given it a range of activity hitherto unknown, yet it cannot go on ever, for the world must be fed. We must interpret the steady rise of prices which has marked this century rise now being resumed after the excessive fluctuations caused by the war, evidence that we are approaching a limitation to the development of the town because there is not food enough to round. The old economists would see simple solution to this impasse; prices of food have only to rise sufficiently a men will be attracted back to the land in order to secure the profits it promises—the balance will be restored. Looking back historically, continued Sir Daniel Hall, has this ever happened? Can we find no example of an urban population migrating into the country. If the countryside does replenish itself in no it is by breeding, and by finding space in the country for the country bred. The great increase in the food supplies of the world the last half-century has been due to the new country becoming accessible whereby opportunities were given to the rural population to put their sons on new land. But that process is nearly at an end. There are no longer the great vacant areas waiting for men. (The speaker is evidently referring to England and Europe only, and not to Australia.) Are we not to look for progress in another direction? Can we not so intensify the farming of our existing land by taking advantage of science, machinery, and organization that agricultural production will become an industry capable of competing against other industries for men and capital? It was by a process of this sort, by enclosing the common lands and building up small capitalist businesses, that Britain succeeded a century and a half ago in meeting the needs of a population which was then beginning to expand as the industrial age approached. Our businesses remained small, too small to be efficient to-day perhaps, and I can point to a few examples of large scale industrial farming in successful operation.

#### Future Production of Food.

In fact, although I pin my faith to big business on the land as necessary to the future production of food in order to meet the growth of cities, I am bound to say that the current seems sweeping in the other direction. Agricultural businesses, such as we have, find it difficult to pay the wages that will retain men on the land with all its disadvantages of quietness and lack of amusement. Social and economic motives in England are working towards the break up of farming businesses into single-man or rather family farms, and similar forces have been ever more powerfully at work in Continental countries in dividing up the land. The desire of men for independence, the determination to call no man master, the innate feeling among country folk that a man has a right to a bit of land of his own as he has a right to vote or to a soul of his own, makes in many countries the single-man holding a burning political question. And the man is ready to pay—to pay in labour, in days that endure from dawn to dark, in days that include the hours of his wife and children, in toil against the regular pace of a factory for the privilege of being a landowner. But I doubt whether the process is fundamentally economic. Farming may become immediately more intensive when a great estate is cut up into small holdings, but the community so created becomes an unprogressive one, little fitted to take advantage of modern science, modern machinery, modern organization. It is fundamentally economic because it is employing more men than are necessary to produce the food on which the community can be supported. I conceive it to be possible for 15 per cent. of the working population to be able to produce the necessary food for the rest of the nation, and the larger the margin that remains after this prime task has been performed of men who can be making boots and clothes.