

point with regard to pure and applied science.* Pure science paved the way by first classifying and then finding out the life-histories of the fungi; pure science had also to devise by aid of much experiment the beautiful technique with regard to pure cultures, and so on, which can be learnt in the laboratory. Then pure science devised fungicides, and finally applied science is brought into the orchard in the form of the spray-pump and its contents. But is science content to rest at this stage? Is she not eagerly seeking to find out more about the relation of fungus and host, more about the causes of parasitism? Here comes in the plant-physiologist, who strives to find out more about the actual life-processes of the plant—whose ultimate aim, indeed, is perhaps to find out what is life itself. This latter problem seems wellnigh hopeless, but long before the problematical success is achieved science will know so much about the plant that new methods of combating disease will be in the hands of every orchardist. The Cawthron Institute of Scientific Research could easily spend all its income on investigations with regard to plant-diseases; but it would not be performing its full scientific duty if it were not carrying out plant-physiological researches with regard to the living tree as it grows in the orchard, and thus working not for the present alone, but for the future."

* Earlier in his address Dr. Cockayne had thus expressed himself on this subject: "I must say something regarding the separation of science into the two classes—'pure' and 'applied,' as they are called—the former at best merely tolerated by the public, who value a scientific discovery only if it has an evident practical bearing. This state of mind would kill all advance. If carried out for a sufficient time throughout the world, civilization would not merely remain at a standstill, but deterioration would rapidly set in. The purely scientific must come first, and the practical, without any special coddling by the State, will assuredly follow. The cure of an infectious disease is only the last link up to the present in a long chain of researches, nine-tenths of which were purely academic, but each leading slowly but surely to the final result. And this great wealth of research—apparently medical—was the work of the biologist, the chemist, and the physicist. The electric tram, the frozen lamb, the marconigram, the spraying of an apple-tree, the moving picture, the field of turnips—all these, and far more of our everyday life, are but the final—again I say for the time being—practical application of exact knowledge painfully acquired by enthusiasts such as Michael Faraday. . . ."

Beekeepers' Field-day at Ruakura.—The annual field-day of the Waikato branch of the National Beekeepers' Association, in co-operation with the Department, was held on 12th February at the apiary of the Ruakura Farm of Instruction, under perfect weather conditions. Between two hundred and three hundred members, representative of the whole of the South Auckland district, attended, under the presidency of Mr. C. S. Hutchinson. A pleasant and profitable day was spent, the programme comprising a number of practical addresses and demonstrations on various phases of the art and industry. The Apiary branch of the Department was represented by Mr. G. V. Westbrooke and Mr. A. B. Trythall; and, as usual at this annual function, Mr. A. W. Green, Farm-manager, gave every assistance for the general success of the gathering.

Brewers' grains (maltings) in the dried state have proved to be an excellent food for fattening stock, and seem to have a special value for sheep.