

vating the natural enemies of pests; and, also, as he taught California how to clear away *Icerya*, he taught New Zealand too the way to extirpate it.

Mr. Maskell desired to cordially indorse all that the Chairman had said, and ventured to add a word or two as to Mr. Koebele's present work. That gentleman had recognised the benefit which New Zealand had done to California in giving it *Vedalia*, and now Mr. Koebele was trying to repay the benefit by introducing to this country and liberating in Auckland insect-parasites from America which would, he hoped, prey largely upon the other "blights" existing here. If America owed something to New Zealand, it was now the turn of New Zealand to thank an American for trying his best to give us a practical benefit in return. He would venture also to say that in America, had there not existed expert Agricultural Departments and expert Boards, Mr. Koebele's two visits would probably have never taken place, and they furnished, therefore, an additional very strong argument in favour of the resolution passed lately both by this Society and by the Legislative Council, to the effect that an expert Agricultural Department should be established here, instead of the sham now existing.

Paper.—"On Stereo-chemistry, or the Arrangement of Atoms; being the Latest Phase in the Development of the Atomic Theory," by W. P. Evans, M.A., Ph.D.

ABSTRACT.

The author sketched briefly the older radical and type theories, showing how each failed to lay sufficiently bare the internal structure of the molecule. The chain theory was then gone into at some length, and its inability to explain many well-known cases of isomerism pointed out. Having thus made evident the necessity for widening the theory, the author proceeded to explain the stereo-chemic hypothesis of Le Bel and van't Hoff. By help of models, the possible derivatives of a single carbon and the combinations of two such systems were developed, it being thus shown how two hitherto unknown classes of isomers were rendered possible—viz., those due to the presence of asymmetric carbon-atoms, and those due to the presence of doubly-bonded pairs of carbon-atoms. Many examples from organic chemistry were then given in support of the hypothesis, special stress being naturally laid on those compounds (*e.g.*, tartaric acid, amygdalic acid, malic acid, propylene glycol, amylic alcohol, camphor, &c.) whose optical activity was not dependent on the solid state. In conclusion, attention was drawn to the fact that the stereo-chemic method had already been extended to other elements, notably nitrogen and oxygen; that it had done much service in the development of organic rings, had explained in a very satisfactory manner several hitherto abnormal anhydrides and oximes, and bade fair to be of considerable use in comparing the chemical energies of the several members of any special group.

Sir James Hector complimented the author on his splendid paper. He hoped that before long the services of Dr. Evans would be secured as a teacher in one of our colleges. He pointed out how necessary it was for Wellington to have a college where a lecture of this kind would be of much benefit to students, and he hoped Dr. Evans would on a future occasion give the Society further experimental proofs of the theories he advanced.

Mr. Hulke said he had listened with great pleasure, for the subject of the paper had been for some time past of great interest to him. If there was any foundation of truth in the theory, then the polariscope would be to the chemist what the spectroscope was to the astronomer. All innovations met with opposition. When, half a century ago, the in-