

Professor Rennie's topic was wide, and consequently many of the subjects to which he alluded could not be dealt with exhaustively. In several of them, indeed, his observations were little more than suggestive, but nothing more than this ought to be necessary. In such matters as the cheaper production of salt, for instance, much elaboration is surely not required. With such an unlimited supply of the raw material as we possess it is strange indeed that at this time complaints have to be made as to the unsatisfactoriness of the locally-manufactured article, and Professor Rennie has rendered good service by showing how the prosecution of this industry would beneficially affect others. In the same way the wastefulness of some other processes to which he referred ought only to need mentioning in order to ensure its being corrected. The utilisation of our forests and the production of tannin are cases in point. The professor has once more shown what has been repeatedly urged, that we have an undeveloped mine of wealth in the cultivation of oil-bearing plants, for which our soil and climate are admirably adapted. The department of metallurgy is another extensive field. By the progress of chemical science the profitable working of low-grade ores of many kinds has been rendered possible, and the value of substances heretofore regarded as worthless has been disclosed. Practical men who are engaged in these various pursuits should welcome the hand chemistry holds out to help them, and the linking of scientific research with active industry will enrich the community.

Perhaps the portion of the address which will attract the largest amount of attention is that which deals with the state of agriculture. It is true that statements very similar in substance have been frequently reiterated, but their repetition seems very necessary. With such a vast extent of virgin soil the temptation to retain the easy plan of superficial farming is very strong, and the habits thereby produced are difficult

to eradicate. For all that the conviction is steadily growing that more systematic and scientific methods must be adopted or the result will be certain failure. The fertility of the soil is not an inexhaustible reservoir, but one that needs renewing according to definite principles. What is abstracted from the land in every crop that is reaped must be restored in some form or other, or else sterility must necessarily result. Even deeper ploughing only postpones the evil day, and the enrichment of the soil by fertilisers is absolutely necessary. Water alone, whether by the ordinary rainfall or irrigation, is insufficient, for it does not contain the chemical elements that are required. Happily these are found to a large extent in what is now habitually wasted. Professor Rennie carefully guarded himself from making censorious charges, but if at any point of his address there was a tendency in that direction it was while speaking of the slovenly farming which is confessedly too prevalent. There can be no doubt that much of past failure is attributable to this cause, and that habitual waste of valuable fertilisers is far too general. One of the chief features of Professor Rennie's address was the underlying exhortation to economy and thrift which pervaded it throughout. This, indeed, is what applied chemistry is continually teaching. There is scarcely anything more marked in the progress made by this department of science during the last half century than the light it has thrown on the economy of nature. It has added to national wealth, not only by its discoveries of new substances and their combinations, but by its disclosure that nothing is really valueless. Several years ago it was stated in an inaugural address at a meeting of the British Association that whereas formerly the by-products of coal in the gasworks were thrown away, they now repay the original cost of the coal independently of the gas that is the chief object of production. In this colony the bounties of nature are scattered with a lavish hand, and in our enjoyment of them we have manifested no little prodigality. For doing so we are already paying a price so high that more economical methods are being forced upon us. It will be a good thing when the lessons thus taught are reduced to practice.

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UNIVERSITY EXAMINATIONS.

TO THE EDITOR.

Sir—Mr. Hartley, referring to the University examinations, states that — “The alternative is to get an examiner from Melbourne,” &c. Now would it not be far better to have an examiner like Mr. Hartley, who has taken such a deep interest in his scholastic work, than one who, coming from another colony, could not be expected to take the same amount of interest as Mr. Hartley would no doubt do? I should think that it would be rather difficult among such numbers of students to know the handwriting of each. I am sure many more join me in preferring Mr. Hartley to a stranger.

I am, Sir, &c.,

B.A.

October 10.

November 3rd 1888

MUSIC AT THE UNIVERSITY.—The work done by Professor Ives at the University School of Music is beginning to show rich results. A visitor to the University yesterday afternoon could not fail to be impressed with the sight presented by the seventy-five candidates assembled for examination in the theory of music. This scheme, which has proved as acceptable to music students in this colony and which has further induced entries from the sister colony of Victoria, is a most comprehensive one. The examinations are conducted in two divisions—junior and senior. The papers set in the former division include questions on all matters connected with elementary musical knowledge—notes, staves, keys, scales, transposition, intervals, common chords, &c. In the senior division the questions are of a more advanced nature, and the candidates are expected to show some knowledge of harmony, counterpoint, and musical history. Until the Chair of Music was established at the University these subjects were little understood in the colony, and as they form the very basis of a sound musical education, the interest evinced in them, as displayed by the large number of candidates offering themselves as subjects for examination, augers well for the future development of music in the colonies. In addition to the candidates who sat for examination at the University yesterday others were being examined at Mount Barker, Strathalbyn, Kadina, Crystal Brook, and Port Pirie, under the supervision of gentlemen who are kindly acting as honorary local Secretaries. Thus students in all parts of the colony may share in the benefits of the scheme without having to entail the expense and inconvenience of travelling long distances. But the encouragement of the study of musical theory is not the sole aim of this scheme. Many people may not have the inclination or ability to become composers or critics. To be able to play well upon the pianoforte, violin, organ, or other instrument, or to be able to make the best use of a good voice is no less worthy an achievement than the possession of deep theoretical knowledge. These practical subjects are of no secondary importance in a complete system of musical education, and we are pleased to find that under the scheme their due encouragement is provided for by a series of examinations in the practice of music which are fixed to