

The Register.

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CHEMICAL SCIENCE AND PRODUCTION.

The address given by Professor Rennie at the annual meeting of the Royal Society on Tuesday evening was a very valuable one. It was the production of a man who has attained to eminence in his own profession, and it was incidentally a useful contribution towards the solution of one of the most important problems which we have to solve. We use the term incidentally because the Professor did not claim to be an authority on matters of which he has no special knowledge. What he had to say was told in a simple and forcible style. Nor was there anything to wound the susceptibilities of that particularly sensitive class of producers who claim to be practical, but are not scientific. It seems to us to be an interesting sign of the times that the annual address by the President of the Royal Society should be on such a theme as "the present state of some of those industries of these colonies in which chemical science is more or less involved. We deprecate the idea that all knowledge is to be gauged simply by its commercial value; but the opposite error needs to be as carefully guarded against. If knowledge is not to be made use of in those instances to which it applies it is worse than useless. We should hold up to ridicule the man who expected to cure himself of a dangerous disease by reading through a medical treatise or getting the doctor to recite a prescription to him. And we cannot have much more respect for those who act as though they believed that scientific knowledge was very good for a member of the Royal Society, but of little value to the producer in his daily work. Truth compels us to say that this feeling has been brought about in part by the dictatorial style too often adopted by experts, and their apparent want of sympathy with those who are engaged in the actual work of production. Truth obliges us also to add that from such defects Professor Rennie's address was absolutely free.

As regards the agricultural and pastoral interests there is no doubt that they are not so flourishing as they ought to be. For this various causes may be assigned, and it must not be supposed that any of them are underestimated because special attention is given to one of them in particular. The Legislature may do something to encourage these industries, just as it has already done much to handicap them very severely. Everybody will acknowledge that the industries specially connected with the cultivation of the soil are the foundation of the prosperity of the colony. We may advance to other industries, but it will be a fatal mistake for us to suppose that the former can be neglected with impunity. If we are to have an unnatural system of fostering some industries, then it is only reasonable that special provision should be made for encouraging those natural industries to which we have referred.

By protection we increase the cost of production, and it is only fair that we should offer the producer special incentives to place him on a level with the manufacturer. The form which the encouragement should take is a legitimate subject for discussion. A special bonus for the successful establishment of new industries connected with the soil might be of some service. But whatever may be done in that direction, the fact remains that at present our natural resources are not being utilized as they might be, and consequently our production declines or has a tendency to go back. It is needless to say that Professor Rennie did not enter into the political and social aspects of the question. These he left to others. His task was the not less important one of indicating the practical relation of chemical science to these industries.

Though the producer has been severely handicapped by the action of the Legislature there is no reason why he should fold his hands in despair. That which has been done by a few who had little or no special advantage over others may be done by many. One great secret of our want of progress is the fearful waste that goes on. To the student of chemical science nothing is common or unclean. Everything has some value, and his business is to find out what its special use is. By constantly taking from the soil certain constituents without making any attempt to replace them we impoverish it and render it less capable of producing. Professor Rennie's remarks as to the waste of manure that might be utilized were very appropriate. In the issue in which they appeared there was published a report of a visit to the Roseworthy Farm, in which the same subject was touched upon. The complaint is not so much that the agriculturist does not expend money in the purchase of costly artificial manures as that he does not make the most of the resources actually within his reach. Into the many other questions dealt with in the address we cannot enter at length.

Knowledge, thrift, and saving common sense are necessary in every industry. They are especially necessary in those industries in which we are brought into direct contact with nature, and we fear it is the absence of them which explains the failure of many attempts that have been made to develop the resources of the colony. To encourage colonial industry is a very right and proper sentiment, but to encourage colonial shams is quite another thing. There is too often an impatient desire to get results quickly, which ends in failure, and so long as our agricultural and mining industries are conducted in the haphazard fashion that is too common failure and not success will be the rule. It has been shown that our soil and climate are specially adapted to some kinds of cultivation which have been tried on a small scale, and with regard to them the application of chemical science is most useful. Wheat is a most accommodating plant, and will thrive in a great variety of soil and temperature, but even wheat requires some consideration. We know that we can grow the vine, but we need to be more careful in selecting the suitable kind of soil and in considering the adaptation of our pro-