

order of the letters, and confusion is the result. Then, again, we venture to think that a little more of what we may call manufacturing chemistry might be with advantage introduced into our laboratories. After preparing the gases, the student goes on to study the analytical reactions of the metals, where there is very little scope for manipulation. Between these stages, or simultaneously with the latter, the preparation on a large scale of some of the reagents used in analysis, or of some compounds demanding skill and caution, such, for example, as the chlorides of phosphorus, would give a more extended knowledge of practical details, and at the same time furnish the student with a certain amount of technical instruction equally valuable to him as a scientific man or as a manufacturer.

LETTERS TO THE EDITOR

[The Editor does not hold himself responsible for opinions expressed by his correspondents. Neither can he undertake to return, or to correspond with the writers of, rejected manuscripts. No notice is taken of anonymous communications.]

The Royal Agricultural Society and the Potato Disease

MY attention has been drawn to a letter in NATURE, vol. xi. p. 67, signed "W. T. Thiselton Dyer," and headed "Royal Agricultural Society and the Potato Disease." It appears that Prof. Dyer has founded the statements and criticisms in that letter upon a paragraph which appeared in the preceding number of NATURE. Had he taken the trouble to read the official reports that have been published by the Society in the agricultural newspapers, the criticisms he might then have made would probably have had some value; and I must express my surprise that a man of scientific pursuits should have omitted to take that most necessary and most elementary course which I may term the verification of fundamental facts. This is the more remarkable as he criticises the Society's want of "methodical scientific method of investigation."

Prof. Dyer asks, "Is it not surprising that the Royal Agricultural Society should think the offer of a *roof* prize for an essay in any way an adequate method of dealing with the subject?" Now, what does Prof. Dyer mean by this question? He seems to imply that the Royal Agricultural Society offered such a prize, and that therefore they thought it an adequate method of dealing with the subject. But the Society did not offer such a prize, and have not considered whether such a method would or would not be adequate to deal with the subject.

The truth is, that Lord Cathcart offered such a prize two years ago, and asked the Council of the Society to nominate the judges and otherwise to take charge of the competition. This they did, and for this alone are they responsible.

Prof. Dyer proceeds: "The Society then determined to offer prizes for disease-proof potatoes." To this I must beg leave to reply that the Society did *not* offer prizes for "disease-proof potatoes," but for potatoes which should resist disease for three years in succession in twenty different districts of the United Kingdom. If the somewhat lengthy statement of the terms on which the prize was offered has been colloquially abbreviated into "disease-proof potatoes," that does not justify a scientific man in basing an argument upon it, especially in the columns of a scientific journal.

Prof. Dyer continues: "The utter futility of this proceeding was clearly obvious to anyone in the least acquainted with the subject." Here again I must join issue with the Professor. This prize was offered because certain essayists asserted, and seedsmen advertised, that they possessed varieties of potatoes which would resist disease. To put these statements to the test was in conformity with the Society's ordinary practice, which is to endeavour to make its members acquainted with the actual agricultural value of various articles, whether they be seed-potatoes, manures, implements, or other commodities. As the result has been to show that none of the potatoes experimented upon can resist disease for even one year in our twenty stations, the members of the Society now know what value to attach to the assertions of their proprietors, and the result is therefore not utterly futile.

These experiments have also been utilised to ascertain the influence of soil, climate, and modes of management on the crop

itself, and on the potato disease; and the results of this inquiry are now being worked out.

Prof. Dyer goes on to say: "Now, it seems to me that this spasmodic and ill-considered way of dealing with a serious subject contrasts, to an extent that it is impossible quite to regard with satisfaction, with the course that would be adopted in such a matter in other countries. It shows, at any rate, how little the methodical scientific method of investigation is understood by the majority of well-informed English people." I am content to ask Prof. Dyer to point out what is "spasmodic" and what is "ill-considered" in the action of the Society, and how does he justify his assertion about "the methodical scientific method of investigation?"

It must be remembered that the Royal Agricultural Society was not established for the advancement of science, and certainly not for the advancement of botany; but it was established for the promotion of agriculture, especially by the encouragement of the application of the discovered truths of science to the practice of agriculture, as is shown by its motto, "Practice with Science."

The Royal Agricultural Society does, however, enlist the services of scientific men upon its regular staff, and in this and other ways seeks to direct their attention to agricultural problems upon which the light of science is still wanting. As Prof. Dyer has contrasted the Society's "spasmodic and ill-considered way" with "the course that would be adopted in such a matter in other countries," I hope that he will inform me of the course that Agricultural Societies in other countries have adopted in reference to the potato disease and other such matters, without receiving assistance from the Government of the country.

I now come to what Prof. Dyer calls his "second point." He states that the Society, "anxious not to be entirely foiled, offered a sum of money to a well-known investigator of the life-history of fungi, Prof. de Bary, of Strasburg, to induce him to study the potato disease. Considering that De Bary had already written an admirable memoir on the *Peronosporae*, there was a certain simplicity in supposing that the gift of a sum of money would elicit some additional information which his zeal as a scientific investigator had failed to do."

So far as I understand the meaning of the phrase "anxious not to be entirely foiled," it implies some previous disappointment. Now, so far as this is from having been the fact, that the *first* step taken by the Council of the Society was to direct me to write to Prof. de Bary and urge him to continue his researches into the life-history of *Peronospora infestans*, in view of the vast importance of the subject in its agricultural bearings. Therefore I cannot see how the term "anxious not to be entirely foiled" can be made applicable to it.

The Society at the same time volunteered to place a sum of money at his disposal towards defraying the expenses which he might find it necessary to incur, but I hope that my communication to Prof. de Bary was not conceived in the offensive spirit which Prof. Dyer seems to suggest. The principle involved has been adopted by the British Association as one of the best means of advancing science, and I consider it a very different matter from that "certain simplicity" which Prof. Dyer derides.

This was not only the first, but it was the only step then taken by the Society in reference to the scientific questions bearing upon the potato disease; and its results up to this time are in no respect indicated by the grotesque statements which Prof. Dyer quotes.

H. M. JENKINS,
Secretary of the Royal Agricultural
Society of England

Nov. 29

Anabas Scandens

IN a short notice of the contents of the August number of the *Bulletin de la Société d'Acclimatation de Paris*, in NATURE, vol. xi. p. 98, reference is made to M. Cabonnier's announcement of "the arrival from India of several specimens of three varieties of fish never hitherto brought to Europe—the *Anabas scandens* or Climbing Perch," &c. With respect to the *Anabas scandens*, I wish to remark that in April 1872 I sent from Calcutta to the Gardens of the Royal Zoological Society of Ireland two specimens of this fish. Both specimens arrived safely and were exhibited in a tank in the Gardens; one died soon after arrival, the other lived for several months, succumbing at length to the cold of the following winter.*

Royal Victoria Hospital, Netley, Dec. 5 G. E. DOBSON

* See Forty-first Annual Report of the Royal Zool. Soc. of Ireland; also P. Z. S. Lond. 1874, p. 319.