

THURSDAY, JUNE 1, 1871

## SCIENCE LECTURES FOR THE PEOPLE

IT is the great weakness of Science in this country that its professors are rather a mass of incoherent units than an organised body eager to influence others and themselves enjoying the privileges of such influence.

Each one is apt to work too much by himself, and while he often exhibits the most rare skill in discovering truth, he too frequently leaves to others less able than he the task of bringing his labours before the world at large.

Now, while the man of science complains with much justice that his pursuits have not been recognised by the rulers of our country, he ought not to forget that it is likewise his duty to help others, in doing which he will help himself. Whatever be the faults of our rulers, they are eminently sensitive to public opinion; men of science, therefore, have only to prove to the people that they are a useful class in order to have their services recognised. It is really absurd to suppose that one of the most intelligent and useful bodies of men in this country could not obtain their just demands if they set themselves earnestly and unitedly to the task. They have hitherto tried to prove to our rulers that the promotion of science will benefit the country, but have met with only indifferent success; let them supplement their endeavours by convincing our rulers that to promote it will be for their own benefit, and they are sure to succeed. Success, in fine, will not be attained by a policy of isolation, but by leavening the whole mass of the community with the love of science, and when this is done science will rise to its just place in the councils of the nation.

Many of its chiefs have now begun to perceive this, and we are glad to record the success of one of the best organised attempts that have hitherto been made to extend the knowledge and love of science among the working classes. The Science Lectures for the People, lately delivered in Manchester, have been a very great success, whether we regard the numbers who attended them, or the standing of the lecturers, many of whom came from a considerable distance in order to give their information to the people of Manchester. In the cheap and simple form in which these lectures are now published they constitute an eminently readable and instructive book, suitable for all classes. The titles of the lectures are as follows: (1) Coral and Coral Reefs, by Prof. Huxley; (2 and 3) Spectrum Analysis, by Prof. Roscoe and Dr. Huggins; (4) Coal, by Mr. Dawkins; (5) Charles Dickens, by Prof. Ward; (6) The Natural History of Paving Stones, by Prof. Williamson; (7) Temperature and Life of the Deep Sea, by Dr. Carpenter; (8) Formation of Coal Strata, by Mr. Green; (9) The Sun, by Mr. Lockyer. We are much indebted to Dr. Roscoe for arranging this admirable series of lectures, and also to Mr. T. J. P. Jodrell, who has generously defrayed the heavy expenses connected with their publication. Surely, too, the men of Manchester owe a debt of gratitude to Dr. Roscoe and his friends for this intellectual feast, the elements of which are at once so excellent and so varied. It would be presumptuous in any one man to criticise such lectures, but let it be said

no more that the chiefs of science are either unable or unwilling to explain to others the discoveries which they themselves have made. They are at last emerging from their seclusion, and recognise their functions as teachers of truth. "A people," says Dr. Roscoe, "whose masses are without knowledge and without tastes for higher things than the mere struggle for existence can come to no good." These are truthful and noble words, and point to what ought to be the future action of men of science. Their author, we learn, is constantly asked about science lectures, and he thinks that if there were the means of sending lecturers to various localities they might be of the greatest value. But to do this a common action is necessary; for it is surely too much to expect that each large town should independently obtain such lecturers, and publish such a volume as that now under review. Indeed, the question is a more important one than at first sight appears; for a national society, formed with the view of diffusing scientific information among the populace of large towns, would be the beginning of a powerful union capable of forcing the claims of science before the Government of the country. Most of the leaders of science are disposed to admit that such a union is desirable, but many of them object to the formation of a new body. For, curiously enough, in matters of administration we are all of us evolutionists, and dislike very much the appearance of a new organisation that has not been developed by insensible degrees from some previous organisation of a humble character and living under other conditions.

Now, such a nucleus exists at Manchester; and as the necessity for an extended union of scientific men is strongly felt, might it not be desirable to extend the Manchester organisation into one for supplying the scientific wants of the whole community?

We make this suggestion with the view of eliciting the general opinion of the scientific public. This is a transitional age, and the social elements around us appear to be ripe for such a transformation.

## CROOKES'S CHEMICAL ANALYSIS

*Select Methods in Chemical Analysis (Chiefly Inorganic).*

By William Crookes, F.R.S. Illustrated by twenty-two woodcuts. Pp. 468. (London: Longmans and Co.)

THE title of this book fails to convey any adequate idea of its true province. It is not a mere textbook of quantitative analysis after the manner of Fresenius; nor is it, as one might be inclined to suppose, a collection simply of analytical examples designed to illustrate to students the more important determinative methods, as in the well-known and deservedly appreciated "Handbuch" of Wöhler. It aims rather at being a laboratory *Vade-mecum*—a sort of "Chemists' Constant Companion"—designed alike for the teacher and the taught. It presents in a remarkably clear and well-arranged manner a number of thoroughly reliable methods of analysis—some original, others modifications of older and well-known methods—of which the greater portion have been rigidly tested by the author in his own laboratory. Every working chemist must have repeatedly felt the need