## THURSDAY, OCTOBER 14, 1875

## THE INAUGURATION OF THE YORKSHIRE COLLEGE OF SCIENCE

THE formal opening of the College of Science at Leeds by the Duke of Devonshire, which we briefly announced last week, is an event of no mean importance to the county, and of no small interest to the rest of the community, inasmuch as we must regard it as another indication of the great educational movement which has already been experienced by Manchester, Newcastle, Birmingham, and Bristol, and is beginning to be felt more or less strongly in every industrial centre throughout the country. This movement, as Mr. Forster tells us, is not merely to give education to the captains of industry; it is to increase the culture of every individual working man and working woman in the land, and to give them not elementary education alone, but skilled knowledge to enable them to earn their living as efficiently as possible by affording them the key to the stores of knowledge.

It really appears that at last, in this county utterly devoid of any organisation for anything but the lowest education, there are persons who are gradually realising the fact, the statement of which has been dinned into our ears by the best informed minds for more than a quarter of a century, that the industrial supremacy of this country depends on other factors than natural resources, mental vigour, industry, and perseverance. The illustrious Liebig more than a generation ago, and in the very town which witnessed the ceremony of last week, warned us how impossible it was for England permanently to preserve this supremacy unless she bestowed more attention on the sciences which formed the basis of her chief industries. Nothing could be happier than the coincidence that Dr. Playfair, who then interpreted this memorable saying of the great German philosopher, should be present to see the Yorkshire people establishing an educational organisation, which is in no small degree the outcome of the counsel given to them so long ago. Truly the bread cast upon the waters has returned to Leeds after many days. And now let the promoters of the Yorkshire College take heed to the words of counsel given by the many eminent men whom they invited to take part in the opening ceremony. If the county is as earnest in furthering its welfare as we believe it to be, the institution ought not to remain long on its present limited basis: we hope and trust that the opinion of its President, Lord Frederick Cavendish, that to restrict the College to natural science would make it "a one-legged, one-sided concern," is shared by the rest of the Council. We do not want a Yorkshire College of Science, but a Yorkshire College in which science will be found in its proper place. It must be remembered that the whole duty of these local colleges is not limited to the instruction in the particular sciences which more directly relate to the manufacturing industries of the districts in which they are placed; they must be made to act as nuclei for higher culture by the establishment of chairs of Art and Literature. As Dr. Playfair told the people of Leeds, "a College of Science, such as we are inaugurating to-day,

is admirable in itself, but it is not complete. Perhaps it even focusses the light too strongly on a particular spot, and for this reason it intensifies the darkness around. Its directors are too enlightened men not to see this, and I am sure they will aid in the co-ordination of your other educational resources." We are aware that the establishment of an institution on so broad a basis as we have indicated is a work of time and patience, but that it can be accomplished, and in the face of great disadvantages, is evident from the example of Owens College. There are doubtless special difficulties in the case of the Yorkshire College; no John Owens has yet come to its aid with a munificent endowment, nor has it the advantage of being connected with an established institution in the manner that the Newcastle College is affiliated to Durham, or the proposed Bristol College to Oxford.

Yorkshiremen are proverbially a hard-headed race, with a keen eye to immediate practical benefits, but they must have patience, not forgetting that institutions similar to their own College have had their day of small things, and that it has needed much money and much time before their advantages have been fully realised. We have just one more word of advice and caution. The wealthy manufacturers who, roused by the fear of foreign competition and the cry for technical education, aid the struggling institution with their money, may be too apt to demand the establishment of technical classes as the condition of their support; and in consequence of the outside pressure thus exerted on the government of the College, it may be driven to regard such classes as the main feature of the work of the professors and lecturers.

We would counsel the College authorities to weigh well the words of the gentleman whose advice they specially asked. Dr. Playfair warned them against giving the College too much of a technical character, at least in its infancy. "The object of education, even in a technical school, is not to teach men how to use spinning jennies or steam-hammers, but it is to give a cultured intelligence which may be applied to work in life, whatever that may be. Teach science well to the scholars, and they will make the applications for themselves. Good food becomes assimilated to its several purposes by digestion. Epictetus used to say that though you feed sheep on grass, it is not grass but wool which grows upon their backs. So if this College teach science as a branch of human culture, it will reappear as broad cloth, worsted, puddled iron, or locomotives, according to the digestive capacities of the Leeds manufacturers who consume it."

## BURTON'S "ULTIMA THULE."

Ultima Thule; or, a Summer in Iceland. By Richard F. Burton. With Historical Introduction, Maps, and Illustrations. Two vols. (Edinburgh and London: W. P. Nimmo, 1875.)

OF the 780 pages which make up these two handsome volumes, only one half is occupied with an account of Capt. Burton's doings in Iceland during the summer, June to September 1872, which he spent there. No one, of course, can conceive Capt. Burton having any temptation to the production of a mere big book, and we have no