

THURSDAY, FEBRUARY 29, 1872

## SCIENCE STATIONS

WE shall not be far wrong, we imagine, in supposing that the article by Dr. Dohrn in a recent number of NATURE on "Zoological Stations" has attracted considerable attention among thoughtful men. We may, indeed, congratulate zoologists that so important a task has been taken in hand by one in every way so well fitted to accomplish it; and it will gratify our readers to learn that the cheery energy and bright enthusiasm of the German anatomist is fast overcoming the obstacles which his scheme naturally met with in the indolent city of the South, whose lands are so rich in classic ruins, and seas so full of Darwin-speaking embryos. At the risk of spoiling a good work we venture to add to his remarks some further suggestions, confining ourselves, however, to one or two points.

In the first place, we will be bold enough to express the doubt whether it will be advisable to separate so entirely, as Dr. Dohrn recommends, the stations in England from the work of teaching. The establishment of such stations will be rendered infinitely easier if they can in any way be made self-supporting. Dr. Dohrn hopes, if we understand him rightly, to pay the expenses of the Naples station out of the fees of the Gentile sightseers, who will be allowed to stroll about in the outer court of his embryological temple. There can be no such hope for any like English temple. Yet a very considerable share of the necessary funds might without difficulty be raised, and a Philistine British public might be made to believe that it was getting its money's worth for its money, if the work of teaching, which is palpable, which may be measured and valued, and for which a receipt in full may be given, were to go on hand in hand with the immeasurable and invaluable work of original inquiry. There would thus naturally grow up around the station a school of sound zoology; otherwise there would be great danger of its becoming a resort of ambitious *privat-docents* anxious chiefly to find a notochord where nobody had found it before, or a home of some narrow zoological clique.

Much might be said for the establishment somewhere on our British coasts of such a school of zoology on the theory of a geographical distribution of scholarship, and the existence of particular habitats best suited for particular branches of learning. Sufficient foundations for such a theory are at hand. It is easy to understand why Edinburgh, with her sea close by, has raised so many brilliant zoologists. We can see why Manchester in the past and in the present has done so much for chemistry. And, to look at the matter from another point of view, one gets a glimpse of the reason why high mathematics flourish at Cambridge, when one gazes at her fenny flats, where, if the conception of three dimensions be once reached, that of four is soon gained, and feels the fogs and mists which wash out of the mind everything that is not held fast by formulæ. The natural habitat for an English school of zoology is surely some bright spot on our southern coast.

Nor need such an institution necessarily have an in-

dependent isolated existence. There is too great a want of community in our English Universities and Colleges especially in matters of natural science. There is one zoology at Oxford, another at Cambridge, another at Jermyn Street, and these three have miserably little dealings with one another. What immeasurable good would a place of higher teaching do, where for a season, or for a term, the zoological students of all the Universities might mingle together with mutual diffusion of ideas! \* The mere opportunity of material would be a great thing: the Cambridge student would lift his ideas above the line of beautifully prepared vertebrate skeletons, the Oxford man would benefit by the change of diet from *Anodon* and *Astacus*, and the London man would learn to see actual things instead of reading about them in books. But the greatest thing of all would be the catholic enthusiasm for biological learning, which such an institution could not fail to generate and foster.

Another remark which we would wish to make takes on somewhat the shape of a complaint against Dr. Dohrn, that he has confined to one science ideas which should properly belong to all the sciences of observation. It is well to have a Biological station, but it is far better to have a station at once Biological, Astronomical, and Meteorological. Let us imitate Dr. Dohrn in giving our views a concrete form. The eclipse party on their outward, and even on their homeward voyage, cannot fail to have been struck with the bright clear air of the North Red Sea. There is the very land of observation. It is impossible for any one with a fragment of a mind within him to sojourn on those delightful shores, where the eye rejoices in its power, where the air helps vision instead of hindering it, where the water is as clear and transparent as the air elsewhere, without the desire springing up to be a naturalist by day and an astronomer by night. And this blessed region is now little better than a week's journey from the fogs of London. Nothing could be easier than to establish at no great expense a Science Station at some spot on the shores of the Red Sea, a little south of Suez. Suez itself is for many reasons undesirable, but the little village of Tor suggests itself as being a very suitable neighbourhood. There would be comparatively little difficulty in getting supplies, or in going and coming to and fro. The naturalist, the astronomer, the meteorologist, with the Palestine explorer as an occasional helpmeet, might spend here a winter, or rather many winters, in which pleasure and profit would be running a hard race together.

We cannot help thinking that such an idea has only to be mooted to be at once caught up and set in action. The outlay of the initial building and arrangements need not be heavy, while the yearly expenditure might be kept within comparatively narrow limits. Such an undertaking is one which Government might justly take in hand, but it is also one which private liberality might largely aid, and to which contributions might come from the funds of our ancient seats of learning. In any case we fairly think it is matter deserving serious attention, and as such we leave it to our readers.

\* It is impossible in a short article to develop a complete scheme; we might indicate our ideas, however, by suggesting that the right to study for one or more terms in the station might be granted as a sort of scholarship to promising biological students selected from all our great teaching institutions.