

A DISCOURSE ON THE NATURAL SCIENCES,

DELIVERED BY PROFESSOR HOW, AT THE ENCENIA, KING'S COLLEGE, 1857.

I HAVE been requested by the Rev. the President of this University, to make a few observations on the branches of study with whose conduct I am charged in the plan of education here pursued. The object of any remarks made in respectful compliance should be, as I understand it, to state as clearly as lies in my power the names and nature of those branches of study — their uses as elements of education, and as directly applying to the business of active life — and the general tendency of such studies in contributing to the real welfare of those who undertake them. It is under such heads that I propose arranging the few sentences put together with a view of accomplishing that object.

The Chair of which I have now to speak is entitled in the Book of Statutes that of Chemistry and Natural History, with Botany, and as no precise details are given of the duties, and as many persons have no very settled notions of the many events of subjects generally held to make up the above departments of study, it may not be uninteresting to inquire a little into the facts of the case, and see if there exist in Universities in various countries, any one plan of grouping these subjects. I shall be able to show that no such plan exists, and that the same names include very different things in many places in the same country, so that it is not surprising if one country holds an opinion varying from that of another.

With regard to Chemistry, it is perhaps universally and correctly considered to be that science which teaches the materials of which all earthly things are composed, the nature of these matters in their separate condition, their natural affinities, and the general principles upon which they unite and are held together, constituting that vast assemblage of objects which, in the aggregate, are called the World. It is held peculiarly to have to do with building materials and the modes in which, according to certain laws of combination, these are made to construct the substance of all created things, whether they have life, or are without it. Hence it follows that if we are to study any object of which we take cognizance by our senses, any thing that we see or touch, or taste or smell, we must, in order to understand it thoroughly, necessarily consider it in the first place in a chemical light — we must look to its chemistry — learn what it is made of, and how it is made, of what it consists. On this point there is no difference of opinion in the places, whose number is constantly increasing from the resistless demands of mankind in this age for useful instruction, where Chemistry is taught and valued.