

CONVERSATIONS ON NATURAL PHILOSOPHY

IN WHICH THE ELEMENTS OF THAT SCIENCE ARE FAMILIARLY EXPLAINED, AND ADAPTED TO
THE COMPREHENSION OF YOUNG PUPILS.
ILLUSTRATED WITH PLATES.

BY JANE MARCET

PREFACE.

The following work does not probably contain so much of the science of Natural Philosophy as might be crowded into a volume of equal size, on some different plan. The author seems to have been influenced chiefly by other considerations; and, in the opinion of the editor, with the most happy success. Mrs. Marcet did not profess to prepare a work suited to the highest stages of education. Her aim was to accommodate an important science to the literary taste and intellectual apprehensions of persons, within whose reach Natural Philosophy had not previously been placed—to accommodate to the use of schools generally a science, which had hitherto been considered too abstruse and uninteresting for any, whose minds had not been disciplined and invigorated by long and regular habits of study. Instead of exhausting the intellectual energies of youth in committing to memory definitions and mathematical demonstrations, which would not be understood, she proposed to illustrate the great principles of Natural Philosophy by comparisons of the most familiar kind; and, it is believed, Mrs. Marcet has done more, in this way, towards giving youth a taste for the study of philosophy than all others who have published treatises on the subject. In her preface she remarks:—" It is with increased diffidence that the author offers this little work to the publick. The encouraging reception which the Conversations on Chemistry and Political Economy have met with has induced her to venture on publishing a short course on Natural Philosophy. They are intended, in a course of elementary science, to precede the Conversations on Chemistry, and were actually written previous to either of her other publications."

The Conversations on Natural Philosophy were introduced into the editor's Seminary about three years since, then at Concord, N. H.; but it was soon found that his pupils were often embarrassed in not knowing to what particular parts they were chiefly to direct the attention, committing to memory what was not necessary and omitting what was, thereby causing great loss of time as well as of improvement. This induced him to prepare, as they were needed, day after day, Questions for their examination. When questions were thus prepared upon the whole work, it was judged expedient to have them published in a pamphlet, which was accordingly done; but being prepared in haste and without thought of their being published, they were of course imperfect; nor was there opportunity to revise them, when afterwards printed with notes in connexion with the work itself. But as successive editions were required, and as the demand is still increasing, he has been induced to revise and write them anew, placing them at the bottom of the several pages to which they relate; and, also to increase the number of Notes, and to add to the volume a Dictionary of Philosophical Terms.

As the work is now presented to the publick, the Editor has full confidence in recommending it to Instructors, well persuaded it will lessen their own labour and facilitate the improvement of their pupils. It is perfectly obvious, that, instead of embodying, the questions at the close of the book, as in former impressions great convenience will be found, both by instructors and scholars, in having them printed

on the pages from which they are to be answered; nor is the labour of finding the answers to be given so lessened, as to enable scholars to select those answers without reading and studying the whole book.

It has been thought best to place the Plates at the end of the volume. If interspersed throughout the work, as in former editions, it is evident that no more than one page could face each. Plate, while a very considerable number of pages would have reference to it, so that the object contemplated could only in a small degree be accomplished. Besides, it is judged advisable by the editor, that the plates should not face the explanations in the Text if practicable. Many of the Questions are to be answered from the Plate; but if the several Plates were placed opposite the different portions of the work to which they relate, the answers might be read from the explanations there given instead of being recited from the figures as intended.

Boston, December, 1824.

J. L. BLAKE.