

figures. The sketches in the book have all been made in outline so as to assist the pupil in making his own.

But chemistry is much more than the making and recording of experiments; it has a most important philosophical side. Observation must be followed by classification, and this involves that all-important principle of comparison. Hence, as the study proceeds there should be constant reference to what has gone before and likenesses and unlikenesses carefully noted. Isolated facts are not science. Moreover, it is not possible to grasp the full import of many things when first met with; their meanings will develop with our own mental advance; hence, the need for frequent re-reading of chapters that go before what at the moment one may happen to be studying. The listing and tabulating of information is a most valuable exercise, as it presents in a striking way many things that might otherwise be overlooked.

What might be called the human side of the subject has not been disregarded. No one needs to remember who discovered each element or compound, or the dates of all the important happenings. But there should be in the mind of each pupil some sort of chronological perspective and an appreciation of the fact that this science is intimately connected with the history of the race and is a part of universal evolution.

It may be well to defer the study of Chapter XV, on Organic Chemistry, till all the inorganic has been gone over; but it was thought best to place it where it appears in the book in order to minimise the old and persistent idea that there is some real and fundamental difference between these two great branches of chemistry.

Certain matters which are perhaps somewhat too advanced, or not of sufficient importance, for treatment in schools, but which explain or round out that which is taught, have been introduced in small type. These little paragraphs will elucidate some things that might otherwise be obscure and may, perhaps, help in cultivating a desire for more advanced study.

While simple language has always been the writer's aim, he does not think that the vocabulary of the High School pupil should be considered as hardly more advanced than that of the infant class;