way, and Mr. Enock's skill as an artist in portraying all sorts and conditions of animal and plant life greatly add to its charm.

Elementary Organic Analysis. By F. G. Benedict, Ph.D. Pp. vi+86. (Easton, Pa.: The Chemical Publishing Co., 1900.) Price 1 dollar.

DR. BENEDICT describes processes for the determination of carbon and hydrogen in organic analysis. His manual is distinguished by completeness of detail concerning the setting up and manipulation of the analytical apparatus, and the treatment necessary for various classes of compounds. The book should be of service in directing students how to carry out organic combustions satisfactorily.

Elevation and Stadic Tables. By A. P. Davis. Pp. 42. (New York: J. Wiley and Sons. London: Chapman and Hall, 1901.)

HYDRAULIC tables showing velocities for various channels and slopes are given in this volume, as well as tables "for obtaining differences of altitude for all angles and distances, horizontal distances in stadic work, &c., with all necessary corrections." The book has been prepared and published because there is a need for such a handy manual in the field work of surveying and in practical problems connected with canal construction. As such its usefulness is assured.

LETTERS TO THE EDITOR.

[The Editor does not hold himself responsible for opinions expressed by his correspondents. Neither can he undertake to return, or to correspond with the writers of, rejected manuscripts intended for this or any other part of NATURE. *No notice is taken of anonymous communications.]*

The Recent "Blood Rains."

THE quantity of dust carried over to Europe by winds from the African Continent during the present month seems to have been unusually great, for traces of the "blood-rain" are said to have been noticed as far north as Hamburg and Schleswig-Holstein, while, in most cases, such phenomena are confined to the countries immediately bordering the Mediterranean. My colleague, Prof. A. W. Rücker, who has been staying at Taormina, in Sicily, has forwarded to me some very interesting observations which he has made on the subject. Writing on March 12, he says: "We have had a rather curious phenomenon here. The sirocco was blowing, and the hills were wrapt in mist, but the fog assumed a yellow hue, and the sun, which at times could be seen through it, was a bright blue. This was caused and accompanied by a copious fall of red dust. Some which I shook off my hat was quite dry, and on looking at it through a low-power lens all the granules seemed to be spherical, except a very few grains of what looked like quartz. Of course, the question was raised whether Etna was ejecting something which corresponded to the Krakatoa dust, but this was negatived by the fact that the Italian papers state that the dust fell also at Naples and Palermo in such quantity that the streets looked red and the people were frightened. I scraped some off a marble table which I send you."

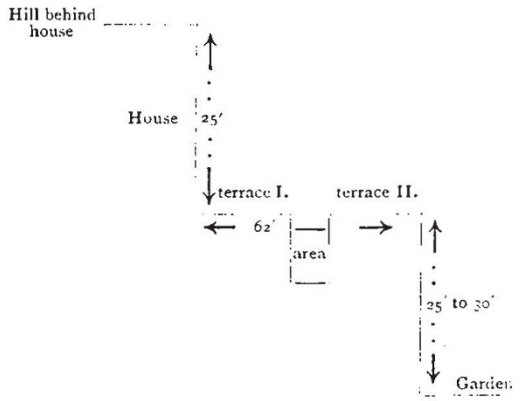
Under the microscope this dust is seen to be mainly composed of inorganic particles, chips of quartz in small quantities being mingled with minute plates of various micaceous and other minerals. There is also a fair admixture of frustules of fresh-water diatomaceæ, entire and in fragments. The number and variety of these diatomaceæ does not appear to be so striking as in some of the celebrated cases described by Ehrenberg, the organisms from which were figured by him in his "Passat Staub und Blut Regen" (1847). There are, however, a very considerable number of species represented in these recent falls.

Vague statements have appeared in some of the newspapers as to the number of millions of tons of dust which, during the present month, have fallen over Italy. The data upon which these statements have been made have not been given, so that the following memorandum on the subject, drawn up by Prof. Rücker, cannot fail to be of interest to readers of NATURE.

Royal College of Science. J. W. JUDD.

March 20, 1901. *Taormina, Sicily.*

"At 7.30 this morning the sky was copper-coloured, and it was evident that another fall of dust was taking place. The sirocco had been blowing for two days, and it was raining slightly.



The general outline of the hotel is as shown. The two terraces are connected by a bridge. On the terraces were several rectangular marble tables, and it occurred to me that it might be interesting to find the amount of dust on some of them.

It is, of course, possible that the rain may have washed some of the dust off them, but I looked at the terrace when dry and saw no signs of a specially great aggregation of dust under the tables.

The aspect of the terrace is about S.W., so that the house did not shelter the tables, as the wind was blowing towards it; but, of course, eddies may have had an effect.

The sky ceased to be copper-coloured about 8 or 8.15, and I have no reason to suppose that any large quantity of dust fell while the experiments were being made.

Table I. Was on the western half of the inner terrace I., about 13′ from the house. It measured $24\frac{1}{2}'' \times 46'' = 1127$ square inches. The mingled dust and water were scraped off with the edge of a sheet of paper into the cover of a biscuit box, then dried over a spiritine (alcohol) flame. The dust adhered rather strongly to the box, and had to be scraped off with a knife, which removed some shavings of the tinning.

Collection made at 9 a.m.

Table II. Further east, on terrace I., near a point where the level of the house fell to about 17′. Distance from house, 13′. Dimension, $22\frac{1}{4}'' \times 40\frac{1}{2}''$, or, say, 900 square inches. Collected as before but into two plates, one earthenware, and the other enamelled iron. The dust had to be scraped off, but I do not think the knife removed anything from the plates.

Collection made at 10.15 a.m.

Table III. This was the best experiment. The table was on the outer terrace, 58′ from the house, and close to the edge of the terrace. Area, $24\frac{1}{4}'' \times 46\frac{1}{2}'' = 1127.5$ square inches. The scrapers used were rags of clean muslin, which were afterwards washed in water to get as much dust as possible out of them, and the quantity so obtained (which was small) was added to the rest. The dust and water were put in a clean bottle and preserved. No drying was done in this case.

Collection made 10.45.

In the afternoon I borrowed a balance from a photographer. The smallest weight was a gram, but the balance would turn to less, and I made smaller weights by cutting a piece of stout paper to such a length that it weighed a gram, measured its length and cut off measured lengths from it. I weighed in both pans and found there was no important difference. The whole experiment was rough, but the amounts deposited on the two tables appear to have been so different that great accuracy in weighing is not important.

Table I. Weight of dust, 1·13 grams.
Area, 1127 square inches, or, say,
0·0010 gram per square inch.

Table II. Weight of dust, 1·54 grams.
Area, 900 square inches, or, say,
0·0017 gram per square inch.

Table III. Preserved wet, and therefore not weighed.