

While several of the plates reproduced by Shaler are excellent, notably the one of a pebble-beach and the pictures of breakers on the shore of Martha's Vineyard, some of the cuts in the text are decidedly poor. The small woodcut intended, according to title, to represent a sun spot, and another of a portion of the moon's surface, should certainly be replaced by something better in future editions.

In the preface of the volume the statement is made that it is intended for beginners in the study of the earth's history. It seems to the present writer that this claim is too modest, as the book can be used with both pleasure and profit by the advanced student and even by the most experienced veteran in physiography, as well as by the novice. In fact, the many suggestions and original observations, strewn thickly along the general pathways that are followed, are among the greatest charms of the book. Some of these branches of the general current of thought may perhaps lead the beginner astray, but to more experienced explorers they serve to show how vast is the space surrounding the known.

In every library there should be a new shelf for romances of nature, and one of the first books to be placed thereon, whether in the home, school, university or circulating library, should be the 'Outlines of the Earth's History.'

ISRAEL C. RUSSELL.

*Die Chemie in täglichen Leben. Gemeinverständliche Vorträge.* By PROFESSOR DR. LASSAR-COHN. Hamburg und Leipzig, Leopold Voss. 1898. Third Edition. 8vo. Pp. vii+317.

A German book on chemistry which has experienced three editions in as many years, and translations of which into several foreign tongues have been made or are in preparation, as the author's prefaces inform us, must have struck a responsive chord in public favor.

These lectures on chemistry in daily life are twelve in number. They cover a wide range of topics; foods, illuminants, explosives, leather, coal-tar colors, ceramics, Röntgen rays and many other subjects are discussed.

At times the grouping of themes presented in one lecture seems rather incongruous. Thus, in one instance, lecture twelve, metallic alloys,

alkaloids, anæsthetics, anti-pyretics and disinfectants all come in for consideration.

This appears to be rather a varied menu for an intellectual repast, especially if one intends following the author's admonition and dispose of it at one sitting. For the preface says: "As the individual lectures had the customary duration of one hour a corresponding amount of time ought to be devoted to their perusal."

The style is terse and clear; typography and paper good.

FERDINAND G. WIECHMANN.

*Introduction to the Study of Organic Chemistry.*

By JOHN WADE, B.Sc., Senior Demonstrator of Chemistry and Physics at Guy's Hospital. London, Swan, Sonnenschein & Co. 1898.

The author has adopted a method of treating the subject which is exactly the reverse of that commonly employed. He starts not with the simple hydrocarbons, but with some of their derivatives, and does not give the properties, etc., of the hydrocarbon until he has taken up the complex derivatives. As he states in the preface, 'the book proceeds from the familiar to the unfamiliar.' The application of this method can, perhaps, be best shown by an extract from this preface: "The first substances to be studied are the typical alcohol and acid akin to the inorganic bases and acids, and the study of these leads to the theory of radicals. The other simple alcohols and acids are next dealt with, and the ideas of homology and isomerism introduced. The construction of the net-work of cross connections typical of organic chemistry is now commenced, with the aid of the ammonia derivatives and cyanogen compounds, and the necessity of the theory of structure shown. The structural formulæ of the various compounds having been duly established, the simple aldehydes are introduced, and with them the conception of polymerism; then the simple ketones and secondary alcohols, with the theory of position isomerism; and the iso-alcohols and acids, with the theory of branching-chain isomerism. Finally, the simple hydrocarbons are dealt with, and the preceding work codified in the theory of substitution."

It is difficult to see how one can gain a clear idea of the more complex substances without