

in which the compounds are regarded as containing the element existing in one of two valency states, 3 and 5. The information includes the mineralogy and technology of the elements as well as the pure chemistry, and the physical constants of the elements and compounds are given in detail.

It is regrettable that a higher standard of accuracy in historical information is not generally required in text-books; in the present volume, two names are incorrectly given in one line on p. 14, for example. References to analytical methods are adequate. The literature appears to have been very well covered until about 1933, but there do not seem to be many references after this date. It should be noted that neither Thenard nor Regnault should be written with an accent.

Geography

The Preservation of our Scenery :

Essays and Addresses. By Dr. Vaughan Cornish. Pp. xiii+92+12 plates. (Cambridge: At the University Press, 1937.) 7s. 6d. net.

To Dr. Vaughan Cornish beauty of scenery is no mere luxury but a factor in the formation of national character, and he regards its preservation as essential to national well-being. Fortunately, there is a growing, but not yet sufficiently influential, body of opinion that subscribes to this view. The study of the mechanism of Nature is less important than its philosophical contemplation, and wild Nature must be protected from both the devastation of the builders and road makers and the frenzy of the collectors who may be termed the criminal classes among Nature lovers.

In the volume before us, Dr. Cornish has collected six papers and addresses which he has given to various societies on the subject of the preservation of the scenic amenities of Great Britain, and he has illustrated the volume with several of his charming sketches. One of the papers discusses the types of scenery suitable for national parks in England and Wales and the relative value of certain areas from this point of view. Another contains a strong plea for the preservation of English cliff scenery, and this is an even more urgent matter since the destructive hand of the bungalow builder is making serious inroads on some of our cliffs, notably in Cornwall.

All who value the beauty of our countryside will welcome this volume. It may be too much to hope that the vandals of our natural heritage will realize their iniquity from its pages, but the indifferent may be persuaded to abandon that attitude.

Markets and Men :

a Study of Artificial Control Schemes in some Primary Industries. By J. W. F. Rowe. Pp. ix+259. (Cambridge: At the University Press, 1936.) 7s. 6d. net.

ONE of the solutions for the economic troubles, which have recently 'depressed' production throughout the world, has been some form of control. The schemes have varied greatly. They have involved a world

limitation of output to a percentage of the normal—tin, copper, rubber; paying the farmer not to produce certain products—cotton, wheat, hogs; actual destruction of the crop—coffee.

After a preliminary chapter on the origin and growth of artificial control schemes, the author describes those for coffee, wheat, sugar, American cotton, rubber and tin, and discusses the troubles which give rise to restriction schemes.

The language is simple, and the book is a useful record of experiments, the success or propriety of which is to-day a matter of keen controversy in political and economic circles.

Geology and Mineralogy

Rutley's Elements of Mineralogy

23rd edition, by Prof. H. H. Read. Pp. viii+490. (London: Thomas Murby and Co.; New York: D. Van Nostrand Co., 1936.) 8s. net.

THE homely saying that the proof of the pudding is in the eating is well exemplified by this well-known text-book, now in its twenty-third edition, which has guided the footsteps of so many generations of students of mineralogy.

In Part 1, which deals with the properties of minerals, the chapters on crystallography and optics have been rewritten and a new chapter on the occurrence of minerals has been added. In the discussion of the elements of crystallography the treatment has been kept as simple as possible. Nothing, for example, is said about the reflecting goniometer, and only the eleven more prominent of the thirty-two classes of crystal symmetry are considered; possibly the number might have been expanded slightly so as to include the cuprite class in the cubic system, the chalcopyrite class in the tetragonal system, and the sulphur class in the orthorhombic system. Prof. Read follows all writers, except some in Great Britain, in the use of the Bravais symbols in the hexagonal system in place of the original Millerian indices. From the excellent account which is given of the optical properties of minerals the student can acquire the fundamental knowledge necessary in the determination of minerals by means of their optical characters, particularly in thin sections of rocks. The chapter on the occurrence of minerals is really an introduction to petrology and the subject of ore deposits.

In the second part, which comprises the description of minerals, the usual chemico-crystallographical classification originated by Dana has been given up in favour of one based upon economic and chemical considerations, the minerals being grouped according to the useful element contained in them and the order following the periodic classification of the elements. Care has been taken to retain the important rock-forming silicates in their natural families. Under each mineral the properties are clearly stated and attention is directed to the discriminative characters which serve to distinguish it from others with which it might be confused.