

With regard to diet and disease much is said, and much that is both interesting and instructive. For instance, we are informed that although bacilli may occasion disease, they only play a subordinate part. The essential cause of all disease is "dysæmia," or a deficiency or wrong proportion of the "vitalised" mineral constituents in the blood. All dysæmia is dietetic, and arises from too much water (the author, by the way, seems to have an objection to water baths: air baths are the things to have), too much common salt, or the too limited consumption of uncooked fruit and vegetables. Mankind in general, except the author, his children and the inmates of his sanatorium, appear to be suffering from this "dietetic dysæmia," and will be a ready prey to the first bacillus that settles on them. The whole book is unfortunately pervaded by the spirit of fanaticism, but nevertheless is well worth reading. Although doubtless the importance of the so-called inorganic salts in their combination with organic substances is greatly exaggerated, still the physiological chemistry of the subject is well considered, and the author has spared no pains to collect the results of erudite researches which tend to support his theory. His remarks upon the cooking of vegetables are well worthy of attention, especially in this country. F. W. T.

*Applied Geology.* By J. V. Elsdon, B.Sc. (Lond.). Part I. Pp. vii + 96. (London: "The Quarry" Publishing Co., Ltd., 1898.)

THE author of this work states in his preface that circumstances have made it necessary to publish the earlier chapters separately, and that, therefore, these chapters scarcely give an adequate idea of the scope of the completed work.

The part thus published contains little but what can be found, often in much more detail, in such well-known books as the work on field geology by Sir A. Geikie, Mr. W. H. Penning's "Field Geology" and his "Engineering Geology," and the "Treatise on Ore Deposits" by J. A. Phillips and Prof. Louis.

The first chapter deals chiefly with geological surveying, but far too briefly to be of much use. Outcrops are then illustrated by figures resembling those of Sopwith's geological models.

The rule given on p. 14 for ascertaining the thickness of beds by multiplying the breadth of the outcrop, in a direction at right angles to the strike, by the sine of the angle of true dip, should be supplemented by the proviso "having, in case the surface is not horizontal, first reduced the observed outcrop to that which would be observed if the surface were horizontal."

The second chapter is devoted to problems relating to dip and strike, the method of solving which, both by trigonometry and by construction, is clearly explained. In the third chapter unconformity, overlap, curved strata and normal faults are defined and illustrated. In the fourth chapter problems relating to faults are dealt with in a similar method to that made use of in the chapter on dip and strike.

The fifth and last chapter of the part published describes, in the space of twenty pages, stratified ore deposits of gold, platinum, tin, iron, manganese, aluminium, copper, &c., at various typical localities.

Taking the volume as a whole, it is obvious from the small number of pages devoted to so great a variety of subjects that some matters are inadequately dealt with. On the other hand the book is well illustrated by fifty-seven figures, the explanations are clear, and the work is calculated to be of considerable practical use, more particularly in the case of dip, strike and fault problems.

An ideal work on applied geology should, in addition to taking hypothetical cases, discuss, as far as possible, problems in mining, tunnelling, water supply, &c., which have been actually met with, and should be illustrated

by concrete examples from definite localities in which the theory of the geologist has been tested by the execution of the engineering work. May we hope that we shall not have long to wait for such a work?

*Flora of the County Donegal.* By Henry Chichester Hart. Pp. xxiv + 392; with a map. (Dublin: Sealy, Bryers, and Walker, 1898.)

THE publication of a flora of one of the dampest parts of our islands—one of the most uniformly peat-buried, and one of the hitherto least worked—is pleasing; and the pains evidently bestowed on this book make it welcome. Less than one half of the "Flora" is taken up by the enumeration of the phanerogams, ferns and *Characea* of Donegal; of the rest, over sixty pages are occupied by a long report on the climate, and one hundred by a discussion of the distribution in Ireland and Great Britain of the plants of the county. New observations on the altitudinal range of plants, and new statements of their times of flowering are things pleasant to see: from the latter, it appears that the "perpetually recurring storms" and the "deficient summer heat" retard the vegetation, so that blossoms appear even later than in the East Highlands. Mr. Hart does not call attention to this; it is a point deserving inquiry. Too long have authors of works such as this been content to copy or to make approximations at dates of flowering. In discussing the vegetation, the lines laid down long ago by H. C. Watson are carefully followed. As a common basis for comparison of different floras they are valuable; but one can only wish that the splendid chance which so uniform a vegetation offers had led to a consideration of vegetative formations—a subject only just touched upon. This discussion of the vegetation contains several suggestive observations, of which by no means the least in interest is that on the poverty of Donegal in *Crucifera*, *Leguminosæ*, *Umbellifera*, *Compositæ* and *Orchidaceæ*: of the last order, *Orchis maculata*, we are told, alone is able to live on the outlying islets; yet these plants, with their tuberous roots, might be expected to be able to tide over bad seasons.

It is a pity that the old error of calling *Neottia* a parasite should appear here; but such errors are rare; and the book, if not strikingly original, will at any rate be serviceable to all who find an interest in the botany of North-west Ireland. I. H. B.

*The Reliquary and Illustrated Archaeologist.* Edited by J. Romilly Allen. New Series. Vol. iv. Pp. 288. (London: Bemrose and Sons, Ltd., 1898.)

THIS attractively produced quarterly review of archæology is "devoted to the study of the early Pagan and Christian antiquities of Great Britain; mediæval architecture and ecclesiology; the development of the arts and industries of man in the past ages; and the survivals of ancient usages and appliances in the present." The volume now before us, containing the numbers published this year, is well up to the high standard of its forerunners. The articles will interest students of the archæology of Great Britain; and they are so well illustrated that all who are interested in antiquities may derive pleasure from reading them. Many of the articles are noteworthy. Mr. Leader Scott describes a Gallic necropolis discovered in Italy, on a tract of land at the foot of an indentation of Mount Montefortino, near Arcevia (Ancona). In addition to the archæological aspects, the necropolis affords an interesting study from an ethnological point of view. Mr. Henry Balfour contributes a short paper on the modern use of bone skates and sledges with bone runners. The editor writes on primitive anchors, pot-cranes and their adjustments, and other subjects; Mr. R. A. Gatty describes the objects found in the Barrow at How Tallon; Mr. H. Ling Roth contributes a paper on Benin art, and there are numerous notes on archæology and kindred subjects.