another on the purely intellectual side. It is a highly stimulating thing and often leads to real discoveries, to look for analogies in the complex manifold which our nature and the world present to the mind, so long only as the critical faculties are awake to control the resultant theories. Sir Francis is in the line of the Pythagoreans. If he can find in the universe more perfect beings beckoning us on by their example, if he can persuade mankind that the universe, as one, is labouring to maintain and multiply to infinity the things that we recognise as best on earth, he will give fresh force both to mind and spirit. As a storehouse of such thoughts, we believe that the book has been built to good purpose and that many will come back to it in future. F. S. MARVIN.

## Conifers and Sempervivums

- (1) Conifers in Cultivation: the Report of the Conifer Conference held by the Royal Horticultural Society, Nov. 10-12, 1931. Edited by F. J. Chittenden. Pp. ii+634+84 plates. (London: Royal Horticultural Society, 1932.) 21s.
- (2) An Account of the Sempervivum Group. By Dr.
  R. Lloyd Praeger. Pp. ii+265. (London: Royal Horticultural Society, 1932.) To Fellows, 15s.; to non-Fellows, 21s.

THE two volumes under notice are official publications of the Royal Horticultural Society. The first is the report of the Conifer Conference held by the Society in 1931, and its 634 pages are filled with information on conifers. Forty years had passed since the previous Conifer Conference was held, and during that time many new species had been introduced; therefore the Conference had a peculiar interest to all who are concerned with trees. Every effort was made to ensure the success of the undertaking, and visitors were unanimous in their opinion that no such collection of plants and cut specimens had ever before been brought together.

As the Council of the Society was particularly anxious to try to establish uniformity for the names used for various species, a list of the kinds usually grown out of doors in the British Isles was compiled, in which the names now looked upon as correct according to the international rules on nomenclature were given, with many of the more important synonyms. This list appears in the early pages of the book and is followed by the fifteen papers read at the Conference, some of

which are well illustrated. An account of the plants and cut specimens follows, then about 300 pages are devoted to statistical returns of conifers growing in 240 gardens and pineta in Great Britain and Ireland. The book will be found to be valuable alike from arboricultural and historical points of view

The second book is a monograph of sempervivums by Dr. R. Lloyd Praeger, and it is very well done. The sempervivums present many botanical difficulties, for they hybridise so freely that it is very difficult to raise a species true to name from seed taken from cultivated plants or from wild plants where two or more species are growing in close association. Fortunately, all the species can be increased by offsets, therefore seed need not be relied upon.

Botanists working upon this group of plants are faced with another difficulty, for owing to the succulent nature of stems and leaves, they are difficult to dry and it is almost impossible to make a conclusive study of the species from dried plants. Therefore Dr. Praeger went to a great deal of trouble in collecting living plants in their native haunts from which to make his descriptions.

The work is divided into two parts, general and systematic. In the first part the author discusses systematy, history, hardy and tender kinds, variability, hybrids, parasites, epiphytes, teratology, the place of sempervivums in the garden, cultivation and economic uses; and in part two, which extends from p. 34 to p. 256, the various species are dealt with systematically under sectional headings. The descriptions are accompanied by excellent botanical drawings, and the book is concluded by a good index.

## A Square Meal

Food, Health, Vitamins. By Prof. R. H. A.
Plimmer and Violet G. Plimmer. Fifth edition.
Pp. xii+143. (London, New York and Toronto: Longmans, Green and Co., Ltd., 1932.) 3s. 6d.

EARLY forty years ago, widespread interest was aroused by the discoveries of new and unsuspected gases in the air around us; to-day the man in the street and even more the woman at home is interested in vitamins—those surprising and apparently essential constituents of our foods. Ten years ago their very existence was disputed by the 'die-hards' of the calorie school of nutrition: