how and why 'dumping' arises. He considers its reaction on the wage policy. He discusses the advantages and disadvantages of integration and vertical combinations, and also of the policy of broadening the basis of business. The relation of dividends to profits, with the corollary of reserves, also receives attention, and a few words are devoted to the question of publicity.

The field of business economics calls, as Sir William Ashley notes in his concluding lines, for much further investigation, and we venture to hope that he will pursue his studies and so develop this side of knowledge that it will, in his own words, "contribute to the training of efficient men of business . . . form in itself an interesting body of knowledge and . . . be a genuine mental discipline." W. H. C.

Handbuch der Pflanzenanatomie. Herausgegeben von Prof. K. Linsbauer. Lief. 15. Abteilung 2, Teil 2: Pteridophyten und Anthophyten. Band 9: Das abnorme Dickenwachstum. Von Dr. H. Pfeiffer. Pp. xii+273. 19·50 gold marks. Lief. 14. Abteilung 2, Teil 2: Pteridophyten und Anthophyten. Band 10: Anatomie der Angiospermen-Samen. Von Prof. Dr. Fritz Netolitzky. Pp. v+364. 27 gold marks. (Berlin: Gebrüder Borntraeger, 1926.)

THESE two volumes, forming part of a comprehensive series dealing with all aspects of plant anatomy, contain a wealth of detail useful to the specialist and, expecially in the case of Pfeiffer's book, not without considerable interest to the general botanist. Pfeiffer deals essentially with the various types of anomalous secondary thickening found in lianes and perennial storage organs, the detailed consideration of which, arranged under numerous headings, occupies the greater part of the book. The introductory section includes a brief summary of the present views as to the causal interpretation of the phenomena concerned and a useful oversight in tabular form of the occurrence of the different types of anomalies in the various Phanerogamous families. The treatment of a large mass of (in part) rather unconnected facts has been successfully accomplished, but a rather fuller consideration of fleshy roots might have been useful. The illustrations are somewhat scanty—in particular figures showing successive stages in development of anomalous structure might have been more freely included.

Netolitzky's treatise on the anatomy of Angiospermous seeds, which traverses a very large body of literature, deals with the subject-matter essentially from the systematic point of view. Seed structure is considered family by family and the data are summarised in a table at the end of the book. One misses, however, anything of the nature of a synopsis giving the distribution of the various seed characters in families and genera, such as would facilitate identification of a seed of unknown affinity. The numerous illustrations may help to some extent to remedy this defect.

Le pH intérieur cellulaire. Par Dr. Paul Reiss. Pp. 135. (Paris: Les Presses universitaires de France, n.d.) n.p.

THIS monograph provides an excellent summary of the literature in a field of experimental biology which is beginning to attract great attention. After a very summary statement of the theoretical physico-chemical basis from which conclusions may be drawn as to the significance of hydrogen ion concentration to the behaviour of protoplasm, a brief chronological summary is given of the main investigations in which an attempt has been made to determine a *p*H of biological interest. As the author says, when placed chronologically, these investigations do not show a growing improvement in the technique of determination of *p*H, the difficulties grappled with in earlier papers often being completely neglected by later workers.

The intention of the author is to avoid this in future by a comprehensive study of the literature of *p*H determinations of significance in biology, and a very valuable section follows in which a critical discussion is given of the use and limitations of both indicator and potentiometric methods when applied to living organisms. A brief but very suggestive discussion of the tentative suggestions as to the significance of *p*H, for example, as an internal regulatory mechanism in the organism, completes a very concise monograph that should be of real value to the experimental biologist.

The bibliography covers English and American work as well as continental, and cites a number of papers published so late as 1926. It is an additional advantage that this little monograph discusses somewhat fully the suggestive work of Prof. Vlés and his pupils, both in the development of methods of determination of *p*H and as to the significance of external *p*H on the behaviour of mixtures of protein ampholytes with different iso-electric points.

Die Tierwelt der Nord- und Ostsee. Herausgegeben von G. Grimpe und E. Wagler. Lieferung 4. Teil 7, c_1: *Bryozoa*, von Ernst Marcus; Teil 12, c.: *Pisces, Allgemeiner Teil*, von H.M. Kyle und E. Ehrenbaum; Teil 12, g_1: *Teleostei Physoclisti*, 1-5, von Georg Duncker und Erna W. Mohr. Pp. 100+104+44. (Leipzig: Akademische Verlagsgesellschaft m.b.H., 1926.) 18 gold marks.

THE present part of the "Tierwelt der Nord und Ostsee" maintains the useful character of the preceding numbers, the section by Marcus on the Bryozoa being particularly well done, comprehensive, and embodying all recent work. It receives treatment on the lines already laid down, which are to be followed throughout the whole work in dealing with each group. The full account of the habitats of the species, and a detailed key, together with figures elucidating the morphology of a large number of species, will be very valuable to zoological workers.

The general introduction to fishes given here by Kyle and Ehrenbaum comprises a rapid survey of their systematics, morphology, and biology; though necessarily brief, it is good. Systematists will find Kyle's views on classification and the phylogenetic scheme which places the Cyclostomata amongst the Chondrichtyes on a level with the elasmobranchs provocative and stimulating. Of greater service to the naturalist are the artificial keys to the families and to the eggs of North Sea species so far as they are known. Detailed descriptions of the families, species, and of their life histories are to be given in the systematic portions as they appear; the scombresociformes, syngnathiformes, Plectognathi, atheriniformes, and ammodytiformes occurring in the present volume.