

For the nutritionist who works mainly in the laboratory it is useful to be able to check the composition of products under their trade names, while the nutritionist concerned with the practical work of food processing or cooking may find the cryptic initials that come into scientific texts need interpretation. This is provided not only for such as ATP (adenosine triphosphate), DNA (deoxyribonucleic acid) and EDTA (ethylenediamine tetraacetic acid) but also for H.T.S.T. (high-temperature short-time pasteurization) and A.F.D. (accelerated freeze drying). The entries from 'Abalone' (a shellfish) to 'Zymotachograph' (an instrument that measures the gas produced in a fermenting dough and the amount escaping from the dough) make enlightening reading for all who have any interest in nutrition. Those who come into the field of food from the technical angle of the physicist or the chemical engineer will find help in defining unfamiliar terms.

For the merely curious there are entries like 'cibophobia' (dislike of food) or 'Dipsogen' (thirst-provoking agent). Products such as the Japanese ham and fish sausage are described. Fruits, vegetables, cereals, herbs of many countries are listed together with products commonly derived from them. Diseases due to nutritional failure are briefly noticed including coeliac disease, kwashiorkor, coronary thrombosis and cretinism. A final table gives the calorie contributions of average portions of common foods to aid the planning of a slimming diet.

In fact, this book is clearly so useful as a reference volume for many different people that it is unfortunate that the increase in size and content has involved an increase in price. This may prevent its use as a student handbook, but it should have a place on the shelf of any library that deals with nutrition. A. M. COPPING

#### Les Anticorps de Transplantation

Par André Govaerts. Pp. 148. (Brussels: Editions Arscia S.A.; Paris: Librairie Maloine S.A., 1964.) 250 Fr.B.

ANDRÉ GOVAERTS was the first person to report the destruction of target cells *in vitro* by sensitized lymphocytes. In this volume he describes his researches at greater length, in the form of a thesis. The introduction defines general notions of the biology of homografts and introduces us to an extensive bibliography. Though a clearly written summary, it is not always accurate—as when a proprietary brand of polystyrene dishes is described as being polyethylene. More serious, in defining immunological paralysis the author states that this is due to the persistence of depots of antigen which neutralize the antibody as fast as it is formed. But there is an accumulation of evidence, starting with a paper by Sercarz and Coons in 1959, that this is not so, and that a central inhibition, akin to that in immune tolerance, must be in operation.

The results themselves will be of much interest to both transplantation surgeons and immunologists. The *in vitro* homograft reaction by sensitized lymphocytes has now been obtained in several other laboratories. What needs further confirmation is Govaerts's observation that immune serum (inactive by itself) would greatly potentiate the action of the cells. Furthermore, cells immune to unrelated tissue (also inactive by themselves) became active when combined with antiserum specific for the target tissue. However, these lymphocytes may have had a low level of immunity to cross-reacting antigens, so it is a pity that the author did not make the control with non-immune lymphocytes. It is also of interest that an antibody was detected (by tanned cell haemagglutination) in homogenates of sensitized thoracic duct lymphocytes, where none could be found in sera from the same animals. Notwithstanding the present interest in transformation of lymphocytes to blast cells during immune reactions, the author does not mention the morphology of the active cells in his experiments. There

is an unbiased discussion, somewhat marred (as is the whole book) by too many indiscriminate references.

R. B. TAYLOR

#### The Freshwater Life of the British Isles

By John Clogg. Third edition. (Wayside and Woodland Series.) Pp. 352+67 plates. (London and New York: Frederick Warne and Co., Ltd., 1965.) 35s. net.

MR. JOHN CLEGG'S work has been a most useful introduction to limnology since its first appearance in the *Wayside and Woodland Series* in 1952. As a well-balanced, elementary text it has been greatly appreciated both by teachers and students. It is unnecessary here to review the text, which remains substantially the same as in the second edition of 1959.

Nevertheless, there are changes; Mr. Clogg has undertaken some extensive revisions, such as improvements in the sections on algae, bacteria and fungi, but the most noticeable differences are in the overall size of the book and in the introduction of some new illustrations. The new edition has been given a larger format (page size  $8\frac{1}{2}$  in.  $\times$   $5\frac{1}{2}$  in.) and a correspondingly bigger type face compared with the earlier pocket size, although the pagination is virtually unchanged. This allows larger plates, but many will find this new edition rather bulky to carry on field trips.

A number of colour photographs, chiefly of ecological scenes, have been withdrawn and have been replaced by eight excellent colour plates, by Mr. E. C. Mansell, that have already appeared in the author's *Observer's Book of Pond Life*. These new inclusions are plates illustrating planktonic organisms, sponges and *Hydra*, rotifers, cases of caddis larvae, beetles, water mites, frogs and toads. Among others, there are also some new black-and-white photographs of polyzoa and of the eggs of trout and amphibia. Most of the other monochrome pictures have been improved through being printed in a larger size, but a few have lost their crispness.

The value of this new edition lies in its excellent new colour plates, but those who already have the 1959 issue plus the author's *Pond Life* will find little excuse for buying this new volume. W. J. REES

#### Metaphysik der Naturwissenschaft

By W. Schapp. Pp. x+141. (Den Haag: Martinus Nijhoff, 1965.) 13.90 guilders.

IN *Metaphysik der Naturwissenschaft* a metaphysician seeks to communicate his thoughts over a very wide range of subjects to those whose primary interest is physics. This is by no means a commentary on natural philosophy as such, but rather a meditation on the world, as the author sees it, in terms of history and its impact on the way in which we regard phenomena. There are three main divisions: (1) criticism of cases; (2) colours and the world; (3) world, object, concept. From these the main trend can be discerned. Much of it is a kind of distillation of Einstein and Infeld's *Evolution of Physics*, even including the familiar cloud of particles constituting the 'real' table, which reminds one of Eddington. All this is by no means to be dismissed as mere playing with words; it resembles the outlook of Goethe in contemporary dress. It is significant how deeply the place of colour is envisaged in the life of mankind, without troubling about any quantitative character. (Newton was not blind to beauty, but he set about measuring—that is the essential difference.)

There is an element of the numinous here and there, which is rather charming: for example, in the introduction of thunderstorms in close proximity to a discussion of simultaneity. Nobody but a Teutonic scholar would do quite that. These are not pages to trouble the down-to-earth man of science, but they are well worth studying by anybody with the requisite time and patience.