

The subject-matter of Volume 23 is "Microwave Receivers". Here again we find a certain amount of duplication, particularly with Volumes 14 and 16, since duplexers and mixers are naturally associated with receivers, but it is not so extensive as to prove irksome. One might, however, have expected a more logical arrangement of the subjects treated in the early chapters. Duplexers, microwave mixers and local-oscillators are dealt with briefly in Chapter 2—local-oscillators, in fact, too much so. Chapters 3, 4, 5 and 6 are concerned with automatic frequency-control systems, intermediate-frequency input circuits, very high frequency amplifiers, mixers and oscillators, and intermediate-frequency amplifiers respectively. Second detectors are described in Chapter 7, video-amplifiers in Chapter 8 and gain control circuits in Chapter 9. There are then three chapters on the mechanical construction of receivers, radiofrequency and intermediate-frequency test equipment. Chapters 13–17 give details of the design and construction of several specific receivers, including an airborne centimetre wave-length type, an automatic tracking radar, a two-band 200 Mc./s. super-heterodyne receiver and a wide-band frequency-modulation receiver. In the last four chapters, 18–21, there is a more general discussion of beacon super-heterodyne receivers, crystal-video receivers, super-generative receivers and, finally, moving target indication systems. It might, perhaps, have been better to sacrifice a little of the extensive detailed treatment of the intermediate- and video-frequency circuits for a rather more comprehensive account of the radiofrequency aspect of the problem, since this seems to have been passed over all too briefly. Of the six volumes here discussed the present reviewer found this one perhaps the least satisfactory in the matter of general presentation and balance of subject-matter.

There are remarkably few typographical errors in all of these volumes despite the conditions of speed under which they must have been prepared. They are all further characterized by a great wealth of circuit diagrams, line drawings and, in many instances, by photographs of equipment. These features will be welcomed by, and will be of great value to, anyone wishing to design and construct microwave equipment, and to such—or indeed anyone interested in microwave techniques—these books may certainly be recommended.

J. A. SAXTON

important demand for books lying between these two extremes, for the reader who knows some science already. This sort of reader is not easy to satisfy. He does not want catalogues of 'wonders of Nature'; he is annoyed if he is mystified; and he demands a high standard of accuracy. The journalist who has 'cashed in' on the popularity of science cannot write popular science at this level; it must be done by a professional scientific worker, and it is exasperatingly difficult.

Prof. W. Neilson-Jones is to be congratulated on having written a book which will go a long way toward satisfying the reader who is already familiar with some science. His book is (as one would expect) accurate, though many botanists will disagree with some of his views on vernalization and photoperiodism. It is written in an easy (though occasionally ambiguous) style, with a pleasant dry wit. It is a series of independent essays on some aspects of botany which are not treated well in elementary text-books: the plant as informant, chimæras, plant hormones, the control of flowering, plant nutrition, and the story of the soil. The book contains much of what our grandfathers called 'curious information': the difficulties in making floral clocks, the use of tomatoes to locate escaping gas, the occurrence of daisies on prehistoric trackways, and so on. However, the author does not try to impress the reader by means of staggering statistics or arresting adjectives, and he draws his examples from a life-time of experience and thought.

On the dust cover it is said that the book is for the general reader; but it would be unfair on the book to judge it by this criterion. It is rather an anthology of what a botanist thinks will interest other scientific workers. He would be a hardy general reader who could read comfortably that "the fully oxidised tetravalent form of manganese" is not available to plants, and that "no plastids from the pollen grains are brought into the egg cell at fertilization". However, as a book for the science master, the chemist whose hobby is gardening, the horticulturist, the first-year student, the reader (in brief) of *New Biology* and *Science News*, "The Growing Plant" can be recommended with confidence. The book is well produced and well illustrated, although there is an unaccountable transposition of words on page 19.

E. ASHBY

POPULAR BOTANY

The Growing Plant

By Prof. W. Neilson-Jones. Pp. 206+8 plates. (London: Faber and Faber, Ltd., 1948.) 16s. net.

THE popularization of science has become an important social activity. Unesco holds conferences on how it should be done; and the Russians have a special government department to manage it in the Soviet Union. The public demand for it is sufficient to support numerous books on popular science, and recurrent publications such as *Science News* and *New Biology*. Already the difference between books on science and books on popular science has become indistinct: there is continuous variation, from the monograph by a specialist for a few specialists, to the article by a journalist for a million newspaper readers. There is an increasingly

CONGRESS OF BIOLOGICAL CHEMISTRY

Un symposium sur les proteines

Par A. Tiselius, D. P. Riley, E. Gorter, D. G. Derwichian, M. Joly, J. Brachet, P. Rebuffat, R. Vendrely, C. Wunderly, V. Desreux, H. Dieu, M. Dubuisson, J. Jacob, E. J. Bigwood, M. Jutisz, E. Lederer, G. Hamoir, P. Desnuelle, M. Roverly et M. Errera. (Médecine et biologie, Monographies publiées sous la direction de Marcel Florin, No. 5.) Pp. 284. (Liège: Éditions Desoer; Paris: Masson et Cie., 1947.) 165 francs.

THE Seventh Congress of Biological Chemistry was held at Liège in October 1946. It was thus the first large international gathering of biochemists to be held in Europe after the War. The collection of seventeen papers, contributed to the general discussion on proteins, has now been published under the title "Un symposium sur les proteines". It is of