

of the amino-acids present have been published. In part 5, the chemotherapeutic approaches to the T.B. problem, the chemical composition of the tubercle bacillus and the biological activity of its components are discussed but also the methods, chemotherapeutic and antibiotic, for the elimination of the parasite; this part composes a review of 217 publications relating to these subjects.

In the chapter on organic chemistry the parts on terpenes (S. H. HARPER) and on the complex chemistry of the alkaloid colchicine (J. D. LOUDON) will certainly interest a biochemist, as will also the part on general methods (B. C. SAUNDERS) in which attention is drawn to many new methods of synthesis.

*Vol. XLVI.* The chapter on biochemistry is somewhat smaller than in the foregoing volume. W. F. J. CUTHBERTSON discusses the haemopoietic factors folic acids and vitamin B<sub>12</sub> and R. A. MORTON carotenoids, vitamin A and visual pigments; in the latter article, the reviewer's attention fell especially on the sections dealing with the biochemical roles of carotenoids and on the biochemical aspects of vision.

The chapter on organic chemistry, however, contains more of biochemical interest. A review is given of general methods (A. W. JOHNSON) available to the synthetic chemist, of long-chain aliphatic compounds (R. E. BOWMAN) in which many compounds of biochemical interest are dealt with, and of vitamin A and related compounds, describing among other things the syntheses of vitamin A and its analogues. H. N. RYDON describes the progress made after 1944 in the field of the amino-acids and A. W. JOHNSON in the field of many important alkaloid groups. M. V. TRACEY presents an interesting essay on proteins which have not been reviewed in these reports since 1937.

This and the foregoing volume are certainly up to the highest standard set by the Chemical Society for these reports and they are a very fine introduction to the modern literature, but only if one is lucky enough to find the subjects of his interest dealt with. For, although their title is *Annual Reports on the Progress of Chemistry*, it is the progress of selected capita which is described. It is, however, understandable that it is no longer possible to describe the progress of the whole of chemistry in a book of this size, and that subjects are chosen which are in the focus of interest. As a result the book remains very readable, which it would not be if it were simply an abstract of the *Abstracts*.

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*Chimiothérapie des Maladies à Bacilles Acido-résistants*, by M. CHAMBON, Professeur à la Faculté de Médecine et de Pharmacie de Lyon. 98 pages, 380 Fr., Masson et Cie., Paris, 1950.

In this little volume Professor CHAMBON has summarized recent progress in the chemotherapy of the main pathogenic mycobacteria (alcohol-acid-fast bacilli), i.e. the causative agents of human, bovine and avian tuberculosis, of human and rat leprosy, and of JOHNE'S disease in cattle and sheep. The paratubercle bacilli are excluded because of their doubtful pathogenicity (though attention is drawn to the recent demonstration of the pathogenic nature of *M. smegmatis* in mice). The work is divided into three sections: 1. a very brief résumé of methods of assessment of chemotherapeutic agents in experimental and human mycobacterial diseases; 2. a valuable main section, giving the properties of synthetic drugs and antibiotics which have been claimed to be active *in vivo*, or which hold promise of further development, accompanied by interesting descriptions of the stages leading up to the discovery of some of them; 3. a rather sketchy section on clinical applications, particularly of streptomycin and dihydrostreptomycin, *p*-aminosalicylic acid (PAS), the sulphones, thiosemicarbazones, and calciferol in tuberculosis, and the sulphones and chaulmoogra oil and its derivatives in human leprosy (JOHNE'S disease is dismissed in a few lines since there is still no clinical chemotherapy of proved value).

The skilful presentation of the essentials of the subject in sensible perspective permits this book to be recommended for the interested non-specialist or student; clinical detail is insufficient for it to be a practical guide to the clinician. A few criticisms and suggestions may be made. It would be well to advise discontinuance of the use of rapidly growing strains of so-called tubercle bacilli for *in vitro* testing, since they are probably not true *M. tuberculosis* (p. 4); the effectiveness of 2-butoxy-5-aminopyridine has not been confirmed by recent work (p. 34); the fascinating stages by which the thiosemicarbazones (p. 34) were discovered to be anti-tuberculous might have been included, and their serious toxicity in man would be better discussed in the section on clinical applications; more space might have been allotted to streptomycin-resistance and no mention is made of the recent discovery of its prevention by combination with PAS (p. 64); with a large number of references a few errors usually creep in, but incorrect spelling or incompleteness in the names of authors are irritatingly numerous.

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