

Symposium on Methods of Penicillin Assay

Their Purpose, Scope and Validity. (The Society of Public Analysts and Other Analytical Chemists: Physical Methods Group and Biological Methods Group.) Pp. iv + 34. (Cambridge: W. Heffer and Sons, Ltd., 1948.) 6s. 6d. net.

MUCH of the value of scientific symposia and conferences is apt to be lost in these days of publication difficulties. For example, the papers read at the International Congress of Pure and Applied Chemistry some eighteen months ago remain unpublished, except as abstracts on bits of common paper. It is therefore especially commendable that the Society of Public Analysts and Other Analytical Chemists (like the Biochemical Society also) has achieved relatively prompt publication of symposium papers. The symposium on "Methods of Penicillin Assay" was held on January 29, 1948, and was reported in *Nature* of February 21, p. 285. The papers and discussion were published in the April and May issues of *The Analyst*, and have since been reprinted as a handy stiff-covered booklet, uniform with reports of previous symposia on polarography chromatography and spectroscopic analysis. The report can probably claim to cover every known method (about forty in all) for assaying total penicillin or individual penicillins, by chemical, physical or biological means. Its importance lies not only in this completeness, but also in the fact that some of these methods have not been published previously, except in war-time reports of limited availability. It is unfortunate that some important methods are mentioned only in the introductory surveys, and therefore briefly, while there are full papers on others of less importance. However, this kind of uneven weighting is inevitable at any symposium.

Working Plans for Estate Woodlands

By N. D. G. James. Pp. ix + 93. (Oxford: Basil Blackwell, 1948.) 6s. 6d. net.

IN the past it was not so much the owners of estates as their factors and agents who were against the 'working plans' for woodlands. It is all to the good that Mr. N. D. G. James emphasizes in a book of considerable merit the importance of the necessity for making plans for small woodlands. He explains clearly enough the form the plan should take, and how information and statistics should be collected. This is all good, concise and clear. He correctly insists on the formation of compartments and other allotments or divisions of the areas, but a serious omission is that nothing is said about yield calculation; this title is even omitted from the headings given of the plan. The intention is expressed of not wishing to frighten owners with complexities and unnecessary technicalities, but one cannot call the calculation of the yield either the one or the other, for the necessity is obvious.

I am unable to follow the author in his divisions of the 'working plan' into three under the titles of a "Full Plan", an "Intermediate Plan" and a "Short Plan". The 'working plan' remains as such whether made for (1) a large area of forest with at present only a small demand for its produce and thus requiring only a simple plan; (2) a large area of forest under intensive management requiring detailed plans; or (3) an area of simple coppice requiring only a simple prescription. The main headings of the 'working plan' are the same for all, and any modifications required can be made in the prescriptions,

such as planting, natural regeneration, felling proposals and so forth. It is suggested that pages 6-15 dealing with the headings of the three types of plan are likely to prove intimidating to the owner. Altogether this book is quite a good piece of work in many of its parts; the omission of any methods of calculating the yield is a pity. In his fear of becoming complicated and complex in items of management, the author seems to have unnecessarily complicated simplicity.

E. P. STEBBING

Poudres et explosifs

Par Henri Muraour. (Que sais-je?, les points des connaissances actuelles, No. 259.) Pp. 136. (Paris: Presses universitaires de France, 1947.) n.p.

THE author of this volume has had unusual experience in writing about his subject; the present work is mainly addressed to those with some scientific background who wish to have a brief but broad account of the nature, classification and testing of organic explosives, and of their future military uses as propellants, in minefields, and for demolition purposes. The format somewhat resembles that of the 'Penguin' series.

For those with some acquaintance with the subject, interest will centre on the chapter on the decomposition process, which includes records of work by the author and his colleagues. The detonation of initiators *in vacuo* is explained by a chain mechanism in which activated decomposition-products bring about further reaction by 'resonance' with unchanged molecules. The *brisant* nature of initiators may be annulled if they are ignited in a high-pressure gas; this phenomenon is left unexplained, pending further investigation.

For high-explosives, the hydrodynamic theory, as elaborated by Schmidt, Jouguet and others, is adopted. Here the experiments of Muraour have included studies of the luminosities of shock waves in monatomic gases; the higher figures found in argon as compared with helium are explained as being due to the higher atomic weight. Vassy found that four millilitres of a mixture of tetranitromethane and toluene, when detonated in argon, gave an intensity of four hundred million candle-power in a flash lasting four millionths of a second. Comparison of these shock-wave intensities with those produced by meteors promises to give interesting results.

W. E. BATTY

Directory of Museums and Art Galleries in the British Isles

Compiled by Major S. F. Markham. Pp. viii + 392. (London: Museums Association, 1948.) n.p.

ALTHOUGH much of the information contained in this directory is also available in the Libraries, Museums and Art Galleries Yearbook, 1948, those who are not chiefly requiring information about libraries or about overseas institutions will probably find the directory the more convenient to use. The information given is slightly fuller, and some details are supplied of museums closed through lack of local interest or of financial support, those destroyed or damaged by enemy action and those occupied by Government departments. Museums closed at December 1947 are listed in an appendix, with remarks on the situation and prospects of re-opening. Although the volume includes no index, the alphabetical arrangement by towns and villages is adequate for most purposes, and the book is well printed and produced.

R. B.