nating sections. Fig. 2.7 is much less clear than the usual diagrams of the microscope. Fig. 2.20: this mica compensator does not tilt.

Reflected light methods and polishing have been purposely omitted, and there are very few references to artificial products. The book thus retains the petrological trend of the earlier editions and will be chiefly useful to petrologists working with transparent thin sections.

Part II forms an excellent introduction to thin-section petrology. The crisp but small micrographs of the 2nd edition have been replaced by numerous good photographs, with many optical diagrams. Clay minerals are described, with some electron micrographs. References at the end of each chapter include many textbooks and monographs. The somewhat high price reflects the good quality of the production. The inclusion of a general first part follows usual practice, but it may be questioned whether these varied subjects might not now be allotted to separate textbooks.

A. F. H.

Rose (A. J.). *Tables et Abaques.* Paris (Centre National de la Récherche Scientifique), 1957, 141 pp. Price 1500 francs.

Durif-Varambon (A). & Forrat (F.). *Tables numériques de sin θ et de $sin^2\theta$.* Centre National de la Récherche Scientifique, Institut Fourier, Grenoble, France, 1958, 26 pp. Price 250 francs.

Rose's main table (III) lists d-values for X-ray powder photographs for Bragg angles, θ, between 0° and 90° at intervals of 0·01°. Values are given for the $K\alpha_1$ wavelengths of the usual radiations (from Cu, Ni, Co, Fe, Cr, and Mo targets). The wavelengths taken (table I) are those of Cauchois and Hulubei, converted to absolute Ångströms; they differ from the usual values by not more than 1 part in 90 000, which is insignificant for most purposes. The tables are thus directly comparable, for example, with those of the National Bureau of Standards (1950, Applied Mathematics Series, 10); random checks show that they agree to the limit above.

A new and valuable feature of this volume is that table III also lists values of $4R\theta$ and $2R\tan\theta$ for each value of θ; $R = 180/2\pi$ or $240/2\pi$ applying to standard American or French cameras of 5·73 cm. or 7·64 cm. diameter respectively. $4R\theta$ represents the distance between powder lines on a cylindrical camera, and can be applied to measurements on a focusing camera; $2R \tan \theta$ gives the corresponding distance measured on a flat-film camera and can be applied to measurements of