BOOK REVIEW

PAPER CHROMATOGRAPHY, by Friedrich Cramer. Second edition, translated from the German by Leighton Richards. Pp. xi + 124 (including 68 illustrations, and Index). Macmillan and Co., Ltd., London, 1954. 25s.

This is a translation of the second German edition of a book based on a series of articles in Angewandte Chemie. The first edition was a praiseworthy attempt to fill the need for an introductory book on paper chromatography and was the first of its kind. The present text claims to be "a practical manual and attempts to give precise working directions". This is a curious claim, since the details given are too few. Particularly is this so in the inorganic section. To the reviewer, unversed though he is in this great and expanding branch of the subject, seven pages seem totally inadequate for a practical manual, particularly when compared with the gratuitous introduction to paper electrophoresis occupying six pages. One half-page, devoted to quantitative inorganic analysis, contains generalities of a most arbitrary selection. A most irritating feature of the work is the almost complete disregard of the conventions and nomenclature of chemistry as published in the English language. A number of errors, including the mis-spelling of authors' names, have been carried over from the German edition, and obscurities and errors have been introduced.

More serious is the adoption of the term development to mean the application of chemical agents to produce colour effects to help locate the material on the paper. This term has a long-established meaning in chromatography and refers to the operation of irrigating the particulate chromatographic medium with the fluid phase. Thus paper chromatography depends largely on elution development, with minor components of displacement development and frontal development.

The presentation of the introductory matter is good, and there are many excellent illustrations and tables of R_F values. It is evident, however, that what is still needed at the present moment, particularly on the inorganic side, is a detailed practical manual, co-ordinating and summarising the already great volume of published work.

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(ABSTRACTS continued from p. 559.)

Hg. continued to occur, and required suitable adjustment of dosage. The blood pressure started falling between the 4th and 19th days, reaching its lowest in 9 to 40 days. In some cases it was possible to discontinue the drug for 3 to 13 days before a rise started again. Appreciable additive effects were obtained. with less fluctuation of blood pressure, when reserpine was administered together with hexamethonium bromide. The severity of side-effects varied with individual tolerance and the dosage of reserpine. Nasal congestion, anorexia, dryness of the mouth, depression, muscular weakness, giddiness, diminished vision and drowsiness occurred with varying severity and frequency, and were more frequent and pronounced when the dose of reserpine exceeded 0.75 mg. daily. Under the influence of the drug slowing of the pulse rate from 20 to 36 beats was a consistent finding. When the side-effects passed off, usually within a week or so, all patients showed subjective improvement, the symptoms most relieved being headache, giddiness, insomnia, palpitation and worry. Constipation had a tendency to be relieved. In some patients the bradycrotic effect was very marked and precordial discomfort was complained of. The bradycrotic effect was abolished by atropine. Some degree of postural hypertension was present in those receiving reservine 1.5 mg. daily; this was also abolished by atropine. S. L. W.