the same kind and infinite stability ". The controversy thus highlighted continued to influence people with physicist's credentials into the late 1940's. But soon there developed an initially uneasy relationship between the physicist, physical chemists and the biologists whose problems they sought to explain in physical and chemical terms. The author deals expertly with the findings of cytochemists on chromosomes and those of biochemists and microbial geneticists on the discovery of " transforming principle " and other important events in a manner which belies his own background as a physicist. I doubt if any of the people directly involved could have written such a contributory and impressive book on such a wide-ranging field. Dr Olby has achieved stature as a scientific historian which few will equal. Sadly, also, I believe that better subjects for his expert analysis are unlikely to occur.

B. M. RICHARDS

Searle Research Laboratory, Lane End Road, High Wycombe, Bucks.

THE HANDLING OF CHROMOSOMES. C. D. Darlington and L. F. La Cour. 6th Edition Allen and Unwin, London. Pp. 201 + 31 plate figs. £6·00.

Most books on techniques in science read like telephone directories. This one, in contrast, is eminently readable. The mass of facts on the sources of plant and animal material, on equipment, fixation, staining schedules, photography and autoradiography is expertly organised, with the aid of many very helpful tables. The plate photographs include many which are familiar from earlier editions and some which are new. They comprise some of the best examples of different techniques applied to a wide variety of chromosome complements. They are, in themselves, a pleasure to contemplate although my impression is that the reproduction does not quite match that of earlier editions.

The publishing of a sixth edition is proof enough of the high quality of this work. It embodies up to date information about new methods, including chromosome " banding " by fluorescence or by giemsa staining and the differential staining of sister chromatids. To my mind it is the best book on the subject and an indispensable item within any cytology laboratory.

H. REES

Department of Agricultural Botany, U.C.W., Aberystwyth

THE DEMOGRAPHIC EVOLUTION OF HUMAN POPULATIONS. Edited by R. H. Ward and K. M. Smouse. Academic Press, New York, London, San Francisco, 1976. Pp. 158 (incl. index) + xii. £4·80, $12.25.

This volume presents a variety of recent contributions to human genetic demography. They span the history of the species, ranging from the modelling of prehistoric population structure to the genetic implications of present-day demographic change, investigations as problematical as they are fascinating.

The editors' introductory paper integrates the topics covered, starting from the inescapable premise that adequate understanding of genetic change in human populations requires knowledge of their demographic structure.