right, even were the reproach just, to complain of a lack of balance in the choice of articles in what is only one volume of a continuing series. In fact, however, the editors have ranged widely over the field of animal cytology, and one's only fear is that the plant cell, which had a foothold in the first two volumes, has been deliberately excluded and not simply temporarily overlooked.

In no other field of biology does the worker lean so heavily upon his techniques or have to use such care in assessing their reliability. Hence most of these articles are to some extent critical surveys of the technical procedures relevant to their problems, and three of them (Chr. de Duve and J. Berthet, on differential centrifugation in the study of tissue enzymes; A. G. Everson Pearse, on azo dye methods in enzyme histochemistry; Roy G. Williams, on transparent chamber methods for work on living mammals) have the results of particular techniques as their main theme. Three others take a particular tissue element (G: Asboe-Hansen, the mast cell; E. W. Dempsey and A. I. Lansing, the elastic tissue ; S.-O. Brattgard and H. Hyden, the nerve cell) and survey the knowledge of its composition, structure and function revealed by classical and by recent methods of research.

The behaviour of living cells or of cell populations is treated by Charity Waymouth in a review of the nutritional requirements of cells in culture, by T. Gustafson in a survey of enzymatic aspects of embryonic differentiation, and by I. Cornman in a brief discussion of the action of urethane on mitotic division. The nucleus alone is the hero of the remaining four articles. O. Bucher reports the measurements, made in his laboratory, of nuclear and nucleolar size of cells in tissue culture, M. Alfert discusses the structure and composition of giant chromosomes, and R. A. Beatty variations in chromosome numbers in mammalian somatic cells. Finally, A. L. Dounce presents a critical survey of recent studies of the enzyme content of cell nuclei isolated by chemical means.

The reviewer of Vol. 1 pleaded for titles of papers to be given in the lists of references. If a reminder will strengthen the editors' hands in forcing this reform upon unwilling authors, it is gladly given.

D. R. NEWTH

## ADMINISTRATIVE CLASS OF THE CIVIL SERVICE

Higher Civil Servants in Britain from 1870 to the Present Day

By R. K. Kelsall. (International Library of Sociology and Social Reconstruction.) Pp. xvi+233. (London: Routledge and Kegan Paul, Ltd., 1955.) 25s. net.

THE scope and nature of this book are better indicated by the title of the article in the October-December, 1954, number of the *Political Quarterly*, in which Mr. R. K. Kelsall discussed the data obtained in a study of the social origins of members of the administrative class of the Civil Service above the rank of assistant secretary in three selected years at roughly ten-year intervals—1929, 1939 and 1950. It is concerned solely with the social origins of these senior Civil servants and, as a secondary issue, with promotion within the Service. It is not accordingly a book about the Higher Civil Service in the sense of Mr. H. E. Dale's earlier book. It is much more limited but contains an immense amount of data on the social background of the senior Civil servant from 1870 to the present day, covering the several routes of entry, the pattern of representation of schools and universities and the occupation of the fathers of the groups examined. There are also a brief review of the position of women in the Administrative Class and a comparison of the social characteristics of the heads of six departments in 1888, 1912, 1929 and 1950.

Mr. Kelsall's treatment of the data he has collected so carefully does not, however, match the assiduity with which it was assembled. His discussion is subjective rather than objective, and appears to be dominated, first, by the assumption that access to a post in the Administrative Class of the Service is a natural right of every citizen, and, second, that promotion from the ranks is intrinsically superior to examination entry as a method of recruitment. These assumptions are nowhere discussed, nor are their implications considered; but they colour Mr. Kelsall's discussion of the nature of the profession and thus rob it of any claims to be a serious contribution to the discussion of the adequacy of the Higher Civil Service to-day and what measures of reform are required.

These preconceived ideas prevent Mr. Kelsall from pausing to consider either the nature and limitation of the duties of the Administrative Class and the relation of such Civil servants to their Minister, or whether social background and traditions of certain groups may not give them certain inherent qualifications as public servants which are as much to the public advantage as to their own. That the Civil Service should be widely representative of the different sections of the community is all to the good. It is egalitarianism run mad, however, to suggest that the different sections should all be proportionally represented and to ignore the fact that a tradition of public service and political sense, at least as much as the resources to acquire a university education, have been responsible for generation after generation of certain classes or professions sending their sons into the Civil Service or Armed Services, just as it still supplies the great bulk of voluntary service.

In his essay in the Political Quarterly, Mr. Kelsall showed himself aware that recruits from certain classes might have their own faults and suffer from inherent disadvantages, but his obsession with egalitarianism and his conception of the ideal Civil servant as an imaginative, intelligent, forceful reformer, preferably trained in the social sciences, leads him to overlook the fact that if a Civil Service of high character and appropriate to the needs of to-day is to be recruited widely, the corollary to opportunity is a gradual raising of educational and cultural standards generally throughout the community which will even out not so much differences in wealth as in cultural outlook and standards. When the working class begins to provide voluntary workers in the way that the middle class has done for generations, we may expect it also to provide recruits for the Civil Service of the same calibre as the middle class has long been doing. The problem is not so much one of educational opportunity as of general education; nor has Mr. Kelsall really faced the difficulties inherent in the expanded promotion policy he advocates, and particularly the recruitment of the scientist to the Administrative Class.

R. BRIGHTMAN