

# Book Reviews

## DIET IN VICTORIAN TIMES

### The Dietary Surveys of Dr Edward Smith 1862-3

A New Assessment. By T. C. Barker, D. J. Oddy and John Rudkin. (Occasional Paper No. 1.) Pp. 62+3 plates. (Staples, for the Department of Nutrition, Queen Elizabeth College, London: London, March 1970.) 12s 6d.

THIS is the first of a series of papers from an interdisciplinary group which meets three or four times a year at Queen Elizabeth College, London, to discuss the development of diet and food habits in this country. This collaboration between economic historians, social scientists and nutritionists will, it is hoped, throw more light on why people eat what they do, and the effect on their health. An assessment is made of the nutritional value of the diets Dr Smith collected in the early 1860s, comparing them with Boyd Orr's findings in the 1930s and with the position for lower income groups in 1965. Some conclusions are drawn on the relationship of particular dietary features, such as the intake of sugar, fat and calcium, with certain diseases. The study begins and ends with comments on the life and career of Dr Edward Smith himself, and a bibliography of his publications.

Listed in this way this work sounds impressive. Yet it leaves the reader dissatisfied and with an unfortunate impression of being too slight. Perhaps this is because the most interesting questions cannot be followed up in this publication. The authors' purpose will be served, however, if their work creates further interest in an analysis of historical data using modern techniques to assess the quality of the diet consumed.

Dr Smith seems an interesting man, another of those public spirited Victorians who found his environment wanting, especially for others less fortunate than himself. He was an uncomfortable ally and it would be interesting to know more of the nature of the quarrel he had with Sir John Simon, whose department under the Local Government Board created in 1871 absorbed Smith's work as Medical Officer to the Poor Law Board.

There are some aspects of the comparative sections of this discussion on Smith's survey which appear hasty and incomplete—the comparison, for example, between the wage material collected by James Caird in 1850-51 and Smith's data on the rural labourer. The limitations of Smith's own work are, however, more carefully explained, especially its coverage of certain types of indoor workers—silk-weavers, needlewomen, glovers and shoemakers, as well as some rural labourers. He also interviewed cotton workers during the depression of the early 1860s, and compared their diets with those they had enjoyed before the American Civil War. The nutritional analysis is done with the same care; the calories and nutrients have been calculated by computer from tables of food composition, making allowances for differences between nineteenth and twentieth century foods, such as bread. The vitamin content has not been measured because of the hazards of various processes of preservation and cooking. On the other hand, some comment on the possible deficiencies in vitamin intake would have been helpful in an assessment of diets containing so few vegetables other than potatoes and little fruit.

The indoor workers in Smith's sample, excluding the

cotton workers, seem to have enjoyed a poorer diet than rural labourers, especially in calories, protein, iron and calcium. In the past hundred years there has been a large fall in bread consumption resulting in a reduction in calories, but compensated for by a rise in consumption of milk, meat, fat and potatoes. There are difficulties in assessing the way in which foods were distributed between members of the family, but the authors conclude that the quality of diet in the 1860s must have affected work efficiency adversely.

Some interesting observations are made on the effect of a reduction in family income on diet. Cuts in expenditure during the cotton famine were made on all foods, and not just on the quality items, largely to maintain palatability, it is suggested. Yet the reductions in meat and fats were particularly severe, and bread was rendered palatable by spreading more treacle on it. The retention of a high level of sweet substances particularly interests the authors, as does the very large increase in sugar consumption of the past hundred years and the possible connexion between this and coronary thrombosis. Their other comments on the relationship between diet and disease concern the calcium intake; yet it seems rather a lavish claim from the evidence given in this publication to suggest that the low intake of calcium in the 1860s among the cotton workers was not matched by any clinical evidence of calcium-deficiency diseases. It seems that the general effect of the impoverished diet of the mid-nineteenth century, made worse by the cotton famine, was an impairment of resistance to infectious diseases such as typhus, whooping cough, chicken pox, scarlet fever, and possibly to diseases such as tuberculosis.

JANET BLACKMAN

## SEEKERS OF NATURE

### The Eternal Quest

The Story of the Great Naturalists. By Alexander B. Adams. Pp. 509+12 plates. (Constable: London, June 1970.) 70s.

ANY attempt to survey the progress of knowledge in the natural sciences is a formidable undertaking. Within the confines of a single volume it represents an exercise in selection and compression, which inevitably invites criticism for omissions or emphasis. Mr Alexander Adams succeeds in his declared objective of writing the story of man's discovery of his place in the natural world and to show the qualities and characters of some of the men who made these discoveries.

*The Eternal Quest* opens with Aristotle, his teachings, especially his observational approach, and critical appraisal of all scientific concepts, and strangely Pliny the Elder, arch-compiler and encyclopaedist of the first century AD. Succeeding essays tell in narrative of the contributions of Copernicus, Vesalius, Bruno, Kepler, Newton and others to the progress of scientific thought. With a more detailed review of the work of Linnaeus the emphasis turns to the naturalists, in the modern meaning of the word. Here the acclaim given to Linnaeus's system of classification is probably overdone. Great as Linnaeus's contribution to natural history was, his classification and the concept of binominal nomenclature owed much (perhaps more than he acknowledged) to John Ray and Peter Artedi. Both are mentioned in this book, but their contribution to the development of Linnaeus's method is surprisingly not.

From Linnaeus the book turns to the work of Buffon, Lamarck, Cuvier, and the latter's pupil Louis Agassiz, whose early work on glaciers and fossil fishes led him to a position of great influence especially in the United States. The life and work of Alexander Wilson, the "father of American Ornithology", son of a Scottish smuggler, and himself a forced emigrant from Scotland who, although