

urban' (p. 39). The American census category of 'rural nonfarm population' has been extremely useful in the writing of this book; a map on p. 36 shows that in almost every county of Megalopolis it is at least 60 per cent of the whole rural population, and at least 70 per cent even in places over 90 per cent of the whole, on the entire north-eastern seaboard.

Much that is told one might have expected—but that is not a criticism. New York's control of the wealth of the country is as great as ever: it handles 95 per cent of the nation's securities, 38 per cent of the bank deposits, and its banks have 40 per cent of the banking assets. Even so, the greatest recent advance has been on the Pacific coast, especially in south California, and this might suggest a relative decline of Megalopolis. But it still has 'the richest group of nearly 40 million people in the world'; it has offered, and still can offer, satisfying economic opportunities to a rapidly increasing number of people, even though it has no exceptional natural endowment in either agriculture or minerals. Steadily from the 1850's more States have shown an urban majority, first seen in Rhode Island and Massachusetts in 1850, in New York in 1870, New Jersey in 1880, but not in the whole of the United States until 1920. The rural exodus developed in the second half of the nineteenth century with increasing momentum, and the tilled area of New England, having reached its maximum in 1850, has been declining ever since; half the area of Megalopolis is woodland, much of it abandoned farmland. The gentleman-farmer having a dairy will engage a 'cow-sitter' so that he can go out in the evening; he is a farmer because he is a gentleman with an urban income rather than a gentleman because he is a farmer. And although there is some highly intensive farming, giving more food from less land, many farmers keep part of their land for sale to home-builders and many more hope for the biggest harvest of all—sale to the advancing city. Four things have made all this possible: the excellent roads, the prevalence of cars, the rapid expansion of retail shops in the countryside and the growing disadvantages of life in city apartment and suburban areas. Essentially, it is a two cars to the family civilization.

As America appears to have unlimited land for food production, is the loss to so pulsating a suburban invasion serious? If (p. 776) 'Megalopolis is . . . examined by many outsiders, some of whom will copy it just because of the prestige the region enjoys today, and some of whom may be inspired to improve on the techniques applied there', will the results be fortunate? Or will it result in an 'air-conditioned nightmare', towns clogged to uselessness by their very wealth, countrysides ruined by indiscriminate suburbanization? Is Megalopolis an awful warning to western European countries, not to mention others following in their wake? Read this book and decide for yourself. It is long, at times diffuse and even repetitive, perhaps inadequately furnished with local examples; but it has vitality, even panache. 'It can't happen here'—or can it?
T. W. FREEMAN

ARIDE UND HUMIDE JAHRESZEITEN IN NORDAMERIKA. By RALPH JÄTZOLD. *Stuttg. Geogr. Stud.* 71, 1961. 9 × 6 inches; 130 pages; maps, line-drawings. 12 D.M.

This monograph on the duration of the arid season in North America makes use of certain aridity indices, long popular in the French and German geographical literature. In 1952 W. Lauer (*Bonner geogr., Abh.* 9) applied de Martonne's index to monthly values, setting $\left(\frac{t+10}{12p}\right) = 20$, where p = mean monthly precipitation in mm., t = mean monthly temperature in °C, as an arbitrary arid/humid limit. In a study of Africa and South America, Laurer demonstrated that the average number of arid months, so defined by an index below 20, showed definite relationships with zonation of natural vegetation. Such simple indices can hardly be applied to climates with monthly temperatures below the freezing point. Hence T. C. Wang (*Tübinger Geogr. Geol. Abh.* (1941)) introduced a hyperbolic curve $p[12p - 20(t+7)] = 3000$ to delimit the number of arid months in China. Jätzold applies this criterion to North America. With data from some 2500 stations, he provides maps of the quantitative distribution

of such arid months in the United States (1:12,500,000) as well as Canada and Alaska (1:20 mill.). A correction factor is applied for high arctic latitudes. Analogous formulae determining classes of arid, semi-arid, humid, nival (humid months with sub-freezing temperature means) and gelid-arid (cold-dry) are used for 1:30 mill. maps characterizing moisture distribution at the four seasons. Cold-dry months are considered to be of indirect consequence for the vegetative cover, since the soil moisture balance is affected. The maps provide a valuable classification of moisture provinces, which are then characterized according to length, intensity, and seasonal occurrence of dry and humid seasons. Fifteen types are recognized, described and illustrated by annual diagrams of rainfall, temperature and index distributions. The results convince the reviewer of the value of such indices as climatographical techniques at a continental scale.

Jätzold applies these arid month isolines to the 'prairie problem' of the north-central U.S.A. The blue-stem sod-grass prairie is found in areas with no dry months, so that no climatic justification seems apparent. On the other hand, the limit between short grass and blue-stem bunch-grass, as well as between dark-brown and chernozemic soils, corresponds remarkably well with the isoline of six arid months. Jätzold suggests that animal grazing and fire may be largely responsible for the 'prairie wedge'. He does not consider the role of precipitation variability, nor the possibility of climatic change during the Holocene. Interesting spatial and altitudinal correlations of vegetation types and number of arid months are suggested for the American south-west.

The study is concise and well written, and provides a welcome addition to the climatological literature. The attractive format and effective illustrations are a little marred by the mediocre English of the summary. K. W. BUTZER

THE AIR-CONDITIONED NIGHTMARE. By HENRY MILLER. *London: Heinemann, 1962. 8¹/₂ × 5¹/₂ inches; 264 pages. 30s*

First published in 1945, this book tells the story of journeys through the United States during the previous few years in vivid and imaginative prose. Unkindly, one could say that Miller was the father of the angry young man, shocked and even horrified by a civilization in which material progress has apparently outstripped the pursuit of cultural values. Returning to America after ten years, he was scandalized by the idea that Europe no longer mattered in human affairs, and touched by the naive approach to life of many who regarded themselves as sophisticated. The wonderful word-pictures, the intimate self-revelation, the tolerant humour of the writing compel admiration, but not all the prophecies have proved true and much in this book is mainly interesting as a revelation of a deeply sensitive mind. Of all his revelations of human futility, none exceeds the description of a party in Hollywood which is so macabre that it could only be credible because he was there. And there lies his strength—he was there, observing, analysing, creating, enduring. T. W. FREEMAN

PETER SKENE OGDEN'S SNAKE COUNTRY JOURNAL, 1826-27. Edited by K. G. Davies assisted by A. M. Johnson. Introduction by Dorothy O. Johansen. *London: The Hudson's Bay Record Society, 1961. 9 × 6 inches; 255 pages; maps in pocket*

Two innovations give this twenty-third publication of the Hudson's Bay Record Society special interest: the format has been changed to allow the customary ample content to be compressed into a slim volume with a view to economy of shelf space and Professor K. G. Davies of Oxford has succeeded Professor E. E. Rich of Cambridge of General Editor. Miss A. M. Johnson, Archivist, Hudson's Bay Company, continues admirably in the role as Assistant Editor, and the work maintains the meticulous standards of its predecessors.

Peter Skene Ogden spear-headed the search by the Hudson's Bay Company for beaver and geographical information in the vast area to the east of the Rocky Mountains and south of the Columbia, which the fur traders knew as the Snake Country. They were looking both for new sources of fur and for a supposed great river flowing