that the inclusion of six species of fuchsia, of several epiphytic orchids or of forty-five different kinds of palm, compared with the single species which is hardy in Britain, causes no surprise. To the British reader, however, the important question is to what extent those species which are hardy in his country are cultivated in France. In the recently published "Gardeners' Dictionary" more than eighty species of *Dianthus* are listed as hardy in Britain, and, of these, twenty-eight are included in the work under notice; of Cornus, the French book includes eighteen of the twenty-nine cultivated in the British Isles. So it will be appreciated that a considerable degree of selection has been exercised, and many of the less commonly cultivated species have been omitted. Clearly the author, faced with the choice between the production of a work that would be comprehensive and unwieldy or one that would be relatively convenient to handle but restricted in its scope, has chosen, perhaps wisely, the latter.

It should be added that the illustrative drawings, though often diagrammatic in presentation, are quite adequate for their purpose as aids to identification.

Issued in paper covers at the equivalent of about £11, which presumably includes the third volume of text not yet available, it is to be feared that there will be comparatively few horticulturists outside France who will see their way to buying for themselves a work of this character. E. J. Salisbury

## POPULATION CHANGES IN **EUROPE SINCE 1939**

Population Changes in Europe since 1939 A Study of Population Changes in Europe during and since World War II as shown by the Balance Sheets of Twenty-four European Countries. By Gregory (Grzegorz) Frumkin. Pp. 191. (London: George Allen and Unwin, Ltd., 1951.) 30s. net.

SHORTLY after the end of the Second World War the United Nations Economic Commission for Europe began a survey of European man-power. Yet the present cannot be understood without a knowledge of the past, and it quickly became clear that the demographic upheaval caused by the War was largely uncharted and very ill-recorded. Gregory Frumkin, formerly editor of the "Statistical Yearbook of the League of Nations" and now a member of the United Nations Secretariat, undertook the heavy task of piecing together the demographic history of Europe for the War period. The result is a scholarly compilation of the main changes in total population of twenty-four European countries for the two periods end-1938 to end-1945, and the succeeding years 1946-47. The U.S.S.R. is excluded from the main account because accurate data are non-existent.

A valuable feature of the work is the author's insistence on a standard treatment for every country. National statistics, based on a variety of definitions and relating to a multiplicity of dates, have been rearranged to conform to a standard pattern. This commendable attack on the difficult problem of international comparability inevitably results in estimation and its attendant errors. Yet these will be of small account compared with the uncertainty which still surrounds the extent of the loss of human life from genocide, and the size of the migratory movements, voluntary and involuntary, which swept across Europe in the wake of the Nazi terror.

NATURE

M. Frumkin insists on independent estimates of all components of population change. These are: births, deaths (divided into those directly attributable to military operations, mass murders and 'normal' deaths), losses and gains from territorial changes, and the successive waves of migration during and after the War. Official statistics, amended to fit the author's standard form, provide starting and finishing check-points. If the account for any country does not balance, and it rarely did, then one at least of the estimates must be wrong. The major part of the author's research has been the patient examination and reconciliation of the many discrepancies he uncovered. He has avoided residual or balancing items which merely reflect an accumulation of errors in the remaining figures.

The general approach is described in Chapter 2. The next chapter is the core of the work and contains a survey of population changes for each country separately. The whole account is preceded by a brief description of the characteristics of population growth during the 1930's, and concluded by a summary of the changes wrought by the War. One of the more horrifying tendencies of modern warfare is laid bare : "Out of 10 million war losses in countries under Nazi control . . . 8.6 millions related to losses among the civilian population and only 1.4 million were military losses". Not least in interest is the evidence of the remarkable recuperative power of a population. By the end of 1947 the total population of the countries surveyed had overtaken war losses and exceeded the total at the end of 1938 by some four millions.

H. SILCOCK

## LIPID METABOLISM

Biochemical Society Symposia

No. 9: Lipid Metabolism, a Symposium held at the London School of Hygiene and Tropical Medicine on 16 February 1952. Organized and edited by R. T. Pp. v+102. (Cambridge: At the Williams. University Press, 1952.) 13s. net.

HIS volume contains the papers communicated I in substance to the Biochemical Society's symposium on February 16, 1952 (see Nature, 169, 569; 1952). The publication in full of the memoirs then dealt with is welcome, since in each instance a fairly full survey is presented which offers a more-or-less complete picture of each subject considered. The collection, which has been prepared by Prof. R. T. Williams and published for the Biochemical Society in the clear and excellent format common to all the Society's publications, is therefore of value to both students and investigators who are concerned with the problems discussed at the symposium.

The first three communications (by Prof. A. C. Frazer, Dr. R. P. Cook and Dr. J. M. French) deal with the absorption of fat by animals. Prof. Frazer's review of the work of his own school and of others during the past thirteen years on the mechanism of fat absorption gives a picture of the conclusions reached up to the present time. It suggests that the balance of evidence is in favour of his partition hypothesis, which presupposes only partial hydrolysis of ingested glycerides with intraluminar emulsification of glycerides as an important step in their absorption; and that the alternative view of complete hydrolysis