

who is professor of both medicine and pharmacology at Southwestern Medical College, Dallas, Texas, and is well known for his work on the circulation and on the adrenals. The section dealing with depressants of the central nervous system has been revised by Dr. Donald Slaughter.

The revision has been thorough and must have been a vast labour. Pharmacology is advancing rapidly and nearly all the new advances have been included. It is unfortunate that new revisions of both the British and United States Pharmacopœias are appearing too late to influence this edition, but the pharmacological information is well up to date. Among the newer drugs which appear are streptomycin, folic acid, "Paludrine", tridione, *B.A.L.*, *D.D.T.* and *D.F.P.* (these initials mean as much to the pharmacologist as the full chemical names). There are many references to work published in 1946, but the material must have gone to the printers fairly early in the year or the formula of synthetic folic acid would undoubtedly have been included. In spite of many changes, the general arrangement has not been altered and the critical spirit has been maintained; there is rather more emphasis on practical applications and rather less emphasis on academic experiments with isolated organs.

Text-books almost always show a certain amount of national bias, and it is interesting, and perhaps a little sad, that this one now shows some slight signs of American bias. The section on anthracene purgatives was apparently written in ignorance of Straub's work on senna. Benadryl and pyribenzamine are mentioned, but not antergan and neoantergan. Benzestrol is included, but not dieneestrol. Lanatoside *C* takes the place of digoxin. Most of these differences are superficial and merely serve to illustrate the fact that new discoveries may be applied in slightly different ways in different countries. There can be no doubt that this new edition of Cushny's book maintains a high standard and will be an invaluable source of information both for students and their teachers. Few students will read it all but many will keep it for reference, and it can be warmly recommended for this purpose. J. H. GADDUM

POPULATION OF THE SOVIET UNION

The Population of the Soviet Union
History and Prospects. By Frank Lorimer. (League of Nations Publications. II. Economic and Financial. 1946. II. A.3.) Pp. xiv + 289. (Geneva: League of Nations; London: George Allen and Unwin, Ltd., 1946.) 15s. net.

KNOWLEDGE concerning the U.S.S.R., apart from political opinions of various colours, has been hard to get. We have had invaluable essays, notably by Sir John Maynard and Sir Bernard Pares, but there has long been a serious need of more information than such reference books as the "Statesman's Year-Book" could find space for. This gives a special value to the publication under review. Dr. Lorimer studies and provides not only the available facts of population and employment, but also, by detailed comparison of data for 1926 and 1939, reviews the dynamics of population changes and movements during this period of vital change.

A Russian population roughly estimated in 1724 as 17,900,000 reached a total of 58,629,000 in 1859,

by which year Russians in the Asiatic part had reached 3,424,000. In 1897 the figure was 94,331,000 Russians (6,947,000 in the Asiatic part), to which must be added more than 31,000,000 non-Russians, making in all 125,640,000. For 1914 the total is estimated at 142,389,000, but the terrible years 1917-23 reduced it to 136,102,000, since when it was on the up-grade until the recent War. It passed its 1917 figure in 1926-27, with 11,802,382 east of the Urals. In the 1939 area of the U.S.S.R. there were at the end of that year 173,788,000. We thus have a continuation of a large percentage increase. Projections of population are given which show that war losses in numbers should be made up before 1950, and the 200,000,000 mark passed before 1960. As the population of North-western and Central Europe is expected to decline after 1950, it is estimated that the U.S.S.R. will equal North-western and Central Europe in population by 1970, and is more likely to go on increasing thereafter. The age composition of the population is strikingly different from that obtaining in North-western and Central Europe (figures are given in percentages).

| | Young people | Males 20-44 | Males 45-64 | Females 20-44 | Females 45-64 | Old people |
|--|--------------|-------------|-------------|---------------|---------------|------------|
| U.S.S.R., 1939-40 | 45 | 18 | 6 | 20 | 7 | 4 |
| N.W. and Central Europe | 32 | 19 | 10 | 19 | 12 | 9 |
| Estimated, U.S.S.R., 1970 | 35 | 20 | 9 | 20 | 10 | 6 |
| Estimated, N.W. and Central Europe, 1970 | 21 | 18 | 14 | 18 | 14 | 15 |

Though it is anticipated that the expectation of life will increase, this extract from the tables shows that the proportion of young people is likely to remain far higher in the U.S.S.R., and the proportion of old people will be much less than elsewhere in Europe.

City growth is as marked in the U.S.S.R. as elsewhere. Moscow doubled and Leningrad nearly doubled during 1926-39, reaching more than 4 and 3 millions respectively. In 1926 Kiev had 513,637; by 1939 nine towns besides Moscow and Leningrad had topped the half-million. In 1926 about thirty other towns had 100,000 or more; in 1939 the number was 71. Figures from German sources for the period of the Hitlerian invasion naturally show enormous reductions, especially for Ukrainian towns.

The amount of sown land per head of the population not only kept pace with population increase in nearly all regions except Belorussia, Karelia, Murmansk and Azerbaydzhan, but actually increased, the average for the U.S.S.R. rising from 0.936 to 1.195 hectares, the increase in the Lower Volga and Don regions and Kazakhstan being outstanding.

The net reproductive-rate, as usual, is far higher in rural than in urban areas, and as the average for the whole of the U.S.S.R. in 1938 was estimated at 1.54, the rural birth-rate is very high indeed. In rural areas women between twenty and thirty-nine are responsible for nine-tenths of the births. In urban areas the number of births to women of less than twenty is slightly larger; those to women of forty and more are much less. The birth-rate in 1938 was as high as 38.3 per thousand and the death-rate was 17.8.

There are 22 maps, 103 tables and 31 figures, and they deal with occupations and industrialization as well as with vital statistics of many kinds. Readers will find the statements of fact invaluable, and perhaps scarcely need to be warned that projections suggesting future conditions are subject to a good many reserves.

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