

Russian Geography

Physical Geography of Asiatic Russia.

S. P. Suslov. Translated from the Russian by Noah D. Gershevsky. Joseph E. Williams, Ed. Freeman, San Francisco, Calif., 1961. xv + 594 pp. Illus. \$15.

The Soviet Union. The land and its people. George Jorré. Translated by E. D. Laborde. Longmans, New York, ed. 2, 1961. 372 pp. Illus. \$7.50.

When I asked a Soviet geographer to comment on the Suslov translation, he remarked that the original was a useful volume but that now, of course, it was out of date. The first edition appeared in 1947, but the translation is based on the second edition which appeared in 1956. Much of the actual translation was done by Clayton L. Dawson, under the supervision of Noah D. Gershevsky. In the editorial foreword, Joseph E. Williams remarks about Suslov: "never before has a geographer set about his work with such a determined effort to understand all the physiogeographic forces acting in a given area."

S. P. Suslov's *Physical Geography of Asiatic Russia* might be regarded as a regionalized amplification of Berg's *Natural Regions of U.S.S.R.* (1937). It is a detailed delineation of the total landscape in the 15 regions east of the Urals and is well supplied with 50 maps and 168 illustrations. The coverage is comprehensive, for Suslov has analyzed the entire natural landscape, ranging from geology through meteorology, vegetation, and mining to zoology. This is more an encyclopedic survey than an objective evaluation, but it provides the best description in English of Western and Eastern Siberia, the Far East, and Central Asia.

The scope of the book is suggested by the subdivisions of the chapter on the mountain region of Central Asia. This chapter covers geologic history, mineral resources, glaciation, earthquakes, climate, relief-forming processes, hydrography, vegetation zones, and mountain landscapes. The discussion of permafrost covers 18 pages, but the limited attention given to mineral resources is shown by the fact that there is but one reference each to petroleum and iron. Coal is not listed, although it is mentioned under the Kuznets basin; there is no reference to water power.

The Soviet Union, by Georges Jorré, now appears in a second edition, translated from the French and revised by E. D. Laborde. The original volume, by the late Professor Jorré (University of Toulouse), was one of the best textbooks when it was first published in 1950; the revision incorporates new statistical data with additions in the regional chapters.

Jorré's book is divided into four parts: the physical setting, the expansion of the Russian world, the economic system, and the main natural regions. The last part is subdivided along vegetation lines. The book is well balanced and interestingly written.

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Tobacco and Man

Tobacco: Experimental and Clinical

Studies. A comprehensive study of the world's literature. P. S. Larson, H. B. Haag, and H. Silvette. Williams and Wilkins, Baltimore, Md., 1961. xii + 932 pp. Illus. \$20.

Since the 16th century, when tobacco was introduced into Europe, its use has been a controversial matter. Robert Burton in his 17th-century *Anatomy of Melancholy* called the tune by saying "Tobacco, divine, rare . . . a sovereign remedy to all disease, a virtuous herb if it be well qualified, opportunely taken, and medicinally used, but as it is commonly abused by most men, 'tis a plague, a mischief. . . ." All the significant scientific information on this controversial subject has been well explored by the keen pharmacologists at the Medical College of Virginia. They have written this huge volume, comprising an analysis of over 6500 scientific references. It is well organized for ready reference to specific detail.

In these days when it is increasingly important for science to have comprehensive and critical reviews, this volume on tobacco offers an interesting example of what may be coming. Here in one place is all the pertinent information available on the effects of tobacco and its alkaloids on living material, and especially on human beings. There are over 100 pages, with three columns on a page, for the listing of references; full titles and full pagination are included.

The analysis goes directly into the

problem of the absorption and fate of alkaloids and other substances in tobacco as they are ingested, by inhalation or by other means, into the body. Then follows a consideration of the effects of tobacco and its alkaloids on the special senses, the nervous system, skeletal muscle, blood, the cardiovascular system, the respiratory system, the urinary tract, the gastrointestinal tract, the oral cavity, metabolism, the endocrine glands, and the reproductive organs. The pages are large and double-columned; the material discussed so far in this review covers nearly 400 pages.

The authors consider the local actions of tobacco, its detailed toxicity and hypersensitivity, tolerance, and habit. The immunology of tobacco is discussed, and there is a general survey of the effect of smoking tobacco on the human organism as a whole. There follows a consideration of tobacco and disease, not only from the standpoint of generalities, but also with reference to specific diseases. Consideration of lung cancer in relation to tobacco smoking is handled judiciously and fairly. There is even a chapter on medical uses of tobacco, and there are helpful appendixes on the biological and chemical methods for the estimation of nicotine, as well as notes on the pharmacology of certain derivatives of nicotine.

Certainly, for anyone desiring detailed information regarding the effects of tobacco, this volume must be a prime source. Its only failing is its lack of a historical survey covering some 400 years of accumulated writings on tobacco, most of which relate to various conflicting opinions on its merits. The initial introduction of tobacco into various parts of the world has always been as a medicine. Indeed tobacco remained in most of the pharmacopeias until the late 19th century. Nevertheless, by the 18th century, it was clear that tobacco was used more for amusement than for its medicinal virtues. Its potential dangers were well appreciated by the early 19th century.

Not the least of the interesting aspects of tobacco has been the extensive use of its chief alkaloid, nicotine, in the physiological analysis of the components of the autonomic nervous system. This was initiated by the famed English physiologist, John N. Langley (1852-1925). The authors discuss this fully and include references to 30 of Langley's contributions on this important matter.

For many years the authors of this