

RADIO

May 12, 2:15 p. m., E.S.T.
OVER-OCEAN AIR SERVICE IN THE MAKING—Edward P. Warner, Aviation Consultant.

May 19, 2:15 p. m., E.S.T.
AMERICA GROWS OLDER—Dr. Warren S. Thompson, Director of the Scripps Foundation for Research in Population Problems, Miami University.

In the Science Service series of radio discussions led by Watson Davis, Director, over the Columbia Broadcasting System.

PHYSIOLOGY

Summer Sun Has Six Times Burning Power of Winter's

SUMMER sunshine, in an average northern-U. S. locality, has six times as much power to start sunburn as has winter sunshine. Measurements reducing a commonly but inexactly known fact to a more precise quantitative basis were reported by Dr. H. Landsberg of Pennsylvania State College, before the meeting in Washington of the American Geophysical Union.

Dr. Landsberg used an instrument known as a "climatological ultraviolet dosimeter." It is a simpler apparatus than its long name might imply, and it measures the length of time required for sunlight to bring on the reddened skin that is the first symptom of sunburn. In central Pennsylvania, the time was about 32 minutes in summer, while in the winter more than three hours of exposure would be required. The amount of ultraviolet in the sunlight is very much less when the sun is low in the sky, as it is even at noon in winter.

The color of the sky as well as the height of the sun has a great influence on the burn-producing power of the light. On days when the sky is a deep, clear blue the sunlight has much less sunburning power than it has on days with a pale, whitish-blue sky. Also, the number of minute dust particles in the air influence the amount of ultraviolet that comes through.

Migrating air masses, from the poles and from the tropics, have much to do with the amount of sunburning we get. Most of our sunburn comes in summer, when tropical air masses dominate our weather; polar air masses have a low total sunburn score, but that is largely because they are around in the winter, when the low sun has much less burning power. When a polar air mass comes swooping down in summer, its clearer atmosphere lets more ultraviolet through.

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First Glances at New Books

Zoology

PIGEONS AND SPIDERS — Maurice Maeterlinck—*Norton*, 128 p., \$1.75. Two essays by Maeterlinck, a long one about the water spider and a shorter one about the life of the pigeon, written in the poetic diction which the world has come to expect of the great Belgian essayist.

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Natural History

ANNUAL REPORT OF THE DIRECTOR TO THE BOARD OF TRUSTEES FOR THE YEAR 1935—*Field Museum of Natural History*, 416 p., \$1.

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History of Science

AN ANALYSIS OF THE DE GENERATIONE ANIMALIUM OF WILLIAM HARVEY—Arthur William Meyer—*Stanford Univ. Press*, 167 p., \$3. Harvey's fame rests in most men's minds on his discussion of the circulation of the blood; yet that was by no means the only scientific work he did. He carried out, with great pains and patience, elaborate researches on embryology, and wrote a treatise on them. Yet strangely enough, not until now has a thoroughly critical and exhaustive study been made of this work of the famous English physician. Decidedly a scholar's book, Prof. Meyer's treatise will appeal to a limited audience but an appreciative one.

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Botany

FIELD BOOK OF ILLINOIS WILD FLOWERS—W. B. MacDougall and others—*Illinois Natural History Survey*, 406 p., \$1.50. It is gratifying to be able to report the appearance of this excellent addition to the growing literature of state and regional floras. This book is announced as "Manual 1" of the Illinois Natural History Survey. The Survey has set a high standard for succeeding numbers in the series.

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Sociology

RURAL SOCIOLOGY; Vol. 1, No. 1, March, 1936—Quarterly, \$2. per year. *Pub. by the Rural Sociology Section, American Sociological Society.* Address subscriptions to Managing Editor, Rural

Sociology, Louisiana State Univ., Baton Rouge, La. A new journal, filling a hitherto unoccupied place in the field of sociology. It will be welcomed not only by sociologists but by all interested in rural life in America and in means toward its improvement.

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Engineering

DIESEL ENGINES, OPERATION AND MAINTENANCE, A PRACTICAL TEXT ON THE CONSTRUCTION, OPERATION, AND REPAIR OF HEAVY-DUTY ENGINES—L. H. Morrison—*American Technical Society*, 212 p., illus., \$2.25. Many illustrations help explain the subject matter of this volume, whose lengthy title tells its scope.

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Embryology

HOW ANIMALS DEVELOP—C. H. Waddington—*Norton*, 127 p., \$2. The author's stated purpose is "to write an account of embryology suitable for the intelligent layman and the elementary student." As a rule, this double objective is a hard one to attain; it is a real test of expository skill, to steer between the Scylla of textbookishness and the Charybdis of popular "jazzing up." But Dr. Waddington passes, with flying colors.

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Natural History

NATURE—BY SEASIDE AND WAYSIDE—Mary G. Phillips and Julia McNair Wright—*Heath*. I, Some Animals and Their Homes, 142 p., 64c.; II, Some Animal Neighbors, 187 p., 68c.; III, Plants and Animals, 244 p., 72c.; IV, Our Earth and Its Life, 280 p., 76c. A series of simply, brightly written science readers for children in the lower school grades, following the lines of a similar series first brought out years ago but so revised as to constitute practically a new group of books.

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Ethnology

WAPPO ETHNOGRAPHY—Harold E. Driver—*Univ. of California Press*, 42 p., 50c. Describes the culture of Indians typical of central California, stressing the geographic influences.

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