NATURE RAMBLINGS by Frank Thone

DEMOGRAPHY—PLANT PATHOLOGY

Moved by a Fungus

THE DEADLY blight fungus, that has ruined our native chestnut forests, indirectly assisted in the creation of the new National Park in the Great Smoky Mountains of Tennessee and North Carolina.

One of the most valuable of the many kinds of trees found in that magnificently scenic region was the American chestnut. Its lumber, though not as strong as oak or as tough as hickory, still found a ready market (especially, for some reason, among coffin manufacturers!), and its huge crops of nuts were a food staple among the mountaineers, who also exported large quantities of them to the cities. The tree was economically interwoven with the people's life.

When the project was broached to make the Great Smoky Mountains, the last unspoiled wilderness area in the Southern Appalachians, into a great National Park for the East, the promoters of the idea foresaw more or less difficulty in inducing the mountain folk to leave their upland homes, where they and their forefathers before them had won a living—albeit usually a meager one—from the same land ever since Revolutionary days. Mountaineers are usually firmly rooted to the bit of soil they call their own.

But when the officials of the National Park Service came to talk it over with the mountaineers, they found them much more willing to make a trade for lowland farms outside the proposed park area than they thought they would be. And one of the reasons for the loosening of their roots proved to be the coming of the fungus disease that killed the chestnut trees. This deprived them of a long-accustomed article of food, and also cut off two sources of money income: part of the work in the sawmills and the sale of the nuts. With this economic push from behind, the inducement of better school opportunities for their children nearer the lowland settlements provided a pull in front, and between the two the mountaineers yielded and sold out to "the guvment."

Whether the chestnut blight is sending our native chestnut trees to the oblivion that has claimed the passenger pigeon and the heath hen, or whether the chestnuts will stage a comeback like that of the bison and the pronghorn antelope, is still undetermined. The fungus kills the trees down to the roots, but leaves the roots alive. They then send out thick clumps of sprouts, some of which have grown into large bushes or even small trees, beginning to yield a few nuts again.

Science News Letter, September 16, 1933

PSYCHOLOGY

Average Vocabulary of College Students Found

THE NUMBER of words known to college students was the subject of research reported to the American Psychological Association by Dr. Robert H. Seashore of the University of Oregon.

They know a great many, it seems, in addition to such technical terms as "date" and "prom" and "flat tire."

The average vocabulary of sophomores and juniors is about 15,000 non-technical English "root" words plus 52,000 derivatives of roots and about 3,000 special terms. This does not count words in foreign languages and the technical terms of such studies as the sciences.

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First Glances at New Books

See Also Page 192

General Science

GREAT MEN OF SCIENCE—Philipp Lenard—*Macmillan,* 389 p., $3. Through the medium of historical studies of great men of science Prof. Lenard, the German physicist and Nobel laureate, tells the history of scientific progress in a very acceptable manner. Says Prof. Lenard in his preface: "What most struck me in recent writings on this subject was a want of that understanding of the great men of science which, so it seemed to me, should come from a study of their life history and their behaviour. I found that these scientists—or at least not a few of them, and those the most successful—were much more above the common run of humanity than the most widely read biographies suggested. My joy was great to find that these personalities so well matched the greatness of their achievements, that they were fit to serve as examples to future generations both from the point of view of their work and from that of their lives." Translation is by Dr. H. Stafford Hatfield with a preface by Prof. E. N. da C. Andrade of the University of London.

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Physics

ANALYTIC AND VECTOR MECHANICS—Hiram W. Edwards—*McGraw-Hill,* 428 p., $4. A text for students in advanced courses in physics.

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Chemistry

INDUSTRIAL CHEMISTRY—Emil R. Riegel—*Chemical Catalog Co.,* 784 p., $6. Of the making of textbooks in general chemistry for schools there is no end; but the almost equally great need of a good text and general reference book in applied chemistry, for both the student and the works chemist, has not been so abundantly met. That Prof. Riegel's work has been successful is well attested by the fact that a revision is now called for, in less than five years since the appearance of the first edition.

Science News Letter, September 16, 1933

Nature Study—Agriculture

NATURE STUDY AND AGRICULTURE—Charles C. Schmidt—*Heath,* 508 p., $1.80. A revised edition. Students who can absorb and retain all the astonishingly varied information and suggestions in this book should grow into most valuable citizens of our rural areas.

Science News Letter, September 16, 1933

Nursing

I GO NURSING—Corinne Johnson Kern—*Dutton,* 256 p., $2.50. As fascinating as any fiction is this volume of true stories from a nurse's experience.

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