

The substantial requirements for entrance, the broad outlook of the elective system, the intensive thoroughness of the graduate professional school, the glorification of the spirit of research, all these are exemplified in the Harvard of to-day. The Harvard of to-morrow will lead in the differentiation of the work of men, the separation of boys and boys' teachers from men and men's teachers. It will not be Harvard College as it was, nor interchangeably Harvard College and Harvard University as it is to-day. It will be a university resting on a college foundation, a university worthy of the eighty millions of free men who form its constituency, a university fit to frame the highest aspirations of the noblest youth of the republic.

DAVID STARR JORDAN

SCIENTIFIC JOURNALS AND ARTICLES

It is ever a wonder to us in America that German biologists can so easily start and maintain a new periodical. No sooner does a science become well defined and gain a number of workers than the proper periodical is forthcoming. These remarks are called forth by the appearance of the *Internationale Revue der gesamten Hydrobiologie und Hydrographie* (Leipzig: Klinkhardt), of which the first (double) number appeared in May. The backing of the magazine is indicated by the names on the cover. R. Woltereck (of Leipzig and Lunz) is the editor. B. Helland-Hansen (Berlin), G. Karsten (Bonn), A. Penck (Berlin), C. Wesenberg-Lund (Hilleröd), R. and F. Zschokke (Basel) are the other members of the editorial staff. The Prince of Monaco, Agassiz, Chun, Forel, V. Hensen, R. Hertwig, Murray, Nansen, O. Pettersson and Weismann have lent their names to the undertaking. The first number contains 307 octavo pages, of which the first half contain original contributions; those of Weismann, Murray, R. Hertwig and Issel being essays written especially for the introduction of the new journal. A paper by Nathansohn begins a projected series on the biology of the plankton; one by A. Fischel deals with very successful intravital staining

of *Cladocera*; one by Klausener treats of the annual cycle of the fauna of alpine lakes; and one by Götziner in the first part of a monograph on Mitter Lake at Lunz, in the Austrian Alps. The remainder of the number contains abstracts of reports, summaries of results, critical reviews, notices from stations and a list of recent literature. There are eight plates and numerous text-figures. Certainly the periodical starts out with the highest ideals and it will be a great stimulus to hydrobiology. It deserves, as it will receive, the most active support of the numerous American workers in this field. C. B. D.

The Independent begins with its issue for January 7, 1909, a series of articles on the fourteen universities of this country, written by Dr. Edwin E. Slosson, of the editorial staff and previously professor of chemistry in the University of Wyoming. Harvard is the first institution discussed and the others to follow in the order named at intervals of one month are: Yale, Princeton, Pennsylvania, Chicago, Johns Hopkins, Stanford, California, Michigan, Wisconsin, Minnesota, Illinois, Cornell and Columbia.

BOTANICAL NOTES

TREES AND FORESTRY

THE University of California has done well in publishing Mr. N. D. Ingham's bulletin (No. 196) on "Eucalyptus in California." In 88 pages the author by means of plain descriptions and 70 excellent half-tones gives his readers some very clear and usually very new ideas as to these wonderfully interesting trees as they grow in California.

Major George P. Ahern's "Annual Report of the Director of Forestry of the Philippine Islands," for the year ending June 30, 1907, is of interest to forestry students in this country as showing the considerably different problems which pertain to work in the islands. Two maps help to give a clearer idea as to the available forest tracts in Negros Occidental and Mindoro.

Two years ago Rolland Gardner, of the timber-testing laboratory at Manila, published a bulletin (No. 4) on the "Mechanical

Tests, Properties and Uses" of thirty-four Philippine woods, and a year later, the edition being exhausted, a second, revised edition was brought out. In its present form it includes a popular discussion of the qualities of woods and the meaning of timber tests, methods of testing and results of tests, structural qualities, appearance and uses. In the last-named section, in addition to common names the scientific names as far as they can be determined are given. An interesting comparison of the tests of Philippine and American woods shows that the former rank very high.

L. A. Dode's "Notes Dendrologiques" in the *Bulletin de la Société Dendrologique de France* (1907) includes notes on *Ailantus*, *Catalpa*, *Sorbus*, *Clerodendron* and *Platanus*, in most of which genera the author of course finds "new species"!

ANOTHER BOOK ON NORTH AMERICAN TREES

GEORGE B. SUDWORTH, dendrologist in the Forest Service, has made an important contribution to our knowledge of the trees of the western part of North America by the publication (October 1, 1908) of a thick pamphlet of 441 pages under the title "Forest Trees of the Pacific Slope." It is the first part of a work intended to deal with all the native forest trees of North America north of the Mexican boundary. This volume contains an account of the trees known to occur in Alaska, British Columbia, Washington, Oregon and California. Part II. will be devoted to the Rocky Mountain trees, part III. to the trees of the southern states, and part IV. to the trees of the northern states. The work when completed will therefore be one of the most important of those yet published by the Forest Service, and must prove of great value to students of forestry and especially of dendrology, while as a matter of course it will be indispensable to the systematic botanist. It may be asked why should the United States Forest Service incur the labor and expense of publishing a comprehensive work on the North American forest trees when we already have Sargent's "Silva" in fourteen great quarto volumes; Sargent's "Manual of the Forest

Trees of North America"; and Britton's "North American Trees," but it does not require a long perusal of the book before us to convince one that it contains much that is not to be found in other books, and that it can easily justify its existence.

In the first place it is written from the dendrologist's point of view. It is rather a forester's book than one for the botanist, and so contains some things that are not to be found in other books on trees. Thus one finds under each species a paragraph relating to the longevity of the trees, another as to their particular habitat, still another in regard to the climatic conditions under which they grow, one on tolerance (of especial value to the practical forester) and one on their reproduction (also of very high value to the forester). The descriptions are non-technical and are accompanied by good life-size figures of characteristic parts, as leaves, cones, fruits, seeds and less commonly the flowers. In only a few instances was it necessary to reduce the figures below their natural size.

In the second place it is desirable that there shall be some authoritative *silva* for the use of the men who go into the United States Forest Service. In this book care has been taken in regard to the selection of English names for the species, and in like manner where there has been a question as to the proper scientific name one is here designated for use by the official dendrologist. In regard to this latter point it seems to the writer of this notice that on the whole a conservative course has been taken. While many trees appear here under unfamiliar names, there seems to be a good reason for every change made. There is an entire absence also of the species-making mania, and the reader soon gets the impression that the author is more interested in giving such a clear idea of the species that they may be recognized in the forests than in making out that certain observed variations are the sure indications of new species.

The definition of a tree followed by the author includes "woody plants having one well-defined stem and a more or less definitely formed crown, and attaining somewhere in

their natural or planted range a height of at least eight feet, and in diameter of not less than two inches." This definition is not, however, allowed to exclude unbranched cactuses, yuccas and palms. The uniform recapitalization of all specific names is greatly to be commended, as also the clear type (of two sizes) and the exact illustrations. Two good maps of the region covered and a good index complete this altogether admirable publication.

FUNGUS NOTES

IN a recent number of *Rhodora* (January, 1908) Dr. W. J. Farlow begins the publication of "Notes on Fungi," which promise to yield critical discussions of much value. He shows that what has been known as *Corticium tremellinum* var. *reticulatum* is in the first place not a *Corticium*, but a *Tremella*, and that the variety is a distinct species, to be known hereafter as *Tremella reticulata*. He shows that what has been known as *Synchytrium plurianulatum* (a parasite in species of *Sanicula*) is in reality *Urophlyctis plurianmulatus*, and that a uredineous parasite of *Rubus neglectus* and *R. strigosus*, hitherto known as, or confused with, *Phragmidium gracile* is *Pucciniastrum arcticum* var. *americanum*. He is further of the opinion that the *Pucciniastrum* on *Potentilla bidentata* is *P. potentillae*. Further notes from this source will be eagerly looked for by mycologists.

In *Annales Mycologici* (V., No. 7, 1907) Professor F. L. Stevens figures and describes "Some Remarkable Nuclear Structures in *Synchytrium*." The paper is a record of facts, and the author does not attempt to base any conclusions upon what he has yet seen. Other recent fungus papers by the same author are "An Apple Rot due to *Volutella*" and a "List of New York Fungi" in the March and May numbers of the *Journal of Mycology* (1907), and "The Chrysanthemum Ray Blight" in the *Botanical Gazette* (October, 1907). The fungus which causes the ray blight on the chrysanthemum appears to be new and is described as *Ascochyta chrysanthemi*.

Heinrich Hasselbring's paper on "The

Carbon Assimilation of *Penicillium*" in the *Botanical Gazette* for March, 1908, is a contribution to our knowledge of the chemistry of the assimilation of some of the simpler compounds by plants. Among the results noted is the fact that "alcohol, acetic acid and the substances from which the acetic acid radicle CH_3COO — is easily derived are assimilated by *Penicillium glaucum*."

Mention should be made here of Scott and Rorer's paper "Apple Leaf-spot caused by *Sphaeropsis malorum*" in Bulletin 121 of the Bureau of Plant Industry of the U. S. Department of Agriculture; of W. H. Lawrence's record of "Some Imported Plant Diseases of Washington," in Bulletin 83 of the Oregon Experiment Station, and Cook and Horne's "Insects and Diseases of the Orange," in Bulletin 9 of Estacion Central Agronomica de Cuba.

Here also may be mentioned Professor Harshberger's paper "A Grass-killing Slime Mould" in the *Proceedings of the American Philosophical Society*, Vol. XLV., recording a case in which the plasmodia of *Physarum cinereum* killed the blades of grass over which they had grown.

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SPECIAL ARTICLES

SOME REMARKS ON THE CULTURE OF EASTERN
NEAR-ARCTIC INDIANS

DURING the past summer, 1908, the writer undertook an ethnological expedition into the James Bay region of Canada, for the Department of Anthropology of the American Museum of Natural History of New York. The original intention was to journey to Moose Factory and thence to the eastern coast of the bay, touching at Rupert's House, Eastmain River and, perhaps, Fort George, at which posts it was supposed access might possibly be had to the Naskapi Indians of Labrador, who, it was thought, might come down to these points during the summer, for the purpose of trade. On arriving at Moose Factory, it was learned that the Naskapi could not be reached via the west coast of Labrador, usually known