

THE John Macoun Memorial Committee of the Ottawa Field Naturalist's Club announces that, as the number of copies to be issued of the autobiography of the late Professor John Macoun, naturalist to the Geological Survey of Canada, is limited, orders, with or without the subscription price of \$3, should be sent in by May 15, addressed to Mr. Arthur Gibson, treasurer, John Macoun Memorial Committee, Birks Building, Ottawa, Canada.

DR. GEZA HORVATH, director of the section of Zoology of the Hungarian National Museum in Budapest, writes that the price of the complete series of the *Annales historico-naturales Musei Nationalis Hungarici* (Volumes I to XVIII) has been reduced from \$108 to \$58. It is the hope of the administration of the museum that, through the sale of sets of these important *Annals*, they will be able to add to the funds needed to pay the present exorbitant charges for the publication of current and future volumes.

THE Royal Academy of Belgium announces that a triennial prize of 2,500 francs, to be known as the Prix Joseph Schepkens, for the best experimental work on plant genetics, has been established.

THE German Congress of Surgery will be held at Berlin, under the presidency of Professor Hildebrand, from April 19 to April 22, when the following subjects will be discussed: The experimental principles of wound injection, introduced by Professor Neufeld, of Berlin; general surgical infection, introduced by Professor Lesser, of Freiburg; operative transplantation of muscles, introduced by Professor Wullstein, of Essen, and the importance of histological examination of the blood, introduced by Professor Stahl, of Berlin.

UNIVERSITY AND EDUCATIONAL NOTES

THE University of Missouri, Columbia, Mo., will erect a new chemistry building to cost \$125,000.

MISS KATE C. GARRICK, daughter of the late Sir James Francis Garrick, for ten years agent-general in London for Queensland, has by her

will bequeathed £10,000 to the University of Queensland to found a James Francis Garrick professorship of either law or medicine, as may seem best to the university, in memory of her father.

DR. EDWIN B. WILSON, professor of mathematical physics in charge of the department of physics at the Massachusetts Institute of Technology and a member of the administrative committee of the institute, has been appointed professor of vital statistics at Harvard University. He has also been appointed a member of the administrative board of the School of Public Health, the other members being David L. Edsall, chairman, Milton J. Rosenau, Roger I. Lee and Cecil K. Drinker.

THE following promotions to associate professorships have been made at Yale University: Dr. Francis Kovarik and Horace Scudder Uhler, in physics; Herbert L. Seward, in mechanical engineering; Charles S. Farnham, in civil engineering, and Richard S. Kirby, in engineering drawing. Dr. Arthur J. Hill has been promoted to an associate professorship in organic chemistry, with assignment to the Sheffield Scientific School and the Graduate School. William L. Crum, Ph.D., has been advanced to an assistant professorship in mathematics. English Bagby, Ph.D., in psychology, and Archer E. Knowlton, E.E., in electrical engineering, have been advanced to assistant professorships.

DISCUSSION AND CORRESPONDENCE

DEVONIAN PLANTS

To the geologist, the invertebrate paleontologist, or the stratigrapher who turns to the map of North America, the Devonian system is one of a completeness and grandeur that must be satisfying in the extreme. The mapping has proceeded through nearly a century, and the horizons have been divided on accurate faunal data. To long lists of invertebrates are added remarkable fishes.

To the paleobotanist on the contrary, the Devonian is at once alluring and forbidding. While the algae with a great record go back to

the Precambrian, the recognizable land floras begin in the Devonian. But the great expanses of Devonian rock are for the main part beyond the reach, knowledge, and experience of the paleobotanist. Away to the Canadian Northwest and extending far into Alaska, the main Devonian mass stretches for 2,000 miles through the remotest region of the continent. Thence scarcely a plant has come. Far or near, no one goes into the Devonian field for plants, and the "finds" are apt to be neglected year after year. Although the world's first great forests appear in the Devonian, from all North America not 200 species of Devonian plants could be named, and those mostly of little satisfactory definition.

Inasmuch as Devonian plant materials must long fail to bulk up as a workable assemblage without some initial and better coordinated attention, I wish the invertebrate paleontologists and geologists who have data would supply them to me or to others interested, in the form of brief memoranda, or promptly publish the same. It should shortly be possible to see Devonian paleobotany on a better basis. Meanwhile it would be especially gratifying if some attention could be given to the following inquiries:

- (1) Which are the main shale or other sections where Devonian plants have been seen?
- (2) Are there good Psilophyton localities,—(a) where stems are petrified, (b) well carbonized?
- (3) What North American localities of the lower Devonian yield silicified stems large or small? The British geologists cite the Cordaite, *Paleopitys milleri* of the old Red.
- (4) Are there any North American Devonian cherts containing stems comparable to *Rhynia*, the most primitive of vascular plants, as occurring in the siliceous cherts of Aberdeenshire, Scotland?
- (5) Are there any well marked seeds in the Indiana Black shale, the Genesee shale, the Waverleyan? Are there any typical pteridospermous, or gymnospermous seeds in the North American Devonian at all?

The enormous extent of parallelism in the lines of plant descent, and the exceedingly small percentage of known forms in pre-Carboniferous rocks, give to every discovery of plants in the Devonian a high value. It is

to-day patent that better plant phylogenies much depend on the closest attention to chronology, and especially on new discoveries in the Devonian.

I should state that it is not my purpose to take up the subject of Devonian plants but to help others to do so, as I am persuaded that much material of value is being lost, or too long unnoted. Is it not grievous to admit that in the past twenty-five years, contributions to Devonian paleobotany have been so lacking from North America? There is for the Waverleyan at the close of Devonian time the very fine contribution of Scott and Jeffrey. And from the Indiana Black shale there is the fine Cordaite *Callixylon Oweni* of Elkins and Wieland. There the record of publication about closes.

But what possibilities of discovery there must be in the rocks that yield such a striking forest type as the "Naples tree," *Protolepidodendron*, interestingly restored at the State Hall at Albany! The great dearth of knowledge of the Devonian plant front is due to the failure to get the evidence in the field; although it is admitted that here discoveries and collection are difficult. It is possible to search given Devonian horizons for invertebrate material with success, because occurrences have been sought out and diligently described, the continent over, for the past three or four score years. The impression thus grows upon us that with attention in kind, the Devonian plant record for the continent would soon be augmented, and that relative importance of scientific subjects asks such a result. Is the investigation of the Devonian to be carried on only in other countries? Can we make no such brilliant discoveries as those from the Devonian cherts of Aberdeenshire?

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THE EFFECT OF ALKALI ON THE DIGESTIBILITY OF CELLULOSIC MATERIALS

THE communication of Professor Lindsey on the above subject in your issue of February 3 is of considerable interest to students of cellulose chemistry inasmuch as it indicates the