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Association Affairs

Officers for 1948

At the recent annual meeting of the Association in Chicago, E. C. Stakman, of the University of Minnesota, St. Paul, was named president-elect. The two newly-elected members of the Executive Committee, replacing Dr. Stakman and Arthur H. Compton, are Roger Adams, of the University of Illinois, and Edwin B. Fred, president of the University of Wisconsin. Those elected vice-presidents of the American Association for the Advancement of Science are: Section A (Mathematics), R. L. Wilder, University of Michigan; Section B (Physics), F. W. Loomis, University of Illinois; Section C (Chemistry), Lee Irvin Smith, University of Minnesota; Section D (Astronomy), Alfred H. Joy, Mount Wilson Observatory; Section E (Geology and Geography), Henry R. Aldrich, Geological Society; Section F (Zoology), Alfred S. Romer, Harvard University; Section G (Botanical Sciences), E. N. Transeau, Ohio State University; Section H (Anthropology), Wilton M. Krogman, University of Pennsylvania; Section I (Psychology), Edwin R. Guthrie, University of Washington, Seattle; Section K (Social and Economic Sciences), Talcott Parsons, Harvard University; Section L (History and Philosophy of Science), Alexander Pogo, Harvard University; Section M (Engineering), William R. Osgood, U. S. Navy, Washington; Section N (Medical Sciences), Shields Warren, Harvard Medical School; Section O (Agriculture), H. K. Hayes, University of Minnesota; and Section Q (Education), Francis D. Curtis, University of Michigan.

Section on Geology and Geography (E)

The program of Section E at the Chicago meeting was made up of a symposium on "Problems of Mississippian Stratigraphy and Correlation," organized by J. Marvin Weller, which met for morning and afternoon sessions on Friday, December 26, and a symposium on "Methods of Ground-Water Investigation," organized by E. J. Schaefer, which met for two sessions on Saturday, December 27. A joint session with Section D (Astronomy), a symposium on "Origin of the Earth," was held on Saturday afternoon, December 27 (to be reported upon under Section D).

Geologists from many parts of the country working on Mississippian problems were present to describe the results of their work and take part in the discussions. In his introduction to the Mississippian Symposium, Prof. Weller, of the University of Chicago, indicated the general problems to be considered. The papers are to be published as a special issue of the *Journal of Geology.* In discussing the status of Mississippian stratigraphic knowledge in the Appalachian region, B. N. Cooper, of Blacksburg, Virginia, emphasized the need for detailed studies. P. B. Stockdale, of the University of Tennessee, discussed Mississippian stratigraphy of the southern Appalachians, including results of recent facies studies and problems of defining the Mississippian-Pennsylvanian boundary. D. H. Swann, of the Illinois Geological Survey, presented his and co-author Elwood Atherton's work on subsurface studies of Chester strata in the Illinois basin. L. R. Laudon, of the University of Kansas, described studies indicating that the Osage-Meramec boundary constitutes a major break throughout the Upper Mississippi Valley and in a large area to the west and northwest. E. L. Selk, Oklahoma City, took up the problem of the "Mayes" in Oklahoma. There was vigorous discussion of each of these papers.

During Part II of the Mississippian Symposium, on the afternoon of December 27, J. S. Williams, of the U. S. Geological Survey, Washington, D. C., discussed Mississippian-Pennsylvanian boundary problems in the Rocky Mountain region, and E. C. Reed, of the University of Nebraska, presented subsurface data from Nebraska and surrounding states which indicate that the Mississippian seas were not continuous between the mid-continent region and the northern Rocky Mountain region. Paleontological problems of the Mississippian were taken up in four papers: A. K. Miller, University of Iowa, described Mississippian ammonoid zones; C. A. Arnold, University of Michigan, the Mississippian flora; and C. L. Cooper,

USGS, Washington, D. C., microfossils of the Mississippian. R. C. Moore, of the Virginia Agricultural Experiment Station, Blackburn, brought out the parallelism and differences in American and European faunas of the Mississippian. Most of these papers brought forth animated discussion.

On Saturday morning, December 27, the symposium on "Methods of Ground-Water Investigation" was introduced by E. J. Schaefer, USGS, Columbus, Ohio. F. C. Foley, USGS, Madison, Wisconsin, discussed development of ground water for military use in the Mediterranean theatres, 1942–45. Among other things, he described wells drilled in volcanic craters. Leland Horberg, of The University of Chicago, described the mapping of subsurface Pleistocene stratigraphy and the determination of buried valleys in Illinois, some of which serve as important sources of ground water. M. B. Buhle, Illinois Geological Survey, Urbana, in a joint paper with C. A. Bays, discussed the electrical-resistivity method of exploration for ground water. V. C. Fishel, of the USGS, Indianapolis, summarized the methods used in ground-water investigations in Kansas, and S. E. Harris, Jr., of Harvard University, in a joint paper with H. G. Hershey and W. E. Hole, described the methods of ground-water investigation in Iowa.

The Saturday afternoon session, Part II of the Ground-Water Symposium, dealt with problems in various states. F. H. Klaer, Jr., USGS, Indianapolis, described the usefulness of soil maps in mapping glacial geology and in ground-water investigations in Indiana; K. E. Anderson, Missouri Geological Survey, Rolla, methods of tracing sources of well contamination in Missouri, showing also the close relationship between geological conditions and probability of contamination; and J. G. Ferris, USGS, Lansing, Michigan, examples of hydraulic analyses which provided geophysical and geological information. M. I. Rorabaugh, USGS, Louisville, Kentucky, reported on studies of infiltration from the Ohio River near Louisville into the glacial aquifers and demonstrated the proportion and amount of river water entering the aquifers. D. W. VanTuyl, USGS, Columbus, Ohio, summarized the methods of investigation of a glacial aquifer near Canton, Ohio, in which stream flow duration curves, correlation of stream flow with pumping, and long-time well records combine to give a figure for safe yield from the aquifer. All papers were discussed and many of them by several participants.

The address of J. L. Rich, University of Cincinnati, retiring vice-president for 1947, on "Goals and Trends in Geological and Geographical Research" was delivered at 2:00 P.M. on December 27. Dr. Rich, in discussing the various motives for research, included the fear motive. He pointed out the danger to universities of secret research, and many disadvantages to universities resulting from their conducting government-sponsored research. He analyzed the problems of financing research, including the very pressing current problem of lessening returns from endowments.

The meetings of the Section were well attended, and the joint session with Section D overtaxed the capacity of the room provided for it. A local committee of which Leland Horberg was chairman, provided for assistance in many matters. (GEORGE W. WHITE, *Secretary.*)

Section on Medical Sciences, Subsection on Pharmacy (Np)

The Subsection held three sessions during the Chicago meeting. The sessions were well attended by representatives of the pharmaceutical industry, departments of pharmacology in medical schools, and representatives from the various areas of science in schools of pharmacy.

H. W. Youngken and Wm. E. Hassen, Jr., of the Massachusetts College of Pharmacy, Boston, reported that the camphor basil, *Ocimum kilimandscharicum,* a shrubby plant native to Kenya, British East Africa, has been grown successfully as an annual in the Boston area. A detailed description of the cultivated plants grown in the Medicinal Plant Garden was given. The dried leaves and flowering tops harvested in late October yielded an average of 2.5% of oil and 2.54% of camphor, the latter similar to the camphor from the camphor laurel of Japan and China.

E. R. Kirch, O. Bergeim, J. Kleinberg, and S. James, from the University of Illinois, Chicago, discussed experiments carried out under conditions of artificial gastric digestion to show the influence of various foods on the reduction of iron. It was found that fresh fruits and vegetables reduced iron as much as 77–98%, largely due to the ascorbic acid content. Egg white, meat, and bread reduced iron to the extent of 25–40%, while milk and egg yolk gave practically no reduction. It is believed in general that the iron utilized by the animal organism has to be in the reduced or ferrous state in order that it may be utilized and absorbed to a maximum.

From the Smith, Kline & French Laboratories, Philadelphia, came a report by R. H. Blythe, J. J. Gulesich, and H. L. Tuthill which described new and modified *in vitro* tests based on physicochemical principles devised for the evaluation of hydrophilic laxatives. These tests measure swelling, water uptake, and water retention in artificial gastric and intestinal media. *In vivo* conditions are further simulated by a novel use of Carbowax as an osmotic agent. In this test, the gel formed by allowing the substance to swell