the zones of movement. This conception is taken to afford the best initial basis for the interpretation and correlation of observed rock structures. There is no certain evidence of increase or decrease of movement toward the bottom of this zone. Beyond a shallow surface zone, there is no certain evidence of increase of rock flowage and decrease of rock fracture with depth. There is no certain evidence that rock flowage means greater weakness than rock fracture. There is no certain evidence in rock flowage that pressures are dominantly hydrostatic or dominantly those of competent solid bodies.

Movements are known to occur in the zone below our range of observation, but their nature and distribution are the subjects of varied hypotheses based on a few known conditions. Much of the sharper diastrophism seems to be confined to a thin surficial zone. Deeper movements, of a more massive type, periodic, and possibly slower, seem to be implied by the relative movement of great earth segments as represented by continents and ocean basins. Their depth is unknown. Most of the current hypotheses agree in assuming a single mobile zone in which rocks move dominantly by rock flowage. The basic requirements of reasonable hypothesis, however, may be equally well met by a conception of movement much like that of the zone of observation. This does not require or postulate the conception of the existence of any single mobile zone, or zone of slipping, or zone of flowage, or of an asthenosphere. It supposes movement irregularly distributed in many zones, with any inclination, and accomplished by both fracture and flowage as far below the surface as movement extends—always remembering that some of the structures geologically described as fractures, may be expressions of mass movement of the kind defined as flow in experimental results.

Conditions of temperature and pressure and vulcanism become more intense with depth, but it remains to be shown that their conjoint action results in a uniform environment, and even if it does, that this condition is not upset by what might be called a heterogeneity of the time factor as represented by differing rates of deformation. If homogeneous environmental and time conditions are assumed, it is yet to be shown that these are sufficient to overcome the heterogeneity of the physical properties of the rocks and to cause homogeneous behavior through any considerable zone. It is not even certain that they may not fix and accentuate the heterogeneous properties of rocks. Certainly in the zone of observation there is comparatively slight evidence of their efficacy in causing more uniform deformation with depth.

In short, as between alternative conceptions as to the conditions in the deep zone, the burden of producing affirmative evidence would seem to rest heavily on any conception involving radical departure from the known irregular distribution and manner of movement within our zone of observation. We come, therefore, to the Chamberlin conception of a heterogeneous structural behavior of the earth.

C. K. LEITH

UNIVERSITY OF WISCONSIN

SCIENTIFIC EVENTS

DINNER IN HONOR OF THE RETIRING SECRETARY OF AGRICULTURE

THE success of Secretary E. T. Meredith in interesting the public in the investigational work of the U. S. Department of Agriculture has been unique. His prompt recognition of the needs of the department and his activity in behalf of the investigators there, have attracted the attention of scientific men throughout the country. Coming to the secretaryship at a time when the morale of the scientists in many government departments was being seriously impaired through discouragement as to the possibility of securing adequate support for investigation, his campaign of education had the effect both of awakening the public to the extent and importance of the work, and of heartening the workers.

It was then appropriate that before his retirement, there should be some demonstration of appreciation by the scientists themselves. This took the form of a buffet supper at the Raleigh Hotel, Washington, February 16. The event was planned by a committee chosen from the membership of the various Washington scientific societies in which the Department of Agriculture is largely represented. In the menu were included various items representative of the work of the department, such as "Dasheen Chips," "Soy Bean Sauce," "American Roquefort Cheese," and "New Unnamed Grapes." During the evening, Dr. B. T. Galloway presented Secretary Meredith with a vellum volume bound in hand-tooled, dark morocco, and containing the following inscription of appreciation signed by the five hundred and sixty scientific and technical men who attended:

The researches of the United States Department of Agriculture in recent years have become so diversified and so important for the welfare of the country and are so absolutely dependent on a wise, far-seeing and sympathetic administration, such as you have given us, that your departure from among us is a matter of very general regret.

Your broad comprehension and appreciation of the fundamental importance of scientific research in agriculture, your prompt recognition of the needs of the service and your enthusiasm and effective efforts to secure proper recognition of the work and workers have been most stimulating to us and have been of the greatest value in promoting a better understanding of the activities and purposes of the department and their vital relation to the business and industrial interests of the nation and the progress of the whole people.

In view of the above facts, we the undersigned, desire to express our deep appreciation and to thank you for what you have done and extend to you our hearty good wishes for all time to come.

In response, the secretary spoke briefly of his interest in the scientific work of the department, and his hopes for its future development. The esteem in which Mr. Meredith is held, was evidenced by the large attendance at this unofficial gathering. And the spirit of those present was such that when all joined in a rousing cheer for "Meredith" and in singing "He's a jolly good fellow" it seemed not only wholly in harmony with the occasion, but a fitting expression of their enthusiasm for the man.

CONGRESS ON MEDICAL EDUCATION

The Annual Congress on Medical Education, Licensure, Hospitals and Public Health will be held at Chicago on March 7, 8, 9 and 10, under the auspices of The Council on Medical Education and Hospitals, and The Council on Health and Public Instruction of the American Medical Association, The Association of American Medical Colleges, The Federation of State Medical Boards of the United States and The American Conference on Hospital Service.

The program of the sessions on Medical Education are as follows:

Introductory Remarks, Arthur Dean Bevan, chairman of the Council on Medical Education and Hospitals, Chicago.

The Significance of Group Practise in its Relation to the Profession and the Community, Veader N. Leonard, Academy of Clinical Medicine, Duluth.

SYMPOSIUM ON GRADUATE TRAINING IN THE VARIOUS MEDICAL SPECIALTIES

Medicine and the Medical Specialties—

(*a*) Internal medicine, George Blumer, clinical professor of medicine, Yale University.

(*b*) Pediatrics, Harry M. McClanahan, professor of pediatrics, University of Nebraska.

(*c*) Nervous and mental diseases, Arthur S. Hamilton, professor of nervous and mental diseases, University of Minnesota.

(*d*) Dermatology and syphilology, William A. Pusey, emeritus professor of dermatology, University of Illinois.

Surgery and the Surgical Specialties—

(*a*) Surgery, Charles H. Frazier, professor of clinical surgery, University of Pennsylvania.

(*b*) Ophthalmology, Walter B. Lancaster, Boston.

(*c*) Oto-Laryngology, Wendell C. Phillips, New York.

(*d*) Orthopedic surgery, Robert W. Lovett, professor of orthopedic surgery, Harvard University.