present in the liver extracts mentioned above, to judge from their *in vitro* inactivation of VDM.

One further therapeutic possibility may also be profitably explored. The importance of the waning humoral concentration of VEM for the development of hypo-reactivity has already been emphasized. It was also pointed out that the capacity of the kidney to form VEM was definitely limited, not only under anaerobic conditions *in vitro,* but also in shocked animals maintained for long periods in the hypo-reactive phase. Consideration should therefore be given to measures which might enhance the endogenous formation of VEM by kidney and thus permit the spontaneous restoration of a state of equilibrium between VEM and VDM, by which the decompensatory vascular effects of the latter would be abolished.

It is evident that the investigation of these potential therapeutic procedures, as well as the vascular homeostatic concept which has been advanced, will be greatly accelerated by the elucidation of the chemical nature of VEM and VDM as well as by the isolation of the enzyme systems and substrates concerned with their production and inactivation. We wish to make clear that our present experimental results and the inferences we have drawn from them pertain only to hemorrhagic and traumatic shock in animals; and that it would be premature to extend them, at this time, to the condition of shock in man.

OBITUARY

EDWARD WILBER BERRY

February 10, 1875–September 20, 1945

THE death on September 20, 1945, of Edward Wilber Berry brought to a close one of the most unusual careers in American science, that of a man with little formal education who became a notable figure in university life and a leader in the science of geology.

Born on February 10, 1875, at Newark, N. J., he was educated in the local schools, completing his formal education with the high school in 1890. Shortly afterward he became a cotton goods salesman, remaining in this profession for seven years. He then went into newspaper work, spending the eight years from 1897 to 1905 as president, treasurer and manager of the Passaic (N. J.) *Daily News.* He had had from boyhood a bent toward rocks and fossils that developed while he was still a journalist into a keen amateur talent for paleobotany. The period from 1902 to 1905 was marked in his scientific career by a series of papers on the paleobotany of New Jersey, some descriptive, some philosophical. This work attracted the attention of Professor W. B. Clark, head of the Department of Geology at the Johns Hopkins University and State Geologist of Maryland, who in 1905 brought Berry to Baltimore to help prepare reports on the Cretaceous deposits of Maryland. In 1907 Berry was appointed assistant in paleobotany at the Johns Hopkins University, progressing from this beginning to become professor of paleontology in 1917, dean of the faculty of philosophy in 1929, and provost of the university in 1935. He had been appointed geologist with the U. S. Geological Survey in 1910 and assistant state geologist of Maryland in 1917. He retained all these connections until his retirement in 1942.

He married Mary Willard in 1898 and found in her a faithful consort, whose sudden death in 1939 was a severe blow to him. Two sons survive, Professor E. Willard Berry, of Duke University, and Dr. Charles T. Berry, of Stonington, Connecticut.

Berry's scientific work earned him honors from many organizations. He was president of the Paleontological Society in 1924. He was president of the Geological Society of America at the time of his death. He was a fellow of the American Academy of Arts and Sciences, American Association for the Advancement of Science, American Society of Naturalists. He was a member of the National Academy of Sciences, the American Philosophical Society, the Washington Academy of Sciences, the Torrey Botanical Club, Société géologique de France, Academia nacional de ciencias en Córdoba (Argentina), Sociedad geológica del Perú. He was awarded the Walker Prize of the Boston Society of Natural History in 1901, the Mary Clark Thompson Medal of the National Academy in 1944. Lehigh University gave him an honorary doctorate of science in 1930.

The scope of Berry's work was wide, and his volume of production stupendous—the total product of his activities is some 500 articles, ranging from short notes to extensive treatises. He began with the paleobotany of the Mesozoic deposits of the northern Atlantic Coastal Plain, expanding through his connections with the Federal Survey and some of the State Surveys to include in his descriptive studies ultimately the floras of the Mesozoic and Cenozoic deposits of the whole area of the Atlantic and Gulf Coastal Plains. Out of these descriptive studies came many discussions of phylogeny and other philosophical aspects of paleobotany. Occasionally he dealt with Paleozoic floras also. Collections of fossil plants from various parts of Latin America came early into his hands, turning his attention to those regions and leading him eventually to make several trips to South America, an extensive tour in the Andean region in

1919, and a summer in Venezuela in 1934. His studies touched eventually almost every country south of the United States, a first paper on the Canal Zone reaching publication in 1914 and the last several papers on fossil floras of South America, in 1945. As a teacher of general paleontology he was well informed outside his special field, this interest leading to several papers on fossil vertebrates, and several on the invertebrates, and ultimately to a textbook on general paleontology, published in 1929. Even in his busiest period as teacher and administrator, he found time to make at least a few contributions every year. It is a record few can achieve in any field.

As an individual Berry was a man of penetrating intelligence and personal charm, a fearless personality and an independent thinker, always a nonconformist and somewhat of a rebel. He had few pretensions to greatness—he preferred to be addressed as "Mister" and was known to rebuke those who persisted in calling him by other titles. His criticisms of those with whom he differed were often vigorous to the point of harshness, sometimes even unfair. Yet beneath this all he was really a kindly and amiable man.

As a university administrator his strong personality at times led him into disagreements with the faculty, with the student body, and with the sports-writers. The "degree-less dean," as the newspaper reporters were fond of calling him, was, however, a successful administrator.

As a scientist Berry was a resourceful and indefatigable worker, as the volume of his publications testifies. Perhaps owing to his newspaper experience, he wrote his manuscripts rapidly and apparently did little revising, a trait that at times betrayed him into unexpected obscurities of expression and faults of syntax. However, his writing was in general forceful and always interesting.

As a teacher he was vigorous, inspiring and generally provocative. He had strong convictions and maintained them stoutly, sometimes with caustic sarcasm. He taught his students to seek a solid foundation for their work, to refuse to accept too complacently the weight of authority, and to work out for themselves the answers to problems. One curious trait was his persistent discouragement of his students' taking up paleobotany as a professional field—he had only one student who, much against Berry's wish, became a paleobotanist. His thirty-odd years of teaching, however, have left a large body of men who look back with both respect and affection on their association with him.

There can be little doubt that Edward Wilber Berry was one of the outstanding scientists of his day. With his passing, geology, and particularly paleobotany, has lost a stalwart figure. Those who knew him have lost a very good friend.

JOHN B. REESIDE, JR.

DEATHS AND MEMORIALS

DR. MAURICE J. BABB, professor emeritus of mathematics of the University of Pennsylvania, died on October 24 at the age of seventy-five years.

PROFESSOR RODNEY B. HARVEY, for twenty-five years professor of plant physiology at the University of Minnesota, died on November 4 at the age of fifty-five years.

DR. EUGENE COOK BINGHAM, research professor of chemistry at Lafayette College, died on November 6 at the age of fifty-six years.

DR. MARGARET BARCLAY WILSON, professor emeritus of the department of physiology and hygiene of Hunter College, New York City, died on October 8 at the age of eighty-two years.

AN Associated Press dispatch reports the death at Lwow, Poland, at the age of fifty-three years, of Professor Stefan Banach, the mathematician.

A PROGRAM honoring the memory of Wilhelm Conrad Roentgen, on the fiftieth anniversary of his discovery of x-rays, was held on the evening of November 8 at the New York University College of Medicine.

SCIENTIFIC EVENTS

COMMITTEE ON THE GROWTH OF THE NATIONAL RESEARCH COUNCIL

THE appointment of a "Committee on Growth," with membership designed to be broadly representative of the fields concerned in cancer research, both basic and clinical, has already been announced by the National Research Council of the National Academy of Sciences. The committee was created, within the Division of Medical Sciences of the council, as a result of action by the American Cancer Society designating the academy as its scientific adviser for research.

The committee wishes to call the attention of interested investigators to the general outline of endeavor which it proposes to foster and the general principles by which it will be guided. The committee accepts the interpretation of its field of interest as including reliance on, contact with and support of research in the basic sciences bearing broadly on the whole phenomenon of growth.

The committee has adopted the following major principles by which, in so far as possible, it will be guided in its sponsorship of research and training programs: