Rothliegende) came the Saalian deformative episode, notably in Central Europe, the Eastern Alps and the Ural Mountains. Extensive unconformities and important floral changes were associated with this episode. After the Dunkard, though we do not know just how soon after, was the main Appalachian revolution in the Eastern United States. This may well have been contemporaneous with the Saalian diastrophism of Europe, but the correlation has not been definitely established.

At the close of the Permian, as now delimited, came the Pfalzian episode of Stille in the Palatinate of Germany, and some neighboring areas. This diastrophic manifestation was feebler and more local than the others just mentioned.

(To be concluded)

OBITUARY

JOHN ALEXANDER MATHEWS

JOHN ALEXANDER MATHEWS died suddenly of a heart attack on January 11, 1935, at his home in Scarsdale. At the time of his death he was vice-president and director of research of the Crucible Steel Company of America and a metallurgist of world-wide repute.

For over thirty years he was in the first rank of American steel metallurgists and among his most notable achievements were the use of the electric furnace in the quantity manufacture of high quality steel, the improvement of high speed steel by the addition of vanadium in 1903 (Rex AA) whereby its cutting efficiency was trebled, the development of various vanadium steels, especially spring steels, and of oil-hardening magnet steels of chrome vanadium, and of corrosion- and heat-resisting steels and the so-called stainless steels.

Born at Washington, Pa., May 20, 1872, he took his B.S. degree at Washington and Jefferson College in 1893 and M.S. in 1896. Coming to Columbia University he obtained his A.M. in chemistry in 1895 and his Ph.D. in 1898. After instructing in the chemical department at Columbia for two years he was given the Barnard fellowship and with it went to the Royal School of Mines, London, in 1900, to study metallography under Sir William Roberts-Austen. It was there I first met him; we were the only two graduate students that year, had adjoining benches and were soon very good friends, for no one could resist his kindly and friendly manner and good fellowship; in fact, all the students in metallurgy used to drift over to his desk to hear about the States. Roberts-Austen thought so highly of him that he strongly recommended Mathews for one of the first Carnegie Scholarships of the British Iron and Steel Institute, which he received. Returning to Columbia in the fall of 1901 with me in tow, we worked in Henry Marion Howe's laboratory in the basement of Havemeyer Hall, Mathews on a series of alloy steels which were made for him at the Sanderson Steel Company at Syracuse, myself continuing the work I had begun with Roberts-Austen on the bronzes at the next bench. His report on this work was awarded the first Carnegie Gold Medal by the Iron and Steel Institute. Finishing this work he went to the Sanderson Brothers Steel Company, Syracuse, as metallurgist in 1902 and soon became assistant manager. From there he went in 1908 to the Halcomb Steel Company, Syracuse, of which he was operating manager and in 1913 president and general manager until 1920, when he became president of the Crucible Steel Company of America. Three years of being a president of a steel company was enough for any real scientist and so in 1923 he was promoted to what he considered a really satisfactory job, namely vice-president and director of research.

He served on numerous technical committees, notably that on aircraft engine forgings of the Bureau of Aircraft Production during the war, was for some time chairman of the Iron and Steel Committee of the American Institute of Mining Engineers, and of the Committee on Alloy Steels of the National Research Council, and did notable work on various committees of the Society for Testing Materials, etc. He was also a member of the Columbia School of Mines Advisory Committee and for several years gave an annual lecture to the pre-engineering class.

He was a clear, concise writer and published about 100 papers, chiefly on the constitution and properties of alloy steels. His worth was recognized by his associates. He received the Carnegie Gold Medal from the British Iron and Steel Institute in 1902, from Washington and Jefferson the honorary Sc.D. in 1903, the Hunt Gold Medal from the American Institute of Mining and Metallurgical Engineers in 1928, and was an honorary member of the American Society of Steel Treaters (now the American Society of Metals). In 1924 he was appointed the second Henry Marion Howe lecturer of the American Institute of Mining Engineers, succeeding Professor Albert Sauveur of Harvard.

It is so easy to tell what a man has done, to list his honors and publications, but how difficult to put in words what he really was. To those who knew him in public or private life or worked with him on committees or in the works that is not necessary, for his kindly personality and the charm of his company

endeared him to all. His friends will miss him, but more lasting will be the loss to those young men who grew up under him, either in the laboratory or in the plant, engaged in research or production, for in him they always had a real friend, who combined those rare qualities of leadership in both the practical and the scientific side of their work, of a patient teacher and a reliable guide. It is to such men we can give the title of a kindly gentleman.

WILLIAM CAMPBELL

COLUMBIA UNIVERSITY

CHARLES EDWARD MOLDENKE

DR. CHARLES EDWARD MOLDENKE, born on October 10, 1860, at Lyck, East Prussia, died at his home in Watchung, N. J., on January 18. Dr. Moldenke received his B.A. and M.A. degrees from Columbia University and his Ph.D. from the University of Strassburg. He was widely known as a student of classical archeology, antiquities and history and was a philologist of the first rank, master of 19 languages, including Hebrew, Arabic, Sanskrit, Icelandic, Anglo-Saxon, Pehlevi, Hieroglyphic, Hieratic, Demotic, Coptic, Cuneiform and Persian. His fame as an Egyptologist was world-wide. He was the first to translate the inscriptions on the New York Obelisk in Central Park and was the author of seven books on Egyptian subjects.

Having extensively traveled throughout Europe, Asia Minor, northern Africa and many parts of the Americas, his interest soon turned to the wonders of nature. Becoming a diligent student of botany, he became an indefatigable collector, not only of antiquities, but also of plant specimens. In 1886 he published an important work on the trees of ancient Egypt, bringing together for the first time all available information about the trees cultivated by the ancient Egyptians, including their origin, uses and names. In 1911 he traveled and collected in Cuba, Puerto Rico, St. Thomas, Jamaica, Panamá and Venezuela, and in 1916 and 1927 in New England, northern New York and Pennsylvania. In 1929–1930, accompanied by his younger son, he botanized throughout the southeastern states, spending six full months in Florida alone, which he traversed from end to end, paying special attention to the flora of the everglades, subtropical hammocks and the keys. Over 23,000 plant specimens were collected on this trip alone. In 1932 he made a circular tour of the entire United States, visiting every major phytogeographic province and making excellent and thorough collections of the representative flora of each province. In 1933 he botanized through the Middle West, the badlands of South Dakota and the Black Hills, and in 1934 visited again the rich collecting grounds of Kentucky, Arkansas, Oklahoma, Texas and Louisiana. Including the many plants brought back by him from his European, Oriental and African travels, Dr. Moldenke collected over 50,000 plant specimens, the majority of which are now deposited in 30 of the leading herbaria of the Old and New World and the remainder now being assembled into sets for distribution by his son, an assistant curator at the New York Botanical Garden.

CORRESPONDENT

SCIENTIFIC EVENTS

THE SECOND INTERNATIONAL NEUROLOGICAL CONGRESS

THE second International Neurological Congress will be held in London from July 29 to August 2, under the presidency of Dr. Gordon Holmes. At the program executive conference held in London in 1933 Sir Charles Sherrington was elected president by the assembled delegates, but since then he has been compelled to resign on grounds of health. According to the *British Medical Journal*, the various sessions of the congress will be held in the large hall of University College, Gower Street, W.C. 1, and in lecture rooms of the college. After the official opening on July 29, Professor O. Marburg will preside over a discussion on the epilepsies, their etiology, pathogenesis and treatment, and this will be continued in the afternoon under the chairmanship of Professor O. Rossi. The morning of July 30 will be devoted to a discussion of the physiology and pathology of the cerebro-spinal fluid, under the chairmanship of Professor O. Foerster, and miscellaneous papers will be read in the afternoon. On August 1 Professor H. Claude will preside over a discussion of the functions of the frontal lobe, and on the morning of August 2 the hypothalamus and the central representation of the autonomic system will be considered under the chairmanship of Professor H. Brouwer. The afternoons will be occupied with the reading of miscellaneous papers. The number of these afternoon sessions will be determined by the total number of papers offered and accepted; so far as proves practicable, the papers will be grouped systematically under different headings. In the evening at eight-thirty the triennial Hughlings Jackson memorial lecture, under the auspices of the section of neurology of the Royal Society of Medicine, will be delivered by Professor O. Foerster, of Breslau.

The program committee is composed of the British