Furthermore, a strong emission band in the red region remains present in the white matter after incubation with solutions of myelolytic substances, such as saponin or sodium taurocholate.

In view of the presence of iron-porphyrin complexes in the central nervous system it deserves emphasis that the 625 band is absent in those regions in which the absorption bands of the cytochromes are clearly present (cerebral and cerebellar cortex, caudate nucleus, putamen). The 625 band is only present in regions which have little, if any, cytochrome. Keilin[15] has expressed the view that coproporphyrin is a derivative of cytochrome. Furthermore, we have not been able to detect the 625 band in the sympathetic and spinal ganglia or in the spinal nerves.

In examining tissues and organs of various animals, we have found that in the large majority of mammals and birds the fluorescence spectrum indicates the presence of porphyrin in only one organ. This organ is the central nervous system. That the porphyrins may play a significant rôle in neurological and psychiatric disorders has been suggested by several lines of evidence.[16,17,18,19,20,21] Numerous theories have been offered to account for the fact that acute porphyria produces such a wide variety of nervous and mental symptoms. In relating our results to facts and considerations reported in the literature, we are led to the hypothesis that certain neurological and psychiatric disorders are associated with a "cerebral porphyria" or a disturbance of the metabolism of certain pyrrol compounds.[22] Investigations are in progress to determine the distribution, amounts and kinds of porphyrins occurring in the brains and spinal cords of patients with various neurological and psychiatric disorders, ranging from demyelinizing diseases to the major psychoses.

OBITUARY

THOMAS SCOTT FISKE

THOMAS SCOTT FISKE was born in New York City on May 12, 1865. He was the son of Thomas Scott Fiske, a business man of New York, and Clara Pittman. He studied at the Old Trinity Church School in New York City, and at the Pingry School in Elizabeth, N. J. He entered Columbia College in 1881, obtaining the A.B. degree in 1885, and continued graduate work in the university, earning the A.M. in 1886 and the Ph.D. in 1888.

His principal teacher at Columbia College was Professor Van Amringe, and Fiske was his assistant for several years. Van Amringe advised him to continue the study of higher mathematics at the University of Cambridge, England. This wise advice had a great influence on Fiske's intellectual career. (It will be recalled that most mathematicians of his period studied in Germany.)

Fiske was fortunate in arriving in Cambridge with letters of introduction from one of the Columbia trustees, George L. Rives, who had himself studied in Cambridge many years before, had in fact been one of the wranglers at the mathematical tripos in 1872, and had been offered a fellowship at Trinity, a very high honor. These letters were addressed to the well-known mathematicians, Cayley, Glaisher, Frost, Forsyth and George Darwin. So young Fiske was welcomed as a guest and attended lectures by most of these men. He also did private reading with Dr. H. W. Richmond.

Fiske himself stated that the teacher of greatest influence was Dr. Glaisher, who made him an intimate friend and traveled with him to London to meetings of the London Mathematical Society. To quote Fiske's own words: "On my return to New York I was filled with the thought that there should be a stronger feeling of comradeship among those interested in mathematics and I proposed to my classmates and friendly rivals, Jacoby and Stabler, that we should try to organize a local mathematical society."

These three young men, all born in the year 1865, sent out an invitation to local mathematicians, and on November 24, 1888, the first meeting was held in Columbia College, attended also by Van Amringe, Rees and Maclay. Thus began formally the New York Mathematical Society, with Van Amringe as president and Fiske as secretary. The society grew very rapidly, new members coming from Harvard, Yale, Princeton and Johns Hopkins. Six years later the membership was really national and the name of the organization was therefore formally changed to the American Mathematical Society. It is now the largest and most influential mathematical society in the world, having a membership of about three thousand. Fiske was the first secretary and the seventh president. He played the leading role in founding the two leading scientific journals, *The Bulletin* (1891) and *The Trans-*

[15] D. Keilin, *Proc. Roy. Soc. London* (*B*), 98: 312–339, 1925.

[16] J. Waldenström, *Acta med. scand.*, suppl. 82: 1–254, 1937.

[17] J. Waldenström, *Acta psychiat. neurol.*, 14: 375–379, 1939.

[18] H. Günther, *Ergebn. allg. Path. path. Anat.*, 20, part 1: 608–764, 1922.

[19] A. Vanotti, *Ergebn. inn. Med. Kinderhk.*, 49: 337–377, 1935.

[20] P. Eichler, *Zeits. ges. Neurol. Psychiat.*, 141: 363–379, 1932.

[21] C. Carrié, "Die Porphyrine." Leipzig: Thieme, 1936.

[22] H. Klüver, *Jour. Psychol.*, 17: 209–227, 1944.

actions (1900), and served on the board of editors in each case.

On the fiftieth anniversary of the society in 1938, Fiske received all honors as founder of the society. His portrait was painted for the occasion and now hangs in the rooms of the society in the Low Library of Columbia University. A full history of the first fifty years of the society, including a most complete account of Fiske's life and services, was written by Professor Archibald, of Brown University.[1]

Fiske was rapidly promoted in the department of mathematics at Columbia, becoming full professor in 1897 and the executive officer in 1915. He was an enthusiastic lecturer, equally interested in undergraduate and graduate work, inspiring many students. His main courses were in the theory of functions and differential equations. He published several technical papers in his early years, and a valuable monograph on functions of a complex variable, but his chief literary work was in the role of editor.

Fiske's name will always be connected with the American Mathematical Society, and also with another important organization, the College Entrance Examination Board. This was started in 1900 and the first secretary was Professor Nicholas Murray Butler. When Dr. Butler resigned as secretary, just before becoming president of Columbia, he asked Professor Fiske to take over the work, and to regard this service as a real portion of his duties as a professor, promoting the course of general education. Fiske was secretary from 1901 to 1936. Under his wise guidance the board grew from a small organization, examining 1,000 candidates for admission to twenty colleges, to 23,000 candidates to two hundred colleges.

When Fiske retired from Columbia and from the College Board in 1936, he settled in Poughkeepsie with his daughter, living the life of a country gentleman and keeping up many scholarly interests, until his death on January 10, 1944.

EDWARD KASNER

COLUMBIA UNIVERSITY

[1] American Mathematical Society Semicentennial Publications, Vol. 1, 1938. I have borrowed most of my facts from this volume.

DEATHS AND MEMORIALS

DR. NORTON ADAMS KENT, who founded the department of physics at Boston University and was professor of physics there until his retirement in 1942, died on June 5 at the age of seventy years.

DR. FREDERICK G. REYNOLDS, since 1891 until his retirement with the title emeritus in 1943 professor of mathematics and head of the department of the College of the City of New York, died on June 9 at the age of seventy-two years.

FREDERIC H. FAY, senior member of Fay, Spofford and Thorndike, engineers, Boston, a member of the Boston Planning Board for twenty years, died on June 5 at the age of seventy-one years.

DR. AMOS ARTHUR HELLER, botanist of Chico, Calif., died at Vacaville, Calif., on May 18. He had at various times been connected with the University of Minnesota, the U. S. Department of Agriculture, the New York Botanical Garden and the University of Nevada.

THE *Journal* of the American Medical Association reports that a portrait of the late Dr. Howard Taylor Ricketts, who died of typhus in Mexico City on May 3, 1910, was unveiled on June 11 in the Archibald Church Library of the Northwestern University Medical School. The portrait is the gift of Mrs. Howard T. Ricketts and was presented by Dr. Henry T. Ricketts, son of Dr. Ricketts. It was unveiled by Robert Howard Palmer and Howard James Ricketts. Dr. Ludvig Hektoen, after an introduction by Dr. Irving S. Cutter, dean emeritus of Northwestern University Medical School, delivered the principal address. The portrait will hang permanently in the Archibald Church Library. A special exhibit of memorabilia depicting the work of Dr. Ricketts, who contracted typhus while carrying on research on the disease, will be on display.

SCIENTIFIC EVENTS

THE HAWAIIAN ACADEMY OF SCIENCE

THE Hawaiian Academy of Science held its eighteenth annual meeting on the evenings of April 27, 28 and 29 at the University of Hawaii, Honolulu. Scientific papers were presented on the first two evenings, and on Saturday the annual dinner and business meeting were followed by the address of the retiring president, Professor Carey D. Miller, who spoke on "Some Aspects of Growth and Food Needs."

For two years, owing to blackout restrictions and attendant travel difficulties, no evening meetings were held and meetings this year marked the return to the usual pre-war program. The average attendance has been about ninety. Thirty nominees were elected to membership. Officers elected for the coming year were: J. L. Collins, *President;* Peter H. Buck, *Vice-president;* Chester K. Wentworth, *Secretary-Treasurer;* T. A. Jaggar, Jr., and Colin G. Lennox, *Councilors* for one and two years, respectively; and Carey D. Miller, *Councilor, ex officio.*

The Hawaiian Academy of Science was founded in