have been interrupted in their exploring by their coincident fear. But as to the basic laws which made some of the individual rats more susceptible to such interference than others we as yet know practically nothing. We do not know whether Hall's more stable rats (in calling them more stable we are, of course, evaluating them as if they were human beings living in our culture) were so because they had inherited little fear or because they had inherited better "inner walls" for keeping their different need-compartments separated (to borrow Lewin's figure).[16] And, if we did know this for rats, we certainly do not know it for men. Is the emotionally stable man in our culture one who has no conflicting needs or is he rather one whose tough compartmentalized make-up keeps his competing needs from interfering? Or is he perhaps, quite oppositely, one whose needs do interfere but in such a way that the culture considers him a leader or a genius? We do not know. In any case, however, it is clear that, while it will be desirable to work out more of the basic principles of need-conflict with rats, it also has to be confessed that special studies with men in their own actual cultural set-ups likewise will be necessary. For, again let me emphasize that the "funny" behaviors which are termed instability in one culture may be called genius or at least a peculiar delightfulness and richness of coloring in another.

But enough. What, by way of summary, can we now say as to the contributions of us rodent psychologists to human behavior? What is it that we rat runners still have to contribute to the understanding of the deeds and the misdeeds, the absurdities and the tragedies of our friend, and our enemy—*homo sapiens?* The answer is that, whereas man's successes, persistences and socially unacceptable divagations—that is, his intelligences, his motivations and his instabilities—are all ultimately shaped and materialized by specific cultures, it is still true that most of the formal underlying laws of intelligence, motivation and instability can still be studied in rats as well as, and more easily than, in men.

And, as a final peroration, let it be noted that rats live in cages; they do not go on binges the night before one has planned an experiment; they do not kill each other off in wars; they do not invent engines of destruction, and, if they did, they would not be so dumb about controlling such engines; they do not go in for either class conflicts or race conflicts; they avoid politics, economics and papers on psychology. They are marvelous, pure and delightful. And, as soon as I possibly can, I am going to climb back again out on that good old philogenetic limb and sit there, this time right side up and unashamed, wiggling my whiskers at all the dumb, yet at the same time far too complicated, specimens of *homo sapiens,* whom I shall see strutting and fighting and messing things up, down there on the ground below me.

[16] K. Lewin, "A Dynamic Theory of Personality." New York: McGraw-Hill Book Company, 1935.

OBITUARY

DEATHS OF RUSSIAN BOTANISTS

A FEW names have to be added to the long list of Russian botanists—the victims of total war (see SCIENCE, 100: 43–44, 1944).

The most irreparable of these losses is the passing on April 19, 1942, of Professor Aleksandr Aleksandrovich Elenkin (1873–1942), one of the most prominent authorities on cryptogams. He was born on September 4, 1873, at Warsaw and educated in the university of the same city. After serving one year as an assistant in botany at the University of Warsaw, he was appointed a conservator of the St. Petersburg Botanical Garden and since then was always associated with that institution, which later was incorporated into the Academy of Sciences as its institute of botany.

Elenkin was active in all fields of cryptogamic botany. His first works were on the lichenology of Russia. He made several exploring and collecting trips to Finland (1898–1909), Caucasus and Crimea (1899), eastern Siberia and Mongolia (1902) and Central Russia (1903, 1907, 1910). On the basis of these collections he published his classical work, "Flora of Lichens of Central Russia," in four parts (1906–11). His studies of mosses are represented by another important work—"Mosses of Central Russia" (1909). In 1906 he was appointed director of the phytopathological station of the Department of Agriculture, and this turned his attention to mycology and phytopathology. He edited the journal *Boliezni Rastenij* ("Morbi plantarum") and contributed many papers to it. In 1910 he was given the task of describing the algae of the Kamchatka expedition of F. N. Riabushinsky (1908–09) and four years later published "Die Süsswasseralgen Kamtschatka's" and "Die Meersalgen Kamtschatka's" (In "Expédition à Kamtchatka" 2: 1–448, 1914). This was the beginning of his thirty years' study of the algae of Russia; in this field he became an undisputed authority in the Soviet Union and culminated his life's work by a masterpiece, "Monographia algarum cyanophycearum aquidulcium et terrestrium in finibus URSS inventarum" (1936–38), two volumes of which are published up to date and two others will be issued after the war. Besides this, he was the author of several papers on Darwinism and the philosophy of

botany. The full list of his published works includes 472 titles.

Georgij Karlovich Kreyer (1887–1942), who at the time of his death on January 11, 1942, was in charge of the Section of Medicinal Plants of the Institute of Plant Industry at Leningrad, was justly considered one of the best experts on medicinal plants of Russia. Born on November 26, 1887, at St. Petersburg, he was educated in the same city and first studied the meadow and swamp vegetation of St. Petersburg province. But since 1916 he devoted himself to the task of the cultivation of medicinal plants. He made a great contribution to the solving of the extremely difficult problem of growing the quinine tree on the Black Sea coast of Caucasus. He also organized the cultivation of insecticide plants and many medicinal plants such as valeriana, belladonna, opium poppy, aloe, etc., on various stations of the Institute of Plant Industry (VIR). His most important publications are: "Medicinal plants," two volumes of which are published up to date; "The cultivation of medicinal plants," with V. V. Pashkevich (1931, ed. 2–1934); "Valeriana officinalis in Europa und im Kaukasus" (1930) and monographic studies of Atropa, Scopolia, Valeriana, etc. He is the author of more than 60 published works.

Ivan Andreevich Ohl (1884–1943), who died on February 19, 1943, in Kazan, was for many years a bibliographer and librarian of the St. Petersburg Botanical Garden (now the Institute of Botany of the Academy of Sciences) and an authority on botanical bibliography. Prior to this (1909–21) he worked at the phytopathological station of the St. Petersburg Botanical Garden and published twelve papers on mycology and phytopathology. In the field of botanical bibliography he is mostly known for his eight classified bibliographies of Russian botanical works for the years 1930–37 published in the journal *Sovetskaia Botanika* and two bibliographies of algological works (1929, 1935) compiled by him in collaboration with A. A. Elenkin. His vast knowledge of botany, botanical literature and several languages, general erudition and an attractive personality made him an ideal librarian for a large scientific institution.

Viktor Konstantinovich Zazhurilo (1909–1943), killed in action on January 8, 1943, was a young phytopathologist of great promise. Born in 1909 at Tula and graduated in 1930 from the University of Voronezh, he started his work at the agricultural experimental station at Voronezh, becoming later a senior specialist of the phytopathological station of the same city. He specialized first on the diseases of beans, and then turned his attention to the virus diseases of the Gramineae. He is the author of 26 papers on mycology and phytopathology. He proved himself a brilliant experimentator and a master of laboratorial technique.

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DEATHS AND MEMORIALS

DR. WILLIAM HENRY HOWELL, professor of physiology and director of the School of Hygiene and Public Health at the Johns Hopkins University from 1926 until his retirement in 1931, died on February 6 in his eighty-fifth year.

DR. IRVING S. CUTTER, dean emeritus of the Medical College of Northwestern University, died on February 2 at the age of sixty-nine years.

PROFESSOR SAMUEL J. RECORD, dean of the School of Forestry of Yale University, a member of the faculty since 1910, died on February 3. He was sixty-three years old.

DR. WAYLAND MORGAN CHESTER, professor emeritus of biology of Colgate University, died on February 8 at the age of seventy-four years.

MME. JEAN COTELLE, a former associate of Mme. Curie, has died from the effects of handling large quantities of radioactive substance.

JOSIAH WILLARD GIBBS, from 1871 until his death in 1903 professor of mathematical physics at Yale University, has been nominated for 1945 to the Hall of Fame at New York University.

A MEMORIAL meeting commemorating the scientific and industrial achievements of the late Dr. Leo Hendrik Baekeland, inventor of the first modern plastic, was held at the Hotel Roosevelt, New York City, on February 9 by the American Section of the Society of Chemical Industry and the New York Section of the American Chemical Society. About three hundred and fifty chemists and engineers participated. The speakers included Dr. Wallace P. Cohoe, a former president of the Society of Chemical Industry, and George K. Scribner, president of the Boonton Molding Company, Boonton, N. J.

SCIENTIFIC EVENTS

BOOKLETS OF INFORMATION FOR LATIN-AMERICAN BIOLOGISTS

As a step toward the establishment of more intimate relationships between biologists of the two Americas, the Union of American Biological Societies has recently published booklets dealing with graduate instruction and research in the biological sciences in the United States. A booklet for Spanish readers bears