

It is characteristic of the man that he has left provision in his will for a fund the purpose of which will be the advancement of knowledge with regard to the "relationship of consciousness and the physical world."

His was an extraordinary combination of the theoretical and the practical. The theoretical scientists respected him because of his technological achievements, while technologists admired him for his vast fund of theoretical knowledge. The only gap in his intellectual inventory was the humanistic sphere, including the esthetic and historical foundations. His practical sense reached out even into the business world, although his ambitions were never high in that direction.

Dr. Leonard Thompson Troland was born in Norwich, Connecticut, on April 26, 1889, the son of Edwin and Adelaide Elizabeth O'Brien Troland. After graduating from the Malden High School, he entered the Massachusetts Institute of Technology, receiving his degree in 1912. Continuing his studies in the Harvard Psychological Laboratory under Münsterberg, he obtained his A.M. degree in 1914 and the doctorate in 1915. He was awarded a Sheldon traveling fellowship from Harvard for 1915-16, engaging in optical research at the Nela Research Laboratory of the General Electric Company at Cleveland.

Returning to Harvard in 1916, he served for a year as fellow in psychical research, working on the problem of telepathy, the results of which turned out to be negative. From 1916 to 1922 he was instructor in psychology at Harvard University and then was promoted to assistant professor. Since 1929 he functioned as a lecturer at Harvard, directing research for the most part in vision, although he had been offered an associate professorship, provided he would devote all his time to his academic duties.

Besides numerous papers in technical periodicals, Dr. Troland was the author of "The Nature of Matter and Electricity" (in collaboration with Dr. Daniel F. Comstock), 1917; "The Present Status of Visual Science," 1922; "The Mystery of Mind," 1925; "The Fundamentals of Human Motivation," 1928; "The Principles of Psychophysiology" in four volumes, the fourth of which is now in the hands of the publishers. It is at least consoling to think that this last work, his *magnum opus*, was completed before the fatal accident. He also participated in the translation of Helmholtz's "Handbuch der physiologischen Optik" into English.

Troland was a member or fellow of about a dozen learned societies and president of the Optical Society of America in 1922-23. His marriage to Miss Florence Rogers Crockford, who survives him, took place in 1924. There was no issue.

Among the qualities which stand out in Troland's personality are his grim determination and industry, his unpretentiousness, even temper and friendship. He could work for 12 to 15 hours at a stretch and yet was never seen hurrying. His unassuming, although by no means submissive or meek, approach was noticeable in all his contacts. Without looking for causes or individuals upon whom to lavish kindness, he was always accommodating and obliging to students as well as to associates.

In spite of the well-known popular belief about the irascibility of reddish-haired people, I never saw him display the slightest distemper but once, and that was when some one was tampering with the tools in the mechanic's shop of the psychological laboratory. In discussion, he was delightful, because he never showed the least impatience if his views were criticized, and furthermore was the first to admit difficulties. Apparently he believed with Horace that "The wise man continues unmoved."

Beneath an unruffled and phlegmatic exterior there stirred a consuming ambition. Although his practical knowledge of German was limited, he once undertook to translate one of his articles for a German periodical in his youthful *naïveté* that submitting a manuscript in the foreign original was a handicap to its being published. His emotionality instead of being directed against man was spent on intractable matter. To turn shapeless material into an efficient device—that is what fascinated him. His native wit was peculiar to the stock from which he was descended, *viz.*, Scotch-Irish. He could see a humorous side in almost everything; and was amused by situations at which many others would chafe. This and the fact that he never took himself too seriously are proof that he possessed a genuine sense of humor.

As a psychologist, contrary to what might have been expected of a man who was so immersed in psychophysiological research, he belonged to the traditional school. On more than one occasion he exposed the one-sidedness of behavioristic contentions. His doctrine of motivation was based on the pleasure-pain principle, which according to him was further grounded in change of conductance in the synergic field. In ethics he was a hedonist of the utilitarian type. On the metaphysical issue, he sponsored the philosophy of psychical monism, or, as he sometimes called it, paraphysical monism. His idealism, however, did not carry with it any theistic implications.

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RECENT DEATHS

DR. GEORGE K. BURGESS, director of the Bureau of Standards, died on July 2 at the age of fifty-eight years.

DR. GEORGE FREDERICK KUNZ, mineralogist, expert in gems, and vice-president of Tiffany and Company, New York, died on June 29, in his seventy-sixth year.

MISS ADELAIDE AMES, research assistant at the Harvard College Observatory, was drowned in Squam Lake, Laconia, New Hampshire, on June 27.

A CORRESPONDENT writes: "Mr. Maximo Ramos, of the Bureau of Science, Manila, died of malaria at Buayan, Cotabato Province, Mindanao, at the age of fifty years, on May 11, while engaged in field work. Mr. Ramos served as botanical collector for the Bu-

reau of Science for over thirty years, and the extensive duplicate series of his enormous collections have been distributed to botanical institutions all over the world. Few individuals in any country have prepared such extensive series of herbarium species as has Mr. Ramos."

JOHN WALTER GREGORY, professor of geology at the University of Glasgow and head of a British scientific mission studying Andean geological formations, was drowned on June 2 when his canoe capsized in the Urubamba River. Dr. Gregory was sixty-eight years old.

SCIENTIFIC EVENTS

THE INTERNATIONAL GEOLOGICAL CONGRESS

DR. W. C. MENDENHALL, director of the U. S. Geological Survey, has given a statement to a representative of the *U. S. Daily* in which he says that in spite of the uncertain means of financing the International Geological Congress, the committee on organization is formulating plans to hold a meeting next year, although it may be a small one. Since 1878, eminent geologists of the world have been assembling periodically in first one country and then another to discuss the mineral resources of the world. It has been the practice for foreign governments to recognize the congress through parliamentary action, and give official sanction and welcome to the delegates from all parts of the world.

Great Britain has been host three times, France twice, while Canada, Mexico, Sweden, Russia, Spain, Belgium and South Africa are among those which have been hosts at one or another time. It was felt by the Americans at the last session of the congress that it was time for this country to be host; hence a proposal to hold the congress here was made.

Because of the economic situation the congress was deferred one year, and the tentative date is now set for the summer of 1933. A bill before congress calling for \$85,000 to cover the costs has been killed; hence official aid can hardly be expected now.

The meeting of world geologists from time to time is concerned with industry and international understanding on world mineral resources. Such resources as coal, gold and similar commodities of international importance have been discussed, and the potential wealth of the world in respect to their future use has been set forth in papers which are the final word on the subject.

At the last congress, gold was the topic under study. The League of Nations called for the published proceedings for purposes of considering the potential

gold supply in respect to studies on currency by one of its committees.

By concentrating on special topics, world facts are assembled and made available. Resources can be appraised and industry can be informed, so that plans for the future in respect to competition and distribution may be worked out intelligently.

The American committee on organization has as its honorary president, Mr. Hoover. In addition to supplying the general secretary, Dr. W. C. Mendenhall, the Geological Survey is also represented by H. G. Ferguson and M. I. Goldman, who serve as assistant secretaries. Honorary vice-presidents of the committee include: The Secretary of State, the Secretary of the Interior, the director of the Geological Survey, the president of the Geological Society of America, the president of the American Association of Petroleum Geologists, the president of the American Institute of Mining and Metallurgical Engineers, and the president of the Academy of Sciences.

THE TWELFTH BIENNIAL CONCLAVE OF ALPHA CHI SIGMA

THE twelfth biennial conclave of Alpha Chi Sigma, professional chemical fraternity, was held from June 13 to 17 on the campus of the University of Maryland. Convention headquarters were at the Phi Delta Theta House, meetings were held in the auditorium of the chemistry building, the delegates housed in the university dormitories, and meals were served at the Lord Calvert Inn. The largest attendance in the history of the fraternity was recorded.

The conclave was featured by alternating half-day business sessions with half-day pleasure intervals such as trips to Mt. Vernon, Arlington, in and about Washington, Annapolis and the Bureau of Standards. One half day was devoted to sports and a model initiation was conducted by Alpha Rho, University of Maryland, one of the host chapters. A reception, a dance and a banquet were also included.