in the meantime, the magma became more viscous and the horizontal stresses could again reach a value required for a new folding. Such a process could be repeated until the crust became too thick for further changes on a larger scale.

Having in mind only to find a plausible mechanism of the formation of principal features in the earth's crust, the author was not concerned with the determination of the geologic periods during which the outlined events could occur. This remains to be done. Also, one can only say that if this mechanism worked throughout geologic history, there ought to be an internal source of energy producing the convection currents which themselves, as mentioned, would maintain the zonal rotation against the increasing viscosity. There is no indication that such a rotation has ceased to exist in the past. The existence of an energy source in the interior of the earth has been asserted at various times, but its exact nature is still open to speculation.

As mentioned, these few considerations show a good agreement between the author's hypothesis of zonal rotation of the earth and the most important conclusions of geology and related sciences. And although much remains to be done, the way seems to be open to the understanding of many other characteristics of the formation of the earth's crust that were not discussed in this paper.


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# Samuel Clark Harvey: 1886-1953


Harry S. N. Greene

*Yale University School of Medicine, New Haven, Connecticut*


SAMUEL CLARK HARVEY died on August 22, 1953. His death came suddenly, in the midst of work, and terminated a career of courageous thought and action.

Doctor Harvey was born in Washington, Connecticut, February 12, 1886. He received his bachelor's degree from Yale College in 1907 and his degree in medicine from the Yale Medical School in 1911. He trained in pathology with MacCallum at the College of Physicians and Surgeons and in surgery with Cushing at the Peter Bent Brigham Hospital in Boston. After an interval with the U.S. Army Base Hospital No. 5 overseas, he returned to Yale as a member of the faculty and was appointed professor and chairman of the Department of Surgery in 1924. In 1947 he relinquished this chair to become professor of oncology, and held this post until his retirement in 1950.

His position in American surgery derived from preeminence in the classroom and laboratory, as well as in the operating theatre. To him, surgery represented a compendium of medical knowledge, encompassing all divisions and recognizing no artificial boundaries. He was not a specialist in any one field but a master in all. His operative procedures were characterized by superior technical ability, combined with infinite patience but, in essence, they were classic demonstrations of applied physiology and pathology. Not only was he the surgeon's surgeon but also he was the physician's physician. Above all, he was the patient's doctor, and his calm considerateness at the bedside evoked a degree of trust and confidence that gave dignity to pain. Such healing left few scars.

His teaching, based on the unorthodox assumption that the student of medicine was an intelligent individual, went beyond instruction to stimulate a lasting inquisitive interest. Learning, to him, was not a passive acquisition of established knowledge but a fresh dynamic experience of the mind. To him the function of the teacher was to inspire with enthusiasm rather than to supplant critical judgment. His ability to arouse speculative interest reflected a deep personal sense of the necessity for constant inquiry, and the rich flavor of his teaching stemmed from participation in many fields of intellectual endeavor.

His research interests were concerned with the phenomena of growth and development as applied to both tissues and ideas. Early experiments on the genesis of the pia-arachnoid and later investigations of wound healing revealed a keen insight into biological processes and led to lasting scientific contributions. His historical and philosophical essays reflect a wealth of knowledge and thought and will be relished, as well, for their style and concept.

He was active in medical and scientific affairs on a national as well as a local scale and was honored by election to the presidency of a number of distinguished societies. He served on a wide variety of governing boards and his wisdom and understanding of men and events rendered his counsel invaluable. In the medical school, he was instrumental in the introduction of broad new concepts and programs and his progressive outlook and sound critical judgment were dominant factors in the determination of institutional policy. A remarkable ability to clarify a confounded situation

with a concise and penetrating analysis made his discussions and opinions sought after and remembered. His considerate concern was not influenced by the status or problem of the petitioner.

Doctor Harvey possessed great personal charm. His bearing was distinguished by an old-fashioned courtesy and an air of kindliness that prompted unreserved confidence. He had a fine sense of humor and his ready wit, combined with an aptitude of expression, made casual conversation memorable. His tastes were simple. He was rarely without his pipe and the smell of good tobacco is an integral part of his memory. A boyhood in Washington County bred an enduring love of the country and of farm life. The planting and cultivation of a garden or the care of farm animals gave continued pleasure throughout his life, but his greatest enjoyment was obtained at the cook stove, where he displayed a unique skill. His rooster pie was an unforgettable experience, his johnny cakes were a tribute to the traditions of a neighboring state.

Doctor Harvey was a savant in many fields, a great surgeon, and a cultured gentleman, but above all, he was a man of good will. His great interest in people and his unfailing concern in their well being set him apart. His presence was reassurance, his memory will be inspiration.

# Albert Sterling Eisenstein: 1918-1953

Newell S. Gingrich

*Department of Physics, University of Missouri, Columbia*

THE University of Missouri suffered a great loss on December 16, 1953, by the death of one of its most vigorous and productive young physicists, Professor Albert S. Eisenstein, but his outstanding performance during his short career gives the University reason to be proud to have been his alma mater and later to have had him on its staff as professor of physics. After a brilliant record as a graduate student for three years, Albert Eisenstein earned the Ph.D. degree in 1942 and then for three years contributed to the war effort by his work in the Radiation Laboratory at Massachusetts Institute of Technology. After this, he was one of the first Jewett Fellows at MIT and a research associate at the same institution before accepting a position as associate professor of physics at Missouri in 1947. Recognizing his unusual abilities, the University promoted him in 1951 to professor of physics at the early age of 33. In the brief span of 13 years he contributed 19 publications, presented many papers at scientific meetings, directed the work of over a dozen candidates for the Ph.D. degree and many M.A. candidates, negotiated for and directed research contracts and grants to the University of Missouri that totaled about $300,000, carried his professorial duties with distinction, and was active in many scientific organizations.

Professor Eisenstein was a man whose characteristically vigorous efforts were habitually directed toward the completion of some constructive enterprise. This was equally true when he worked alone as an experimental physicist or when he dealt with students or colleagues. Nevertheless, he was not unmindful of the importance of harmonious dealings in personal relations, for he was tactful and sympathetically considerate of others. In addition to his unusual ability as an experimental physicist and his interest in people, he was skilled as an organizer, in which capacity he thought more of the common welfare than of personal benefit. He was endowed in generous measure with intellectual curiosity and honesty, with a reliable sense of integrity, and with a compelling drive to contribute significantly in the field of his professional interest.

Former students and colleagues held Professor Eisenstein in high esteem and many of them have made contributions to a memorial fund in his honor to be used in some way connected with graduate work in the Missouri Department of Physics.

We mourn his loss to physics and to us as associates but we are not unmindful of the sorrow that his close relatives now experience. He is survived by his mother, Mrs. Leo Eisenstein, sister Jean, widow Edith, and two children, Eric and Jane.