of scientific methods, or whether he cited the biologists as a clear and obvious example of another group of workers who also deal in abstractions. What can be said is that the thought processes that are successful in transforming scientific techniques are, in some measure, similar to those operating to transform poetic techniques. The transformation is possible because the subject matter of science, abstractions, also occupies a dominant role in poetry. The difference is one of degree only, for the essential nature of the abstracting process is the same, whether it be used to extract the properties of a collection of selenium atoms or the characteristics of man's philosophic dilemma.

Pearson (*13*, p. 160) concludes:

> Science has performed an inestimable service to modern poets in forcing them by a redefinition of physical reality to search out a revitalized manner of expression. . . . Science gave in her new terms a fresh beginning to poets. They served as challenges to poetical clichés.

The statement is a little one-sided. Poetic usage of science, of the scientific attitudes and spirit, performs an "inestimable service" for scientists, too. Poets as such will probably never suggest the direction of future scientific inquiries, but they will always provide a fairly reliable index of the extent of popularization of major scientific advances. Poetry is a reliable index because it is unself-conscious; it is only fairly so because of the necessary time lag between the publication of a scientific concept and republication of the poetic distillation of that concept. Possibly no other index of this quality exists, being, as it is, almost an artifact of the poetic energy, not the *raison d'etre* for poetic expression. Scientific content seems to be used only as one of the ways for creating and heightening the expression, itself extrascientific.

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A Treasurer Retires: W. E. Wrather

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Scientific Manpower Commission, Washington, D.C.

IN March 1940, a score of scientists met in Dallas to make preliminary plans for the first annual meeting of the American Association for the Advancement of Science ever to be held in Texas. At Washington headquarters, there was some trepidation about holding a convention at a point so distant from the northern and eastern centers of learning, where scientists are concentrated in largest numbers, but the warmth and sincerity of the invitation from Texas had been persuasive.

Foremost among the decisions to be made was the selection of a general chairman for the meeting. By tradition, born of experience, the general chairman must be an eminent scientist who not only commands the respect of his fellow-scientists but also enjoys the confidence of the entire community. He must be a leader, a man who can get things done and with whom everyone will cheerfully cooperate. Of the several men proposed, only one had all these exacting qualifications. By unanimous consent, the group chose William Embry Wrather, an oil geologist whose successful consulting practice and wide scientific contacts had made him not simply an eminent local businessman but a prominent citizen of Texas and a scientist with a nation-wide reputation as well.

Dr. Wrather had been a member of the AAAS since 1917 and a Fellow since 1925, but this was his first major role in Association affairs. The success of the Dallas meeting, handicapped as it was by the tension and confusion that followed upon the attack on Pearl Harbor only 3 weeks before, was an achievement for which William E. Wrather must be given generous credit. It was, however, just the beginning of a long and valuable period of service.

Not long after Pearl Harbor and the Dallas meeting, Dr. Wrather was called to Washington to func-

William Embry Wrather. [Courtesy U.S. Geological Survey]

tion as associate chief of the Metals and Minerals Division of the Board of Economic Warfare. Only a year later, in 1943, precedents were broken when he was chosen to succeed W. C. Mendenhall as director of the United States Geological Survey. His predecessors in this post had all been career geologists in government service, and to be picked to head an expanding agency with heavy wartime responsibilities was a tribute to Dr. Wrather's scientific competence and his effective but unostentatious administrative genius.

Impressed with his performance at Dallas, the Association quickly made the most of his move to Washington by appointing him treasurer when Charles Carroll Morgan resigned to enter the Navy in 1943. In the 11 years that have elapsed since his appointment, AAAS membership has doubled (24,000 to 48,000); *The Scientific Monthly* and *Science* have been acquired, and the editorial and business management of the journals has become headquarters responsibilities; to accommodate its expanding operations, the administrative staff vacated the quarters it had so long occupied through the generosity of the Smithsonian Institution and moved into the Association's newly purchased property at 1515 Massachusetts Avenue, NW. These changes not only reflected healthy growth; they also recorded a conversion from a quiet, essentially academic scientific society to an energetic organization engaged in big business. William E. Wrather had the perspicacity and investment experience to ease the Association through this transformation, with the able assistance of a shrewd and conservative Finance Committee.

Although the AAAS Constitution charges the treasurer merely with responsibility for endowment funds, good sense and sound practice have made him a member of the Board of Directors, of the Finance Committee, of the Budget Committee, and of the Council. From these vantage points, Dr. Wrather has watched Association receipts and expenditures with critical care. From 1948 to the time he submitted his resignation in 1953, his guiding hand was an important factor in realizing substantial gains from invested endowment and special funds, in increasing investments from approximately one-quarter million to 1 million dollars, and in making the income from investments the third largest source of revenue in Association operations. He will no doubt insist that credit for these accomplishments should be generously distributed among his associates, but they all know that, for the sound, not to say prosperous, financial position that the Association enjoyed at the end of 1953 and for more than 10 years of unflagging attention to the Association's financial affairs, the membership owes William Embry Wrather its deep and lasting gratitude as he steps into richly merited retirement from an office that he has discharged with distinction and at no small personal sacrifice.

His many other honors—the presidencies of the American Association of Petroleum Geologists, the Society of Economic Geologists, and the American Institute of Mining and Metallurgical Engineers, not to mention the recent award of the John Fritz Medal—have been accepted by him with the same humility and conscientiousness as his post at the AAAS. Always he has been less impressed with the recognition accorded him by his associates than he has with his responsibilities to them. Tributes and acclaim rest uneasily upon his shoulders, but it is hoped he will accept the deep gratitude of the Association for a task well done.