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SCIENCE AND HUMAN PROSPECTS

By Professor Eliot Blackwelder
Stanford University

In this fateful year, one should need no excuse for departing from the common practice wherein the president of the society devotes his final address to the field of his own research. It seems to me that the occasion calls for a subject of larger importance and one that has a more direct relation to the welfare of the nation. Therefore my remarks on this occasion will bear upon some aspects of education in science and its relation to the future welfare of humanity.

It seems to me that a teacher of geology, or indeed of any other science, should devote himself not only to giving his students information, and explaining processes and theories—however important those educational duties may be—but especially to training young people in the scientific way of thinking and helping them to acquire the scientific spirit. To my mind, that is his most important function.

Since geology is considered a science—albeit not one of the so-called exact sciences—and since we call ourselves scientists, it may be well to ask at this point—what, essentially, is science? In general terms the dictionaries say that it is knowledge established, organized and systematic. To me, however, this concept is not adequate. In the words of the great French mathematician, Poinsot: "A collection of facts is no more a science than a heap of stones is a house." Verified knowledge is one element, organization and classification are necessary and so is the testing of hypotheses, but I can not regard any of these as the core of science. To me the basic thing about science is an attitude or habit of

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1 Address of the retiring president of the Geological Society of America, delivered at the annual meeting in Austin, Texas, on December 26, 1940.