

vice, and for forty years on the payroll of the government, describes the scheme one would expect of a Totalitarian State or the U. S. S. R. What is the country coming to when its servants in high places propose "central agencies" for sorting and distributing the "contributions of the workers" and "eliminating some journals" for the "advancement of science and the public welfare"? How about the public welfare being served by individual enterprise and the freedom of the press? Give me the horse-and-buggy days, and leave for Europe the advancement of State Socialism.

RICHARD L. SUTTON, JR.

KANSAS CITY, MO.

THE PLANNING COMMITTEE OF THE VIRGINIA ACADEMY OF SCIENCE

THE Virginia Academy of Science, with its thousand members from all fields of science and from prominent lay groups in the state, is to have a long-range planning committee to help make its usefulness to the state and nation more effective in these defense times and in the future. In addition, this committee will have a group of prominent Virginians as consultants, their names to be announced later.

The personnel of the long-range planning committee appointed by Wortley F. Rudd, president of the academy, follows:

Arthur Bevan, state geologist; L. C. Bird, president of Phipps and Bird, Inc.; Raymond B. Bottom, publisher of the *Daily Press* and *Newport News Times Herald*; Dr. Julian A. Burruss, president of the Virginia Polytechnic Institute; Francis S. Chase, executive secretary of the Virginia Education Association;

Justus H. Cline, chairman, board of directors of the Virginia Wildlife Association; Virginius Dabney, editor of the *Richmond Times-Dispatch*; Dr. Frank A. Geldard, professor of psychology, University of Virginia; Dr. Meta Glass, president of Sweet Briar College; Dr. Sidney B. Hall, state superintendent of public instruction; Dr. William R. Harlan, assistant director of research, American Tobacco Company; Dr. J. Shelton Horsley, surgeon; W. Catesby Jones, chief chemist, State Department of Agriculture; Dr. Ivey F. Lewis, dean of the University of Virginia; H. K. McConnell, vice-president, Tobacco By-Products and Chemical Corporation; Robert F. Nelson, publicity director for the Virginia State Chamber of Commerce; Dr. Garnett Ryland, head of the department of chemistry, University of Richmond; R. M. Sanford, assistant director of the State Planning Board; Dr. I. A. Updike, head of the department of chemistry, Randolph-Macon College, with other officers of the academy besides Dean Rudd and E. C. L. Miller as *ex-officio* members; Dr. George W. Jeffers, president-elect and professor of biology at Farmville State Teachers College, and Dr. Sidney S. Negus, head of the department of chemistry, Medical College of Virginia.

This long-range planning committee will soon have its organization meeting and begin considering various scientific problems of Virginia which have been suggested during a comprehensive survey extending over the last four months and just completed. Some 1,200 persons were consulted by the president of the academy in this survey.

E. C. L. MILLER,
Secretary-Treasurer

SCIENTIFIC BOOKS

THE THEORY OF PROBABILITY

Theory of Probability. By HAROLD JEFFREYS. Oxford: published by the Clarendon Press. 1939.

THE purpose of this book is to construct a foundation for scientific method and to analyze inductive reasoning. The problem is attacked with the aid of the theories of probability and statistics. The author gives a set of postulates for the theory of probability. These postulates specify certain relations between implication and probabilities and demand that probabilities shall constitute a completely ordered set. Probabilities are interpreted as "degrees of reasonable belief" and are distinguished from the numbers which represent them. Number is introduced by means of two conventions and one additional postulate. These conventions do not require that certainty be represented by the number one. In fact on occasions the author finds it convenient to represent certainty by infinity. On the basis of the postulates

and the conventions the usual results of the theory of probability are derived. The author discusses estimation problems and significance tests with the aid of Bayes's principle and the following rules: "If the parameter may have any value in a finite range, or from $-\infty$ to $+\infty$, its prior probability should be taken as uniformly distributed. If it arises in such a way that it may conceivably have any value from 0 to ∞ , the prior probability of its logarithm should be taken as uniformly distributed." He devotes considerable attention to the justification of these rules. The latter part of the book is concerned with general questions, including a discussion of the frequency theory and other foundations for the theory of probability.

Let us note that science and indeed all inductive thinking are vitally concerned with predictions. The first few pages of this book furnish a strong support for this claim. In the pages which follow Jeffreys