THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

THE ELECTION OF DR. CHARLES FRANKLIN KETTERING AS PRESIDENT

CHARLES FRANKLIN KETTERING was born near Loudonville, Ashland County, Ohio, on August 29, 1876. He is vice-president of the General Motors Corporation and general manager of its Research Laboratories Division. Many and various honors have been bestowed on Kettering, including doctor's degrees from several universities, medals, honorary memberships in technical societies, election to the National Academy of Sciences and the American Philosophical Society, Chevalier, Légion d'Honneur, and the Order of the Crown of Belgium.

He is a director of the National Inventors Council, head of the committee appointed by President Roosevelt to investigate and report on the American patent system, a trustee of Antioch College and supporter of its researches on photosynthesis.

To his co-workers in the laboratories Kettering is referred to as "the Boss," and hosts of his friends affectionately call him Ket. Although best known to the public as an inventor, Ket is most versatile. His achievements in organized industrial research and development have probably been more important to mankind than his personal inventions, even though these include among many the Delco system for the starting and ignition of automotive engines. As occasions demand he becomes a great engineer, a scientist of note, a financier, an industrialist, a public benefactor, a humorist, a lecturer and, by no means least, a philosopher. Many of his homespun philosophical sayings are not only profound but embarrassingly humbling.

In the great industrial upsurge of the past half century led by science and technology, the automotive industry has been one of the main spearheads. In turn, Kettering has been one of the main spearheads of the automotive industry. He has not only been part and parcel of this great forward movement, but as much as any one now living he typifies it.

One way to advance science is to use it. Ket has spent his life using and thus helping to advance science. "Research," he has said, "is an organized method of finding out what you are going to do when you can't keep on doing what you are doing now. . . . Research is a state of mind." The world and science can not keep on doing what they have been doing. Paraphrasing Ket, the future of science and society will be an endless series of states of mind. The American Association for the Advancement of Science should receive great inspiration from his leadership during the coming year.

ZAY JEFFRIES

GENERAL ELECTRIC COMPANY,
CLEVELAND, OHIO

THE EDITING OF SCIENCE

FIFTY years ago, on January 4, 1895, the first issue of SCIENCE, New Series, was published. It was the successor to a journal published from 1883 to 1894 under the same title which had been acquired by Dr. James McKeen Cattell. SCIENCE, New Series, for a number of years had no named editor but appeared under the sponsorship of an "Editorial Committee" consisting of eighteen of the leading American scientists of the day, who together represented all the principal fields of the natural sciences. This editorial committee was continued, with a few changes, for nine years (1895–1903), during which eighteen volumes were printed, consisting of 17,332 pages.

During the succeeding nine years, in which eighteen volumes were also published, the masthead of SCIENCE, except in the last two issues, carried only "Mss. intended for publication and books, etc., intended for review should be sent to the Editor of Science, Garrison-on-Hudson, N. Y." In the last two issues of this period (1904–1912) the words ". . . sent to the Editor of Science . . ." in the masthead were replaced by ". . . sent to Professor J. McKeen Cattell, . . .," a form that was continued until the October 5, 1917, issue, when the earlier instruction that manuscripts be sent to "The Editor of Science" was restored and continued until the last issue of 1921. Beginning with the first issue of SCIENCE in 1922 and continuing until the issue of January 21, 1944, the masthead always carried "Edited by J. McKeen Cattell . . ."

At his death on January 20, 1944, Dr. Cattell had completed forty-nine years and three weeks as editor of SCIENCE. He was not, however, the only editor of SCIENCE during this long period; his wife, Josephine Owen Cattell, was actually, though not formally, co-editor from the beginning, and she and Mr. Jaques Cattell have continued to edit SCIENCE since the death of Dr. Cattell. For fifty years Mrs. Cattell has been largely responsible for editing and writing "Scientific Notes and News" and arranging them for publication. It was she who largely prepared the short articles published under the heading "Scientific Events." There was no part of SCIENCE, not even the advertising,

which was outside the range of her interests and responsibilities.

Dr. Cattell has been praised much and justly for his contributions to American science. A considerable part of that praise should be bestowed upon a talented English woman, Josephine Owen, whom he met as a girl while she was studying music in Leipzig and whom he married in 1888. For more than fifty-five years she was his unfailing helpmate, in the literal and highest sense of the word, and contributed very greatly to the success of his many undertakings.

It is difficult to comprehend the enormous task of editing SCIENCE for fifty years. During all that period its pages have been the same size (about 7½ by 10½ inches, untrimmed), but its type page was increased in length and width beginning with the July 6 issue of 1923. At the same time the type used for the principal articles was reduced from ten-point to nine-point and the spacing between the lines was reduced a little. The pages after these changes carried about 50 per cent. more type than before. In the interval from January, 1895, to the end of June, 1923, the reading text printed in SCIENCE amounted to 50,858 pages, every word of which had been scrutinized in manuscript and also in both galley and page proofs. In the interval from the end of June, 1923, to the end of December, 1944, the reading text in SCIENCE amounted to 26,922 pages, or to more than 40,000 of the type pages used before 1923. Consequently Mrs. Cattell has participated largely in the editing of the equivalent of 90,000 pages of SCIENCE in the original format, or 60,000 of the pages of the size and type now in use.

Readers of journals usually think only of the text as requiring attention and labor. However, advertisements do not appear in journals automatically or without editorial work similar to that given the text. In publishing trustworthy advertisements a journal renders direct service to many of its readers, and indirect service to them because without the revenue received from advertisements scientific journals could be published only at much higher subscription rates or not at all. From the beginning, industries and publishers of the highest standing have used SCIENCE as a medium for reaching those who will be interested in their products. The high standing of SCIENCE as an advertising medium is proved by the fact that twelve companies have advertised in it every year for more than forty years. The Macmillan Company has advertised in SCIENCE every year for the entire fifty years of the existence of the New Series, Henry Holt and Company for forty-nine years, Bausch and Lomb Optical Company for forty-eight years, Gaertner Scientific Corporation for forty-six years, and Fisher Scientific Company-Eimer and Amend for forty-five years.

The foregoing is a sketch of the history of the editing of SCIENCE since it was acquired by Dr. and Mrs. Cattell in 1895, but the Association must also look toward the future. It is widely known to members of the Association that in 1925 Dr. and Mrs. Cattell entered into an agreement with the Association under the terms of which the Association agreed to purchase subscriptions for either SCIENCE or *The Scientific Monthly* for each of its members during the lifetime of Dr. Cattell, and under which SCIENCE would become the property of the Association upon the death of Dr. Cattell, subject to the payment of an annuity to his estate for a period of ten years, the amount of the annuity depending upon the profits from publishing SCIENCE during the preceding five years. Upon the death of Dr. Cattell on January 20, 1944, SCIENCE became the property of the Association. Dr. Cattell wisely wrote into this agreement with the Association the provision that after his death SCIENCE should continue to be edited for three months by The Science Press, the registered name under which Dr. and Mrs. Cattell conducted their publishing enterprises, and as long thereafter as might be consonant with the interests of the Association. After careful consideration, the Executive Committee voted on last May 7 that the Association should take over the editing and publishing of SCIENCE as soon as it should be feasible to do so.

In order to determine the amount of the annuity payable by the Association to Dr. Cattell's estate it is necessary to have the books of account of The Science Press and The Science Press Printing Company audited by certified public accountants for the five years since 1939 to 1943, inclusive. This audit is as necessary in filing returns of the amount of the estate to the State of Pennsylvania for tax purposes as it is for the Association. Consequently, every effort has been made since March, 1944, to get the necessary audit. Conditional promises of audits have been repeatedly made, but the loss of men from the auditing firms to our Armed Forces made it impossible to fulfill them. However, Price, Waterhouse & Co., one of the leading auditing companies in the country, has made a firm commitment to start the audit next April. Although the audits have not been made, it is reasonably certain that the annuity will be somewhat in excess of $20,000 a year, the exact amount depending on the average purchasing value of the dollar year by year relative to that in 1938. Such an annuity is of course a serious matter, but, as the financial reports of the Association for 1944 will show when they shall have been completed and published in SCIENCE, the annuity is not anything to cause apprehension.

In addition to the audit, there are other important matters to consider in order to edit and publish SCIENCE. There are the problems of office space, the securing of office equipment, the employing of competent personnel, all of which have become steadily

more difficult to solve in Washington. In view of all these difficulties the Executive Committee, at a meeting held in Washington on November 14, voted that an agreement be entered into "with Mrs. Josephine Owen Cattell and Mr. Jaques Cattell for editing SCIENCE until December 31, 1945, and that the names of Josephine Owen Cattell and Jaques Cattell shall appear as editors of SCIENCE, and that the editing of SCIENCE shall be under the direction of the Executive Committee during that period." The arrangements are mutually satisfactory and the details are being reduced to written form. The Association, however, has taken over the advertising of SCIENCE, with Mr. Theo. J. Christensen, lately of the Ohio State University Research Foundation, as Advertising Manager; Mr. Christensen is also Advertising Manager of *The Scientific Monthly*.

It follows from these arrangements that contributions for publication in SCIENCE during this year should be sent directly to the Editors of SCIENCE, The Science Press, Lancaster, Pa. Contributions for publication in *The Scientific Monthly* should be sent, as heretofore, to Dr. F. L. Campbell, the Smithsonian Institution Building, Washington 25, D. C., and all communications relative to advertising in either journal should be addressed to Mr. Theo. J. Christensen, Smithsonian Institution Building, Washington 25, D. C.

If by any chance manuscripts offered for publication in SCIENCE should be sent to the Office of the Permanent Secretary they will be promptly forwarded to the editors, for it will be the unvarying policy of the staff of the Office of the Permanent Secretary to give Mrs. Cattell and Mr. Jaques Cattell every possible assistance in their laborious task of editing SCIENCE. The long experience and great success of Mrs. Cattell, sketched above, are conclusive evidence of her competence. May she continue to have health and strength to carry successfully her part of the heavy responsibilities the Association entrusts to her and to her son!

F. R. MOULTON,
Permanent Secretary

OFFICERS FOR 1945

BY mail ballot of the Council, the following officers were elected for the terms indicated, beginning on January 1, 1945.

Officers Elected for One-Year Terms

President: Charles F. Kettering

Vice-Presidents of the Association and Chairmen of the Sections:

Mathematics (A): E. P. Lane, University of Chicago

Physics (B): R. C. Gibbs, Cornell University

Chemistry (C): Henry Eyring, Princeton University

Astronomy (D): J. J. Nassau, Case School of Applied Science

Geology and Geography (E): Arthur Bevan, University of Virginia

Zoological Sciences (F): Carl G. Hartman, University of Illinois

Botanical Sciences (G): F. D. Kern, Pennsylvania State College

Anthropology (H): A. Irving Hallowell, Northwestern University

Psychology (I): Florence L. Goodenough, University of Minnesota

Social and Economic Sciences (K): (No nomination)

History and Philosophy of Science (L): John F. Fulton, Yale University

Engineering (M): George A. Stetson, Editor, *Mechanical Engineering*

Medical Sciences (N): Warfield T. Longcope, the Johns Hopkins University

Agriculture (O): William A. Albrecht, University of Missouri

Education (Q): H. H. Remmers, Purdue University

Officers Elected for Four-Year Terms

Members of the Executive Committee: Anton J. Carlson, University of Chicago; Walter R. Miles, Yale University

Elected Members of the Council: R. E. Buchanan, Iowa State College; Fay-Cooper Cole, University of Chicago

Permanent Secretary: F. R. Moulton

General Secretary: Otis W. Caldwell

Treasurer: W. E. Wrather

Secretaries of Sections:

Mathematics (A): R. W. Brink, University of Minnesota

Physics (B): (No nomination)

Chemistry (C): Neil E. Gordon, Wayne University

Astronomy (D): C. C. Wylie, University of Iowa

Geology and Geography (E): George W. White, Ohio State University

Zoological Sciences (F): J. W. Buchanan, Northwestern University

Botanical Sciences (G): G. W. Martin, University of Iowa

Anthropology (H): Gladys Reichard, Barnard College

Psychology (I): H. E. Burtt, the Ohio State University

Social and Economic Sciences (K): (No nomination)

History and Philosophy of Science (L): Raymond J. Seeger, George Washington University

Engineering (M): Frank D. Carvin, Newark College of Engineering

Medical Sciences (N): Malcolm H. Soule, University of Michigan

Subsection on Dentistry (Nd): Isaac Schour, University of Illinois