

AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

Science serves its readers as a forum for the presentation and discussion of important issues related to the advancement of science, including the presentation of minority or conflicting points of view, rather than by publishing only material on which a consensus has been reached. Accordingly, all articles published in *Science*—including editorials, news and comment, and book reviews—are signed and reflect the individual views of the authors and not official points of view adopted by the AAAS or the institutions with which the authors are affiliated.

Editorial Board

1980: RICHARD E. BALZHISER, WALLACE S. BROECK-ER, CLEMENT L. MARKERT, FRANK W. PUTNAM, BRYANT W. ROSSITER, VERA C. RUBIN, MAXINE F. SINGER, PAUL E. WAGGONER, F. KARL WILLENBROCK

1981: PETER BELL, BRYCE CRAWFORD, JR., E. PETER GEIDUSCHEK, SALLY G. KOHLSTEDT, EMIL W. HAURY, MANCUR OLSON, PETER H. RAVEN, WILLIAM P. SLICHTER

Publisher

WILLIAM D. CAREY

Editor

PHILIP H. ABELSON

Editorial Staff

Managing Editor ROBERT V. ORMES Business Manager HANS NUSSBAUM

Assistant Managing Editor JOHN E. RINGLE Production Editor ELLEN E. MURPHY

News Editor: BARBARA J. CULLITON

News and Comment: WILLIAM J. BROAD, LUTHER J. CARTER, CONSTANCE HOLDEN, ELIOT MARSHALL, DEBORAH SHAPLEY, R. JEFFREY SMITH, NICHOLAS WADE, JOHN WALSH. Editorial Assistant, SCHERRAINE MACK

Research News: BEVERLY KARPLUS HARTLINE, RICHARD A. KERR, GINA BARI KOLATA, JEAN L. MARX, THOMAS H. MAUGH II, ARTHUR L. ROBINSON. Editorial Assistant, FANNIE GROOM

Consulting Editor: ALLEN L. HAMMOND

Associate Editors: ELEANORE BUTZ, MARY DORFMAN, SYLVIA EBERHART, RUTH KULSTAD

Assistant Editors: CAITILIN GORDON, LOIS SCHMITT

Book Reviews: KATHERINE LIVINGSTON, Editor; LINDA HEISERMAN, JANET KEGG

Letters: CHRISTINE KARLIK

Copy Editors: ISABELLA BOULDIN, STEPHEN KEPPLER

Production: NANCY HARTNAGEL, JOHN BAKER; YA LI SWIGART, HOLLY BISHOP, ELEANOR WARNER; MARY MCDANIEL, JEAN ROCKWOOD, LEAH RYAN, SHARON RYAN

Covers, Reprints, and Permissions: GRACE FINGER, Editor; CORRINE HARRIS, MARGARET LLOYD

Guide to Scientific Instruments: RICHARD G. SOMMER

Assistant to the Editor: JACK R. ALSIP

Membership Recruitment: GWENDOLYN HUDDLE

Member and Subscription Records: ANN RAGLAND

EDITORIAL CORRESPONDENCE: 1515 Massachusetts Ave., NW, Washington, D.C. 20005. Area code 202. General Editorial Office, 467-4350; Book Reviews, 467-4367; Guide to Scientific Instruments, 467-4480; News and Comment, 467-4430; Reprints and Permissions, 467-4483; Research News, 467-4321. Cable: Advancsci, Washington. For "Instructions for Contributors," write the editorial office or see page xi, *Science*, 28 September 1979.

BUSINESS CORRESPONDENCE: Area Code 202. Membership and Subscriptions: 467-4417.

Advertising Representatives

Director: EARL J. SCHERAGO

Production Manager: GINA REILLY

Advertising Sales Manager: RICHARD L. CHARLES

Marketing Manager: HERBERT L. BURKLUND

Sales: NEW YORK, N.Y. 10036: Steve Hamburger, 1515 Broadway (212-730-1050); SCOTCH PLAINS, N.J. 07076: C. Richard Callis, 12 Unami Lane (201-889-4873); CHICAGO, ILL. 60611: Jack Ryan, Room 2107, 919 N. Michigan Ave. (312-337-4973); BEVERLY HILLS, CALIF. 90211: Winn Nance, 111 N. La Cienega Blvd. (213-657-2772); DORSET, VT. 05251: Fred W. Dieffenbach, Kent Hill Rd. (802-867-5581)

ADVERTISING CORRESPONDENCE: Tenth floor, 1515 Broadway, New York, N.Y. 10036. Phone: 212-730-1050.

Science Centennial

When the first issue of *Science* was printed, the United States had few universities worthy of the name. Of 330 so-called colleges and universities, 218 had fewer than 100 students, 88 had 100 to 200, 12 had 200 to 300, 6 had 300 to 500, and 6 had more than 500.* Graduate education was almost nonexistent. Those seeking advanced degrees studied in Europe. Faculties were small: most schools had fewer than ten professors. Only a small amount of research was conducted, and the *American Journal of Science* was the principal local vehicle for its publication.

The American Association for the Advancement of Science, then in its 32nd year, had a total membership of 1550, of whom probably no more than half were actually scientists. The Association served as an umbrella organization for the various disciplines. A few specialized groups, such as the American Chemical Society, were also beginning an independent existence.

But there were stirrings and ferment in the land. The United States had become relatively prosperous. Its people were energetic, and there were those who were determined to improve the national status in scientific matters. Nevertheless, the launching of a weekly magazine on 3 July 1880 was a courageous—even foolhardy—act. The principal financial backer was the controversial Thomas A. Edison. The editor was John Michels. The magazine was intended to be patterned after *Nature*.

Edison was a successful inventor whose flamboyance was offensive to some scientists. The magazine was not a financial success; Edison withdrew his support after about a year, and publication ceased soon thereafter. Rights to the magazine were purchased by Alexander Graham Bell and his father-in-law, Gardiner G. Hubbard. Publication was resumed on 9 February 1883 with Samuel H. Scudder as editor. The two sponsors were generous; the quality and content of the magazine were much improved, and many leading scientists contributed items to it. However, financial success was still elusive. During about a decade, a loss of \$80,000 was sustained. Publication was suspended after the issue of 23 March 1894.

But better days lay ahead. Rights to the magazine were obtained by James McKeen Cattell, who was head of the psychology department at Columbia University. He created an editorial board that represented the various disciplines and included 18 leading scientists of the time, such as Simon Newcomb, mathematics; E. C. Pickering, astronomy; O. C. Marsh, paleontology; Henry F. Osborne, biology; and John Wesley Powell, anthropology.

Cattell, ably assisted by his wife, Josephine Owen Cattell, established a low-cost editorial office at their home north of New York. Publication of *Science* was resumed on 4 January 1895. In 1900 Cattell succeeded in obtaining the cooperation of the American Association for the Advancement of Science, which made *Science* its official journal.

The Cattells remained as owners and editors of the magazine until James Cattell's death in 1944. Ownership then passed to AAAS. Turbulent years followed until Dael Wolfe became chief executive of AAAS in 1954. Under his judicious guidance, sound editorial and financial policies were established, and *Science* prospered.

Examination of the material appearing in *Science* during the hundred years of its existence reveals a rich heritage. From time to time during 1980 we will reprint excerpts from this material. However, we are reluctant to engage in an excess of ancestor worship. Instead, it is our intention to honor the past contributors by examining the present and looking to the future, just as they did. Our principal observance of the centennial will occur on the hundredth anniversary of *Science* in the form of a special issue. This will contain about 25 articles, of which 5 will portray aspects of the history of the magazine. The major content will be devoted to surveys of the status and future of the sciences, applied sciences, and interactions of science and technology with societal problems.—PHILIP H. ABELSON

*H. A. Rowland, *Science* 2, 242 (1883).