

the amount in 1958 and well over three times the amount for 1954. As measured in dollars, the Association's scale of operations has more than tripled in five years.

Of the \$943,000 in grants, \$600,000 came from the National Science Foundation to support the Traveling Libraries of Science Books. One hundred thousand dollars of this amount was in completion of a grant for the 1958-59 program, and \$500,000 represented the total grant for the 1959-60 program. The Traveling Science Libraries are now going to 1700 high schools and 800 elementary schools in the United States. In terms of numbers of schools, this program has now reached its maximum planned size. The program will be continued at this level for the next several years, but because it will no longer be necessary to purchase large numbers of books, the amount of money required will be smaller, approximately \$250,000 a year.

A grant of \$7500 from the Asia Foundation has made it possible to prepare a number of sets of science books for distribution to school libraries in Southeast Asia.

Three grants were received during the year for work in the field of science education. From the Carnegie Corpo-

ration came \$83,000 (the second annual payment on a 3-year grant of \$250,000) to support the Association's Science Teaching Improvement Program. Another grant from the Carnegie Corporation of \$81,000 was made to the Association to support the work of the National Association of State Directors of Teacher Education and Certification in their effort to develop better and more standardized requirements for the certification of teachers of high-school science and mathematics [see *Science* **130**, 1237 (6 Nov. 1959)].

From the National Science Foundation the Association received \$38,620 as reimbursement for the costs of administering a program of selecting high-school science and mathematics teachers who were granted fellowships for graduate study during summer sessions.

The Association received \$7500 from the Westinghouse Educational Foundation to provide for two annual awards of \$1000 each, and the cost of administering these awards, for excellence of science writing in newspapers and magazines.

The major portion of the expense for the Symposium on Basic Research held in New York 14-16 May and jointly sponsored by the National Acad-

emy of Sciences, the Alfred P. Sloan Foundation, and the AAAS was paid by the Sloan Foundation. The Association, however, received the sum of \$8547 in reimbursement for expenses of publishing the symposium volume, *Symposium on Basic Research*.

The first International Oceanographic Congress, arranged by the AAAS with the cosponsorship of UNESCO and the Special Committee on Oceanic Research of the International Council of Scientific Unions and held in New York City from 30 August to 11 September, received gifts, grants, or contracts totaling \$117,000 from UNESCO, the Office of Naval Research, the National Science Foundation, the Atomic Energy Commission, the Rockefeller and Sloan foundations, and a number of industrial organizations.

This generous support from a variety of sources has enabled the AAAS to extend its efforts toward the advancement of science and the improvement of science education far beyond the limits set by its own funds.

On behalf of the Treasurer, the Executive Officer presented the budget that the Board of Directors had adopted for 1960. The budget is shown in the accompanying tables.

## AAAS Officers, Committees, and Representatives for 1960

The following persons are serving as officers, as members of the indicated committees, and as representatives to other organizations for the year 1960. The dates in parentheses indicate the year of expiration of terms of election or appointment.

### General Officers

Retiring President and Chairman of the Board of Directors: Paul E. Klopsteg (1960), 828 Apple Tree Lane, Glenview, Ill.

President: Chauncey D. Leake (1961), Ohio State University

President-Elect: Thomas Park (1962), University of Chicago

### Other Members of the Board of Directors

Don K. Price (1960), Harvard University

Mina S. Rees (1960), Hunter College  
Alan T. Waterman (1960), National Science Foundation

William W. Rubey (1961), U.S. Geological Survey

H. Bentley Glass (1962), Johns Hopkins University

Margaret Mead (1962), American Museum of Natural History

Harrison Brown (1963), California Institute of Technology

Alfred S. Romer (1963), Harvard University

Paul A. Scherer (ex officio), Research Corporation

Dael Wolfle (ex officio), AAAS

### Vice Presidents and Chairmen of the Sections

*A* Mathematics: William L. Duren, Jr., University of Virginia

*B* Physics: John H. Van Vleck, Harvard University

*C* Chemistry: Robert W. Schiessler, Socony Mobil Oil Company, Paulsboro, N.J.

*D* Astronomy: Nicholas U. Mayall, Lick Observatory, Mt. Hamilton, Calif.

*E* Geology and Geography: William C. Krumbein, Northwestern University

*F* Zoological Sciences: Viktor Hamburger, Washington University

*G* Botanical Sciences: Barry Commoner, Washington University

*H* Anthropology: Cornelius Osgood, Yale University

*I* Psychology: Clifford T. Morgan, University of Wisconsin

*K* Social and Economic Sciences: Pendleton Herring, Social Science Research Council

*L* History and Philosophy of Science: Harry Woolf, University of Washington

*M* Engineering: Clarence E. Davies, United Engineering Center Project, New York

*N* Medical Sciences: Carl F. Schmidt, University of Pennsylvania School of Medicine

*Nd* Dentistry: Joseph L. T. Appleton, University of Pennsylvania School of Dentistry

*Np* Pharmacy: Joseph V. Swintosky, Smith, Kline and French Laboratories

*O* Agriculture: Firman E. Bear, Rutgers University

*P* Industrial Science: J. A. Hutcheson, Western Electric Corporation, Pittsburgh, Pa.

*Q* Education: John C. Flanagan, American Institute for Research, Pittsburgh, Pa.

#### Administrative Officers

Executive Officer: Dael Wolfle

Treasurer: Paul A. Scherer

Associate Administrative Secretary: Raymond L. Taylor

Editor: Graham DuShane

Business Manager: Hans Nussbaum

Director of Education: John R. Mayor

Director, Science Library Program: Hilary J. Deason

#### Secretaries of the Sections

*A* Mathematics: C. C. MacDuffee (1960), University of Wisconsin

*B* Physics: Stanley S. Ballard (1963), University of Florida

*C* Chemistry: Edward F. Degering (1960), 26 Robinhood Road, Natick, Mass.

*D* Astronomy: Frank B. Wood (1961), University of Pennsylvania

*E* Geology and Geography: Frank C. Whitmore, Jr. (1960), U.S. Geological Survey

*F* Zoological Sciences: Karl M. Wilbur (1961), Duke University

*G* Botanical Sciences: Harriet B. Creighton (1963), Wellesley College

*H* Anthropology: James L. Giddings (1961), Brown University

*I* Psychology: Frank W. Finger (1963), University of Virginia

*K* Social and Economic Sciences: Donald P. Ray (1962), George Washington University



Harrison Brown is a new member of the AAAS Board of Directors.

*L* History and Philosophy of Science: John W. Streeter (1961), Chester Springs, Pa.

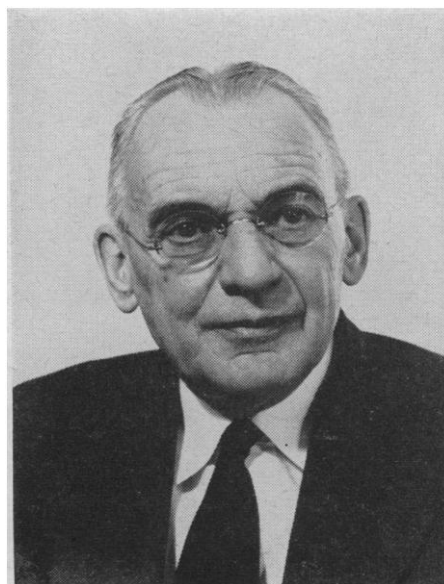
*M* Engineering: E. Paul Lange (1960), Engineers Joint Council, New York, N.Y.

*N* Medical Sciences: Allan D. Bass (1960), Vanderbilt University School of Medicine

*Nd* Dentistry: Reidar F. Sognnaes (1962), Harvard School of Dental Medicine, Boston

*Np* Pharmacy: John E. Christian (1962), Purdue University School of Pharmacy

*O* Agriculture: Howard B. Sprague



Alfred S. Romer is a new member of the AAAS Board of Directors.

(1961), Pennsylvania State University  
*P* Industrial Science: Allen T. Bonnell (1960), Drexel Institute of Technology

*Q* Education: Herbert A. Smith (1963), U.S. Office of Education

#### Officers of the Alaska Division

President: Roger R. Robinson, Bureau of Land Management, Anchorage

Vice President: Calvin J. Lensink, Alaska Department of Fish and Game, Juneau

Secretary: Lamar Hubbs, Box 960, Anchorage

Executive Secretary: Albert W. Johnson, University of Alaska, College

Council Representative: Victor P. Hessler, Geophysical Institute, College

#### Officers of the Pacific Division

President: Henry P. Hansen, Oregon State College

President-Elect: W. A. Clemens, University of British Columbia

Retiring President: Henry Eyring, University of Utah

Secretary: Robert C. Miller, California Academy of Sciences

Council Representative: Robert C. Miller

#### Officers of the Southwestern and Rocky Mountain Division

President: Lora M. Shields, New Mexico Highlands University

President-Elect: Alan T. Wager, Arizona State University

Secretary: Marlowe G. Anderson, New Mexico State University

Council Representative: Marlowe G. Anderson

#### Editorial Board

Graham DuShane, AAAS, chairman  
Donald J. Hughes (1963), Brookhaven National Laboratory

Konrad B. Krauskopf (1963), Stanford University

Edwin M. Lerner (1964), National Institutes of Health

H. Burr Steinbach (1963), University of Chicago

William L. Straus, Jr. (1963), Johns Hopkins Medical School

Edward L. Tatum (1962), Rockefeller Institute

## Standing Committees

### *AAAS Cooperative Committee on the Teaching of Science and Mathematics*

J. W. Buchta, University of Minnesota, chairman

Wayne Taylor, Michigan State University, vice-chairman

Bernard B. Watson, Operations Research Office, Johns Hopkins University, secretary

C. L. Agre, Augsburg College

John W. Cell, North Carolina State College

Alfred B. Garrett, Ohio State University

Arthur I. Howland, Northwestern University

Phillip S. Jones, University of Michigan

Robert T. Lagemann, Vanderbilt University

Harry F. Lewis, Institute of Paper Chemistry, Appleton, Wis.

George G. Mallinson, Western Michigan University

John R. Mayor, AAAS

Bruce E. Meserve, Montclair State College

Brother G. Nicholas, University of Notre Dame

Fred H. Norris, University of Tennessee

Leonard O. Olsen, Case Institute of Technology

Thornton L. Page, Wesleyan University

W. E. Restemeyer, University of Cincinnati

Richard L. Weaver, University of Michigan

Harold E. Wise, University of Nebraska

Theodore Woodward, Department of Agriculture, Washington, D.C.

Dael Wolfle, AAAS, ex officio

### *AAAS Meetings*

Allen T. Bonnell (1962), Drexel Institute of Technology, chairman

Ellis A. Johnson (1960), Johns Hopkins University

William C. Steere (1961), New York Botanical Garden

Stanley A. Cain (1962), University of Michigan

Frank Fremont-Smith (1962), Josiah Macy, Jr. Foundation

Ralph R. Shaw (1962), Rutgers University

John R. Bowman, Northwestern University, ex officio

Barry Commoner, Washington University, ex officio

Warren Weaver, Alfred P. Sloan Foundation, ex officio

Dael Wolfle, AAAS, ex officio

Raymond L. Taylor, AAAS, staff representative

### *Affiliation*

I. Melville Stein (1962), Leeds and Northrup Company, Philadelphia, chairman

Luna B. Leopold (1960), U.S. Geological Survey

Earl L. Green (1961), Roscoe B. Jackson Memorial Laboratory, Bar Harbor, Me.

Paul B. Sears (1963), Yale University  
Rensis Likert (1964), University of Michigan

Dael Wolfle, AAAS, ex officio

Raymond L. Taylor, AAAS, staff representative

### *Cooperation among Scientists*

John R. Bowman, Northwestern University, chairman

Burton W. Adkinson, National Science Foundation

Richard T. Arnold, Alfred P. Sloan Foundation

R. E. Gibson, Applied Physics Laboratory, Johns Hopkins University

Thomas Parran, Avalon Foundation, New York, N.Y.

H. Bentley Glass, ex officio Board representative

Dael Wolfle, AAAS, ex officio

### *Executive Committee of the Board of Directors*

Paul E. Klopsteg, chairman

Chauncey D. Leake

Thomas Park

Paul A. Scherer

Alan T. Waterman

Dael Wolfle

### *Investment and Finance*

F. P. H. Siddons (1962), American Security and Trust Company, Washington, D.C., chairman

J. E. Graf (1960), Smithsonian Institution

Sheldon B. Akers (1961), Brookings Institution, vice chairman

Malvern F. Morse (1963), American Security and Trust Company

Wallace R. Brode (1964), Department of State

Paul A. Scherer, Research Corporation, ex officio

Dael Wolfle, AAAS, ex officio

Hans Nussbaum, AAAS, staff representative

### *Nominations and Elections*

Paul E. Klopsteg (1960), 828 Apple Tree Lane, Glenview, Ill., chairman

H. Trendley Dean (1960), 2006 Cleveland St., Evanston, Ill.

Harold D. Lasswell (1960), Yale University

Thomas Park (1961), University of Chicago

(Note: Three additional members are to be elected by Council, by means of mail vote.)

### *Public Understanding of Science*

Warren Weaver, Alfred P. Sloan Foundation, chairman

Willard Bascom, National Academy of Sciences

Allen T. Bonnell, Drexel Institute of Technology

Victor Cohn, *Minneapolis Star and Tribune*

Paul E. Klopsteg, 828 Apple Tree Lane, Glenview, Ill., ex officio Board representative

Dael Wolfle, AAAS, ex officio

### *Publications*

Thomas Park (1962), University of Chicago, chairman

George R. Harrison (1960), Massachusetts Institute of Technology

H. Bentley Glass (1961), Johns Hopkins University

Ralph R. Shaw (1963), Rutgers University

Chauncey D. Leake (1964), Ohio State University

Dael Wolfle, AAAS, ex officio

Graham DuShane, AAAS staff representative

### *Science in the Promotion of Human Welfare*

Barry Commoner (1962), Washington University, chairman

Robert B. Brode (1960), University of California, Berkeley

Lawrence K. Frank (1960), 25 Clark Street, Belmont, Mass.

Harrison Brown (1961), California Institute of Technology

Frank W. Notestein (1961), Population Council, Inc., New York, N.Y.

T. C. Byerly (1962), Agricultural Research Service, Department of Agriculture, Washington, D.C.

H. Jack Geiger (1962), Harvard Medical School, Boston

Margaret Mead, American Museum of Natural History, ex officio Board representative

Dael Wolfle, AAAS, ex officio

## Special Committees

### *AAAS-Anne Frankel Rosenthal Memorial Award for Cancer Research, Judges*

Lowell T. Coggeshall, University of Chicago, chairman

Harry S. N. Greene (American Association for Cancer Research), Yale University School of Medicine

G. Burroughs Mider, National Cancer Institute

Richard L. Rosenthal, Richard and Hinda Rosenthal Foundation

C. Chester Stock, Sloan-Kettering Institute for Cancer Research

Harry M. Weaver, American Cancer Society

### *AAAS-Campbell Award for Vegetable Research, Judges*

Louis P. Reitz (AAAS Section O-Agriculture), Agricultural Research Service, Beltsville, Md., chairman

Sterling B. Hendricks (American Society of Plant Physiologists), Plant Industry Station, Beltsville, Md.

Iver J. Johnson (American Society of Agronomy), Iowa State College

F. F. Smith (Entomological Society of America), U.S. Department of Agriculture, Entomology Research Branch, Beltsville, Md.

F. C. Stark, Jr. (American Society for Horticultural Science), University of Maryland

G. Ledyard Stebbins, Jr. (Genetics Society of America), University of California, Davis

E. E. Wilson (American Phytopathological Society), University of California, Davis

### *AAAS-Ida B. Gould Memorial Award for Research on Cardiovascular Problems, Judges*

Emmet B. Bay, University of Chicago, chairman

C. Sidney Burwell (Helen Hay Whitney Foundation), Harvard Medical School

Robert P. Glover (American College of Cardiology), Presbyterian Hospital, Philadelphia

Dickinson W. Richards (Life Insurance Medical Research Fund), Bellevue Hospital, New York

Richard L. Rosenthal, Richard and Hinda Rosenthal Foundation

Francis C. Wood (American Heart Association), University of Pennsylvania Hospital

J. Franklin Yeager, National Heart Institute

### *AAAS Newcomb Cleveland Prize, Judges*

Thomas Park, University of Chicago, chairman

Wallace R. Brode, Department of State

Alfred E. Emerson, University of Chicago

M. R. Irwin, University of Wisconsin

Chauncey D. Leake, Ohio State University

Clifford T. Morgan, University of Wisconsin

William W. Rubey, U.S. Geological Survey

Paul B. Sears, Yale University

A. C. Smith, U.S. National Museum

Howard B. Sprague, Pennsylvania State University

### *AAAS Socio-Psychological Prize*

Pendleton Herring, Social Science Research Council

Donald P. Ray, George Washington University

Dael Wolfe, AAAS

### *AAAS-Westinghouse Science Writing Awards, Managing Committee*

Graham DuShane, AAAS, administrator

Jules B. Billard, *National Geographic Magazine*

Charles N. Fry, Westinghouse Electric Corporation

Harry R. Gail, Westinghouse Electric Corporation

Nate Haseltine, *Washington Post and Times Herald*

Hans Nussbaum, AAAS

Dael Wolfe, AAAS

### *Council Activities and Organization*

William A. Wildhack, National Bureau of Standards, chairman

Allan D. Bass, Vanderbilt University School of Medicine

Ward Pigman, University of Alabama Medical Center

Albert E. Sobel, Jewish Hospital of Brooklyn

Leon Sokoloff, National Institutes of Health

Paul E. Klopsteg, Glenview, Ill., ex officio

### *Council Agenda and Resolutions*

Paul S. Dwyer, University of Michigan, chairman

Robert C. Miller, California Academy of Sciences

George C. Paffenbarger, National Bureau of Standards

Kenneth C. Spengler, American Meteorological Society, Boston

## Meeting Sites

Harold E. Finley, Howard University

James L. Giddings, Brown University

Paul B. Sears, Yale University

Frank J. Soddy, General Dynamics Corporation

Frank Bradshaw Wood, University of Pennsylvania

## Popular Science Books

Harrison Brown, California Institute of Technology

Barry Commoner, Washington University

E. U. Condon, Washington University

Kirtley F. Mather, Harvard University

## Retirement Plan (must be composed of three staff members)

Dael Wolfe, AAAS, chairman

Hans Nussbaum, AAAS

Raymond L. Taylor, AAAS

## Committees To Be Appointed

AAAS Socio-Psychological Prize, Judges

AAAS-Westinghouse Science Writing Awards, Screening Committee

AAAS-Westinghouse Science Writing Awards, Judges

Theobald Smith Award in the Medical Sciences, Judges

## Representatives

### *Advisory Council on Medical Education*

Lowell T. Coggeshall, University of Chicago

### *American Council on Education*

Mark H. Ingraham, University of Wisconsin

John R. Mayor, AAAS

### *American Standards Association Sectional Committee on Fluid Permeation (Z59)*

M. King Hubbert, Shell Oil Company, Houston

### *American Standards Association Sectional Committee on Letter Symbols and Abbreviations for Science and Engineering*

Irving P. Orens, Newark College of Engineering

### *Council of National Organizations of the Adult Education Association of the United States*

John R. Mayor, AAAS

*Committee on the Kimber Genetics Award of the National Academy of Sciences*

Tracy M. Sonneborn, Indiana University

*Council of Old World Archeology*

Richard K. Beardsley, University of Michigan

*Instrument Society of America Committee on Research and Development*

Jesse W. Beams, University of Virginia

*Joint Commission on Mental Illness and Health*

Ernst Mayr, Museum of Comparative Zoology, Harvard College

*National Conference on FAO*

Noble Clark, University of Wisconsin

*Science Service Board of Trustees*

Wallace R. Brode (1960), Department of State

Douglas M. Whitaker (1961), Rockefeller Institute for Medical Research

William W. Rubey (1962), U.S. Geological Survey

*Scientific Manpower Commission*

Wallace R. Brode, Department of State

M. H. Trytten, National Academy of Sciences

*Office of Critical Tables Advisory Board, National Academy of Sciences*

Wallace R. Brode, Department of State

*U.S. Committee on ISO Technical Committee 37-Terminology*

Duane Roller, Harvey Mudd College

*U.S. National Commission for UNESCO*

(To be appointed)

### New AAAS Symposium Volumes

*Biological and Chemical Control of Plant and Animal Pests*, Louis P. Reitz, Ed. Papers from a symposium presented 28-30 December 1957 at the Indianapolis meeting of the AAAS. Probable publication date, March 1960.

*Water and Agriculture*, Roy D. Hockensmith, Ed. Papers from a symposium presented 29-30 December 1958 at the Washington meeting of the AAAS. Probable publication date, April 1960.

*Calcification in Biological Systems*, Reidar F. Sognnaes, Ed. Papers from a symposium presented 29 December 1958 at the Washington meeting of the AAAS. Probable publication date, May 1960.

*Congenital Heart Disease*, Gordon K. Moe, Ed. Papers from a symposium presented 29-30 December 1958 at the

Washington meeting of the AAAS. Probable publication date, May 1960.

*Oceanographic Symposium*, Mary Sears, Ed. Papers from the morning lectures presented 31 August to 11 September 1959 at the First International Oceanographic Congress in New York. Probable publication date, July 1960.

### AAAS Membership

1) <i>Changes during 1959</i>	
New members elected	7,165
Losses	
Deaths	444
Resignations	2,561
Dropped for non-payment of dues	2,736
Total loss	5,741
Net increase during 1959	1,424
2) <i>Totals as of 31 December 1959</i>	
Annual members in good standing	53,175
Life and emeritus members	1,072
Total in good standing	54,247
In arrears	4,327
New for 1960	718
Total membership	59,292

## A Report of the Chicago Meeting

Raymond L. Taylor

From all reports, the recent seventh Chicago meeting of the American Association for the Advancement of Science was one of the smoothest running and most generally successful of the 126 national meetings the AAAS has held. Though there were instances of overcrowded session rooms—commonly due to underestimates of expected attendance but, in any event, tributes to the programs scheduled in them—usually it

was possible to make transfers. It was also possible to meet last-minute requests for projection because the Committee on Physical Arrangements wisely had provided extra equipment and not only had scheduled an operator for every session that had originally requested lanterns, but had several projectionists in reserve. Besides the sessions for programs, such aspects of the meeting as registration, traffic in the ex-

hibit and Science Theatre areas, and the various social functions, in general, went very well.

The quality of the programs was uniformly high and pleased comments were heard on every hand; those who arranged the sessions naturally were gratified at the good attendance and applause. The exhibitors, too, obviously were pleased with the serious attention their displays received.

The four hotels that housed the 18 sections and 101 participating organizations were so convenient to one another that virtually all registrants, it is believed, saw the exhibits at least once. Incidentally, the policy of restricting admission to the Exposition to those with registration badges—and registering no one younger than 16—was a decided success and will be continued. There were a few disappointed parents who felt that exceptions should be made for their exceptionally talented young children, but most people who inquired appreciated that the exhibits were designed