

these figures do not allow adequately for the heavier material carried along the bed of the river. Neither does this estimate take into account the fact that a great deal more material is washed out of the fields than ever reaches the sea. Much is stranded on the way and causes inconvenience to man by creating sandbars, filling up river channels, covering fertile fields with flood *débris* and the like.

This continuous and heavy loss of the soil on which the very food supply of the nation depends is a most important problem that has to do with the use of our most vital resource—the land. To confine the menace within the bounds of reasonable safety will tax the best efforts and ingenuity of the nation.

Terracing the fields, contour ploughing and cultivation, wise forestry management, the conservation of forestry or grazing of sharply sloping lands that are sure to wash away if cultivated, and scrupulous attention to gullies while they are small to prevent enlargement are parts of the answer to this problem. The problem is so important that it demands the best cooperative effort of engineers, of chemists and physicists among the soil scientists and of practical farmers.

On the basis of the chemical analysis of nearly 400 surface soils it may be estimated that the amounts of material washed away from the fields of the country each year contain not less than 126,000,000,000 pounds of plant food. This is a loss about twenty-one times the annual net loss of plant food taken out of the fields by all the crops that are harvested. In a soil depleted of one or more of the elements of plant food essential to growth, it is usually possible to supply this in the form of fertilizer. But when the soil has been washed away the use of fertilizer is not effective. Measured on the basis of chemical analysis, the value of the phosphorus, potassium and nitrogen contained in the material washed from the fields each year would cost something in excess of \$2,000,000,000 if purchased at current market prices for the cheapest commercial carriers of these three essential plant foods.

GIFTS FOR THE STUDY OF DEAFNESS

GIFTS amounting to \$91,080, bringing the fund for research into the causes and methods of preventing deafness up to more than a quarter of a million dollars, have been announced by Dr. Arthur B. Duel, chairman of the board of trustees of the American Otological Society. This is half the amount which the society proposes to raise before July 1 in order to continue the studies started under a grant made by the Carnegie Corporation.

The research to which this fund is to be applied is being conducted by otologists in different medical

and educational institutions throughout the country, including the Harvard Medical School, Northwestern University Medical School and the Massachusetts General Hospital. A central bureau for direction of the research has been opened at the New York Academy of Medicine.

In commenting upon the importance of the investigation which the society hopes to make with this fund Dr. Duel said that the wide prevalence of deafness and the social and economic handicap it places upon a patient make this medical problem a particularly acute one. It has been estimated by some authorities that one out of every twelve persons suffers from some sort of ear affection.

The quarter of a million dollars which has been contributed or pledged to date includes a number of conditional gifts which will only be paid if the goal of half a million is reached by mid-year. One of these is a sum of \$100,000 promised by Mr. Edward S. Harkness.

All the gifts are to become a part of the permanent fund of \$2,500,000, which will be devoted to the study of diseases and affections of the ear in the hope of discovering methods of dealing with the problem of chronic progressive deafness.

The names of those whose recent contributions to this fund were announced include: Miss Isabel Valle January, \$25,000; The Lillia Babbitt Hyde Foundation, \$25,000; Mrs. Clarkson Cowl, \$6,000; Mrs. William H. Moore, \$5,000; Felix Warburg, \$5,000; George F. Baker, \$2,500; B. M. Baruch, \$2,500; Mr. and Mrs. Pierre S. du Pont, \$2,000; James D. Black, \$1,000; Dr. Ogden M. Edwards, Jr., \$1,000; Mrs. Frank C. Lowden, \$1,000; Mrs. Richard March Hoe, \$1,000; Mrs. John G. McCullough, \$1,000; Dr. and Mrs. Lewis R. Morris, \$1,000; Mrs. Herbert N. Straus, \$1,000; Miss Gertrude S. T. Thomas, \$1,100; Miss Emma C. Watkins, \$1,000; Mrs. Walter O. Whitecomb, \$1,000.

THE EINSTEIN BIRTHDAY CELEBRATION

THE fiftieth birthday of Professor Albert Einstein was the occasion of a celebration in New York City on the evening of April 16. The celebration was held under the auspices of the Jewish National Fund and the Zionist Organization of America. Messages were received from President Hoover, the Earl of Balfour and from the leading universities of America.

President Hoover was represented at the meeting by Ray Lyman Wilbur, Secretary of the Interior, who made the principal address. Other speakers included Mayor Walker, Count F. W. von Prittwitz, German Ambassador to the United States; Louis Marshall, Nathan Straus, Rabbi Abba H. Silver, Dr. John Haynes Holmes, Emanuel Neumann, Morris

Rothenberg, the Reverend Z. H. Masliansky and Herman Bernstein, chairman of the Einstein jubilee committee.

Messages of tribute were read from Lord Balfour, President John Grier Hibben, of Princeton University; Dr. Julian Morgenstern, president of the Hebrew Union College, Cincinnati; Chancellor E. L. Lindley, of the University of Kansas; Chancellor E. A. Burnett, of the University of Nebraska; Judge Benjamin N. Cardozo, President David Kinley, of the University of Illinois; Professor A. A. Michelson; President James Rowland Angell, of Yale University; President C. C. Little, of the University of Michigan; President Wallace W. Atwood, of Clark University, and others.

It was announced at the celebration by Mr. Bernstein that the greetings received from the various men of science and other leaders of thought will be bound into a special album which will be presented to Professor Einstein.

Each of the Jewish signatories of the album contributed \$100 toward the acquisition of land in Palestine by the Jewish National Fund, a project in which Dr. Einstein is interested.

Mr. Hoover wrote:

Professor Einstein ranks high among the foremost scientists of all time, who have enriched mankind by their invaluable contributions to thought and human progress. Every important scientific achievement is a step forward in the direction of better universal understanding and good-will. It is very fitting that distinguished educators and other public-spirited Americans are paying this tribute to Professor Einstein.

Lord Balfour, formerly Prime Minister of England, sent the following cable message:

I congratulate the organizers of the Einstein celebration upon the honor they are conferring on a great investigator. He profoundly modified scientific conceptions of the material universe. His name will be remembered through the ages as among the greatest of those who have sought pure knowledge for its own sake and have found it.

THE AMERICAN PHILOSOPHICAL SOCIETY

At the annual meeting of the American Philosophical Society, held in Philadelphia from April 18 to 20 officers were elected as follows:

President

Francis X. Dercum, Philadelphia

Vice-presidents

William W. Campbell, University of California
James H. Breasted, University of Chicago
Elihu Thomson, General Electric Company

Secretaries

Arthur W. Goodspeed, University of Pennsylvania
John A. Miller, Philadelphia

Curator

Albert P. Brubaker, Jefferson Medical College

Treasurer

Eli K. Price, Philadelphia

Councilors

(To serve for three years)

Charles B. Davenport, Carnegie Institution
William H. Hobbs, University of Michigan
Emory R. Johnson, University of Pennsylvania
Harlow Shapley, Harvard College Observatory

Members

(Residents of the United States)

William F. Albright, Jerusalem, Palestine
Harley H. Bartlett, University of Michigan
George Henry Chase, Harvard University
James Pyle Wickersham Crawford, Philadelphia, Pa.
William Darrach, College of Physicians and Surgeons, Columbia University
C. J. Davisson, Bell Telephone Laboratories
Charles Hall Grandgent, Harvard University
John L. Haney, Central High School, Philadelphia
E. Newton Harvey, Princeton University
Edwin P. Hubble, Mount Wilson Observatory
William Jackson Humphreys, U. S. Weather Bureau
Solomon Lefschetz, Princeton University
James Howard McGregor, Columbia University
Michael I. Rostovtzeff, Yale University
Frank W. Taussig, Harvard University
Owen D. Young, New York, N. Y.

SCIENTIFIC NOTES AND NEWS

THE gold medal of the Linnean Society of London has been awarded to Professor Hugo de Vries, of Lunteren, Holland.

IN connection with the meeting of the American Chemical Society at Columbus, Ohio, a dinner will be given on the evening of May 2 in appreciation of the work of Dr. William McPherson, professor of chemistry in the Ohio State University.

THE sixty-fifth birthday of Dr. Harvey Cushing, professor of surgery at the Harvard Medical School and surgeon-in-chief of the Peter Bent Brigham Hospital, Boston, was celebrated on April 8. For this occasion a birthday book was compiled by his students. It differs from previous "Festschriften" in that only those who could legitimately call themselves pupils have been included. Eighty-two articles are contributed by them to the volume, which contains 1,110 pages, forming the April issue of the *Archives*