

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