SCIENCE NEWS

Science Service, Washington, D. C.

THE SCIENCE TALENT INSTITUTE

THE most talented young scientists in America went to Washington on Friday, March 3, to attend the Science Talent Institute conducted by the Science Clubs of America, and to compete for Westinghouse Science Scholarships.

Selected in the nation-wide third annual Science Talent Search with nearly 15,000 entries, all seniors in secondary schools, these boys and girls listened to a score of eminent scientists, visited scientific institutions in the nation's Capital, and made plans for pursuing scientific research careers. Those invited numbered 40, of whom 28 were boys and 12 girls.

Dr. Karl Compton, president of the Massachusetts Institute of Technology and member of the National Defense Research Committee, made the principal address of the meeting when on Tuesday evening (March 7) an awards banquet was held. At this time the scholarships were announced. One boy and one girl received $2,400 scholarships to be used at universities of their own choice. Six boys and two girls were given $400 scholarships, and $3,000 more in scholarships were distributed. Their scientific hobbies and experiments were demonstrated by the youthful winners on Saturday evening.

After a luncheon at noon on Saturday, leaders in science discussed with the boys and girls the opportunities for service in scientific research for war and peace. Dr. Leonard Carmichael, president of Tufts College and director of the National Roster of Scientific and Specialized Personnel, and Walter J. Murphy, editor of *Industrial and Engineering Chemistry*, participated.

Lectures of the Science Talent Institute began with a program on Friday evening during which Dr. Samuel G. Hibben, director of applied lighting, Westinghouse Electric and Manufacturing Company, staged a demonstration of "Lighting Tomorrow."

On Saturday morning there were three speakers: Dr. A. N. Richards, from the University of Pennsylvania and now chairman of the Committee on Medical Research of the Office of Scientific Research and Development, spoke on "Medicine in War and Peace"; Dr. Margaret Mead, associate curator of the department of anthropology of the American Museum of Natural History, answered "Can Women Re-make Our World?" "Navigation in Emergencies" was discussed by Dr. Bart J. Bok, associate professor of astronomy, Harvard University.

At the fourth session of the institute on Monday morning the speakers and their subjects were Dr. W. C. Lowdermilk, assistant chief, Soil Conservation Service, U. S. Department of Agriculture, "Food from Soil"; Dr. Marshall H. Stone, president, the American Mathematical Association, "New Steps in Mathematics," and Dr. E. U. Condon, associate director, Westinghouse Research Laboratories, "Frontiers of Atomic Physics."

A Nutrition Luncheon was held at noon on Monday to demonstrate new methods of feeding fighting men and civilians at home and abroad. Dr. Henry C. Sherman, chief, Bureau of Human Nutrition and Home Economics, U. S. Department of Agriculture, spoke at that time on "Trends in the Science of Nutrition."

The afternoon session on Monday included Pin Chuan Ho, professor of physics from China, who discussed "The Future of Science in China"; Dr. A. Allan Bates, manager, Chemical and Metallurgical Department, Westinghouse Electric and Manufacturing Company, who reviewed "Advances in Metallurgy"; and Dr. R. G. Robinson, of the National Advisory Committee for Aeronautics, who spoke on "Aeronautics."

A special Educational Luncheon Conference was held on Tuesday, March 7. It was attended by educators invited from all parts of the United States and the discussion centered around the methods of selection of promising young scientists. Dr. Morris Meister, principal of the Bronx (N. Y.) High School of Science, G. Edward Pendray, assistant to the president of Westinghouse Electric and Manufacturing Company, and Dr. Harlow Shapley, director of the Harvard College Observatory, led the round table discussion.

The Annual Science Talent Search is the joint effort of Science Clubs of America administered by Science Service and the Westinghouse Electric and Manufacturing Company.

ITEMS

NOT concentric circles but complicated ovals, or even curves running off the paper, should be used to correctly map on a flat surface airplane ranges of 500, 1,000, and 1,500 miles or more was pointed out by Professor Edward Kasner, of Columbia University, and Professor John DeCiccio, of the Illinois Institute of Technology, in a paper presented to the New York meeting of the American Mathematical Society. Concentric circles of a sphere can not accurately be represented by concentric circles in a plane. "A map is not a perfect picture, but at best a systematic caricature," Professor Kasner stated. The surface of a sphere, or any part of that surface, can not be mapped on a plane with exactitude.

LARGER iron ore deposits have been found to exist in the West than were formerly known. It is now believed that our local reserves will be sufficient to supply for the duration of the war the iron and steel furnaces with this important ore. Deposits containing more than 150,000,000 tons of iron ore, vitally needed for war production, have been charted by the U. S. Geological Survey, this work in some instances being supplemented by core drilling by the U. S. Bureau of Mines was recently reported by Dr. Charles F. Park, Jr., and Ernest F. Burchard, of the U. S. Geological Survey, to members of the Society of Economic Geologists and the American Institute of Mining and Metallurgical Engineers. The largest of these deposits were found in California and Utah. Because of the remoteness of transportation facilities and water supplies, not all of this ore is immediately available.