



NATIONAL SCIENCE FUND

These men seek funds for basic researches in science. Left to right: Dr. William J. Robbins, New York Botanical Garden, Dr. Harlow Shapley, Harvard University astronomer, President Karl T. Compton, of the Massachusetts Institute of Technology, Dr. Frank B. Jewett, president of the National Academy of Sciences and a member of the National Defense Research Committee, Dr. A. F. Blakeslee, Carnegie Institution botanist, and chairman of the National Science Fund committee, Prof. Douglas Johnson, Columbia University geologist and Dr. Robert A. Millikan, California Institute of Technology physicist. Gano Dunn, well known electrical engineer, and Dr. James R. Angell, former Yale President, are on the committee but were not present to be photographed.

GENERAL SCIENCE

National Science Fund To Encourage Basic Research

Will Receive and Administer Gifts for Advancement
Of Science; Directed by Scientists and Laymen

SUPPORT for basic researches in science, that may mean as much for future ages as Franklin's experiments in electricity or Pasteur's first discoveries on germ life have meant for the present generation, is to be provided from the National Science Fund, newly instituted under the auspices of the National Academy of Sciences.

Dr. Frank B. Jewett, president of the Academy, in announcing the establishment of the new organization, pointed out that "a single discovery by a research scientist may revolutionize our outlook in an entire field of human behavior," and he further insisted that despite present perversions of research results to the ends of wholesale destruction, the long-run effects of science and technology are

greatly to the benefit of the human race.

The purpose of the National Science Fund will be to receive and administer gifts for the advancement of science. The Fund will be directed by a joint board made up of scientists and laymen. Twelve lay members, prominent in non-official public affairs, have been appointed, together with 20 eminent scientists from the membership of the Academy. Dr. William J. Robbins, director of the New York Botanical Garden, has been designated as acting chairman of the board.

Commenting on the new enterprise, Dr. Jewett said:

"One of the important tasks of science today may well be to lay the groundwork for new industrial enterprise to fill the gap after the artificial stimulus of

defense orders and the armament business falls off. Unless fundamental research can be carried on now in the university and engineering school laboratories, at a time when industrial organizations are being pushed to meet national defense needs, the basis for the industrial development and production of the next decade may be placed in jeopardy."

The National Science Fund has been organized as the result of a three-year study of the present sources of financial support for fundamental research in science by a committee under the chairmanship of Dr. A. F. Blakeslee, of the Carnegie Institution of Washington, with Howland H. Sargeant as executive director. The study disclosed the urgent necessity for new sources of revenue, to supplement and replace former sources which have become diminished through the depression and other recent rapid economic changes.

Science News Letter, May 10, 1941

RADIO

Radio Waves Travel With Speed of Light

RADIO waves have "practically the velocity of light," a research quartet of West Virginia University has found in a new series of experiments reported to the American Physical Society. The speed is about 186,000 miles per second.

The observations were made by Prof. Robert C. Colwell, H. Atwood, Jr., J. E. Bailey and C. O. Marsh. They set up a transmitter on the campus at Morgantown, which broadcast ten pulses a second, each lasting for a hundred thousandth of a second. This was received by a portable unit which automatically sent a return pulse, in its turn received at the first transmitter. There, both the original and the return signal were shown by a luminous line on a tube like that used in television receivers. This indicated the total time for the round trip. Part of it was due to actual transmission between the stations, the rest was the delay in the radio equipment.

First, readings were taken with the portable station near the fixed one. Then it was moved farther away and more measurements made. Since the instrumental delay was the same in both sets, the difference between the measurements "is the time taken for the radio pulse to travel twice the distance between the two positions of the portable station."

The measured velocity in the line of sight, they stated, came out practically the same as that of light.

Science News Letter, May 10, 1941