GENERAL SCIENCE

Board To Plan Research

Research and Development Board will be staffed with top-flight scientists and will plan use of money available for research.

➤ ONE of the boards set up in the new "national military establishment" headed by Secretary of Defense Forrestal will have more to say about the direction of scientific research and development in this country than any other group.

It is the Research and Development Board, heir to the Joint Research and Development Board which has been headed by Dr. Vannevar Bush, wartime director of the Office of Scientific Research and Development.

The Army and Navy have had large amounts of money to grant to colleges, research laboratories and industrial organizations for digging into new problems and developing applications of recent science developments. With the creation of equality between Army, Navy and Air Force, this full-scale and well-implemented research support will continue unabated.

Failure of the National Science Foundation to materialize as expected will throw a continued obligation on those military branches. They have the money and they will use it in the exploration of fields far removed from shot and shell but nevertheless essential to future fighting strength.

The Research and Development Board, with a staff of top-flight scientists largely from the wartime OSRD, has the job of alloting research fields among the various services and seeing to it that no hot leads are overlooked.

Although the unification act provided a chairman of the board, presidentially appointed from civilian life, "with compensation at the rate of $14,000 a year," this does not mean the replacement of Dr. Bush, who has been heading the joint board on a part-time basis, just as he ran the OSRD and remained president of the Carnegie Institution of Washington as well. The way seems to be open for Dr. Bush to continue as chairman, thanks to "at the rate of" wording of the act, and he will probably do so.

It is not too much to say that the chairman of this board will be the most powerful person in the nation in the allotment of scientific research funds. He will be the ony member of the board of seven who is not a representative of Army, Navy or Air Force. He will decide differences between the three services.

Of major importance are the two other boards that are created under the unification act. These are the National Security Resources Board and the Munitions Board. The Resources Board's closest approach in the past was the War Reconversion Board, headed by James Byrnes before he became Secretary of State. It is policy-making in industrial and civilian mobilization, in use of natural and industrial resources, in strategic and critical materials, in strategic relocation of all the nation's activities.

The Munitions Board is concerned more directly with procurement, production and distribution among the armed services, but it will be concerned also with the important matter of the adequate reserves of strategic and critical materials.

Science News Letter, August 23, 1947

ENTOMOLOGY

Two New Chemical Weapons Used in Mosquito Warfare

➤ MOSQUITOES have two new chemical-warfare weapons to face, that are expected to make life more miserable—and shorter—for them in future summers. Both weapons have been demonstrated by Dr. Elton J. Hansens.

The first is a pint-size, one-man version of the big insecticide fog-machines that have come into use for large-scale attack during the past year or two. It is known as a mosquito fumer. It consists of a can containing a nicotine product, plus fuel to convert this into a thermo-fog. To operate, a lighter somewhat like a Fourth of July sparkler is first ignited, then pushed through a diaphragm on one end of the can. The fumes continue to be effective against mosquitoes for two or three hours.

The second device demonstrated by Dr. Hansens is called a pinstream oiler, and is intended for use against mosquito larvae or "wigglers" in marshes and ponds. Hitherto, fuel oil has had to be applied to such places, at a rate of about 25 gallons per acre, and since this work has to be done mainly on foot this is a rather terrific burden. Now, one gallon of a concentrate containing 1.5% DDT and 0.5% of a spreader will treat the same area that used to require 25 gallons of oil.

Science News Letter, August 23, 1947

HORTICULTURE

New Jersey Orchid Crop Gets Special Attention

➤ ORCHIDS, as well as peaches and tomatoes, pig rations and silo stuffing, are getting scientific attention at the New Jersey State Experiment Station. There's a reason: New Jersey is the home of the greenhouses where fully half the commercially-grown orchids in the United States are produced. The crop is worth three million dollars a year.

Under the direction of Dr. O. W. Davidson of the Station staff, studies are being made on the effects of growth hormones on orchid bulbs, stems and flowers, also on the light and humidity requirements of the temperamental plants, and the acid-alkali balance on which they thrive best.

Science News Letter, August 23, 1947

FIVE-PLACE HELICOPTER—The Army XR-12, with a top speed of 105 miles an hour, is undergoing preliminary tests. A two-bladed rotor system is used with a gyroscopic action stabilizer bar.