GENERAL SCIENCE

Research Recovery Urged

Dr. Karl Compton advocated the use of recovery funds to restore research in foreign lands. He emphasized economic recovery rests on technology based on research.

➤ USE of recovery funds to restore scientific research programs and institutions in war-devastated lands was advocated by Dr. Karl T. Compton, eminent physicist and research leader. Dr. Compton, who is chairman of the Research and Development Board of the U. S. National Military Establishment as well as chairman of the Corporation of the Massachusetts Institute of Technology, spoke before the opening session of the Mid-Century Convocation on the Social Implications of Scientific Progress.

"To my way of thinking," he said, "it would be a helpful and legitimate thing if those countries whose programs of scientific research were most seriously disrupted by the war would see fit to include funds for the rehabilitation of those programs in their requests for U. S. aid under the provisions of the Foreign Assistance Act of 1948. I believe that such requests should be sympathetically received, since sound plans for economic development must rest upon technology supported by fundamental research."

Dr. Compton pointed out several historical precedents for scientific spending in order to promote economic reconstruction. Louis XV of France in the eighteenth century made large expenditures from his treasury for the promotion of research, as a part of a broad recovery plan to help the country out of the depression into which it had been plunged by the extravagance of his predecessor, Louis XIV. Similarly, after the Napoleonic wars Germany started programs of applied science, and after World War I Britain set up a million-pound research fund.

"It is to be hoped," he continued, "that our leaders of public affairs, in government and business and the professions, will be no less far-sighted than those statesmen of earlier days. The post-war interest in research shown by our military departments, the favorable prospects for a National Science Foundation, and above all the recently increased liberality of American industrial corporations in support of fundamental research within and without their organizations, are all encouraging signs."

Science News Letter, April 9, 1949

AGRICULTURE-SOCIOLOGY

People Before Profits

➤ PRIVATE enterprise in the Americas since the war has been taking a new direction, working with the idea of people before profits, in one venture described by its president, Nelson Rockefeller, speaking before the Massachusetts Institute of Technology Mid-Century Convocation on the Social Implications of Scientific Progress.

The enterprise, which has until now been operating so privately that few people have heard of it, is the International Basic Economy Corporation, which is undertaking to increase agricultural production in underdeveloped areas. It was founded under Mr. Rockefeller's leadership by a group of American capitalists who had played a part in the prewar good-neighbor policy and in international cooperation during the war, and who are now undertaking to carry on the same kind of thing in cooperation with businessmen of other lands, without depending on governmental sponsorship.

"We believed that American capitalism was ready to play a new part in world affairs—not seeking just the areas which promised the greatest profit, but going to the areas of greatest needs. We believe that it was ready to go where it could produce the most goods and render the greatest services, and, finally, that it would have the ingenuity and resourcefulness to accomplish these things on a sound and profitable basis which would contribute to the well-being and real wealth of the people it served."

Of the two "pilot areas", Venezuela and Brazil, in which this unique corporation is operating, Mr. Rockefeller chose Brazil as a sample of performances to date.

One alien insect pest, known as the broca, has been costing Brazilian coffee growers as much as 100,000,000 dollars annually. A helicopter dusting company has now been formed, which seems to be the answer to the broca problem.

To increase grain production without paying the heavy penalty of rapid soil erosion from which Brazil has been suffering, modern methods of land clearing, terracing, and cultivation have been introduced. For most economic returns on investments in heavy machines, these are operated almost around the clock on a three-shift basis.

Corn is Brazil's basic food, yet Brazil had no hybrid corn and no modern mechanized production and storage methods. A hybrid seed company was set up and is already producing seed that yields 35% to 40% more per acre than open pollinated strains now in use. Grain elevators are planned that will cut handling costs by more than two-thirds. To use more corn and cut the costs of meat production, new hog breeds have been introduced, together with handling methods adapted to the needs of small farmers.

"The operation of all of these companies involves not only the introduction of new methods and modern equipment but also the changing of life-long habits of production and distribution," said Mr. Rockefeller. "This is not easy and takes time."

Science News Letter, April 9, 1949

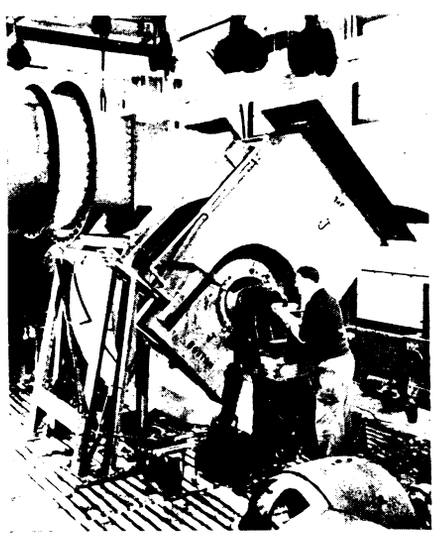
NUCLEAR PHYSICS

Giant Blowers Built To Cool Atomic Pile

➤ GIANT 12-foot-high blowers which can move 80,000 cubic feet of heated air a minute have been built to cool an atomic pile.

These huge air movers were made by the Sturtevant Division of Westinghouse and will be used at the atomic pile now under construction at the Brookhaven National Laboratory, Upton, N. Y. Despite their size, the blowers are "unusually quiet," Westinghouse engineers said. Centrifugal compressors revolve at a speed of 450 miles per hour in the blowers. An all-steel wheel, approximately three and one-half feet in diameter and with nine forged blades welded to a solid hub, is at the heart of each of the units. They are driven by a 1,500-horsepower motor.

Science News Letter, April 9, 1949



ATOMIC BLOWER—One of the blowers that will cool the atomic pile now being constructed at Brookhaven National Laboratory, Upton, N. Y.