

subject, an increase of £1,300,000 over what they were spending two years ago. But a great part of that expenditure, as he was sure they would all know, although primarily made for the purpose of defence, would nevertheless have its effect on many departments of civil life. Under the heading of defence came money spent on the Royal Observatory, on the Meteorological Office, the hydrographic surveys of the Navy, and the construction and manning by the Admiralty of a non-magnetic ship for the purpose of observing magnetic variations. They might remember that improvements in the engines of warships, developments in the design of military aircraft, or the evolution of the military tank were all speedily translated into forms which added to the resources of civil life. In civil research proper the contributions from the Exchequer also continued to show a steady increase. Grants to universities and colleges in 1914 were less than £500,000. They now amounted to £2,300,000. That was exclusive of the sum that was being allocated to the post-graduate medical school. Ultimately the grant to that school would be made through the University Grants Committee when the school became a recognized school in the University of London. Contributions to civil research proper amounted to £1,660,000.

PUBLIC EXHIBITION AND LECTURES OF THE CARNEGIE INSTITUTION OF WASHINGTON

THE annual exhibition, lectures and radio talks relating to the research activities of the Carnegie Institution of Washington were held on December 12, 13 and 14. The exhibits, which illustrated the work of the various departments during the year, are given below:

The Present-Day Maya Indians of Yucatan, by the Department of Genetics, in cooperation with the Division of Historical Research and the Nutrition Laboratory.

Archeology of the Guatemalan Highlands, by the Division of Historical Research.

Pinocytosis—The Drinking of Fluids by Cells, by the Department of Embryology.

The March of Forests in Response to Changing Climate, by R. W. Chaney.

Protection and Use of a Primitive Natural Area at Point Lobos, California, by N. B. Drury and R. W. Chaney.

Recent Cave Explorations in the Southwest, by Chester Stock.

New Factors in Animal Metabolism, by E. G. Ritzman.

Exploration of the Earth's High Atmosphere with Radio Waves, by the Department of Terrestrial Magnetism.

Absorbing Material in Space, by the Mount Wilson Observatory.

Formation of Copper Ores, by the Geophysical Laboratory.

The Publications of the Institution, by the Office of Publications.

A program of radio talks was arranged as follows: "Carnegie Institution Researches," included in the

news program of the U. S. Office of Education; "Early Man," by Chester Stock; "Supergravitation in the Atom," a round table led by Dr. W. F. G. Swann; "Advances of Science as Illustrated in the Annual Exhibition of Carnegie Institution of Washington," by President John C. Merriam and John B. Kennedy.

Public lectures on December 12 were opened with "Introductory Remarks" by Dr. John C. Merriam. He was followed by Ralph W. Chaney on "Why Our Forests Differ," and by Sinclair Smith on "The Local Group of Galaxies"; on December 13, lectures were given by Warren H. Lewis on "The Eating, Drinking and Locomotion of the Macrophages, the Great Scavenger Cells of the Body"; by John A. Anderson on "The Design of Large Telescopes," and by Chester Stock "On the Trail of Ancient Man in the Southwest." On December 14, H. A. Spoehr spoke on "The Point Lobos Natural Reserve," and E. G. Ritzman on "Genetic and Seasonal Factors in Metabolism."

THE UNION OF AMERICAN BIOLOGICAL SOCIETIES

A MEETING of the Council of the Union of American Biological Societies is called for 8:00 P.M., on Monday, December 28, in Room 104, Hotel Ambassador, Atlantic City. Professor Winterton C. Curtis, president of the union, writes:

The question of future activities for the union will be considered, in addition to a report from *Biological Abstracts* and a report from a committee recently appointed to consider what can be done to remedy the conditions described in the address of Dr. Oscar Riddle, delivered as retiring vice-president of Section F of the American Association for the Advancement of Science in December, 1935 (*SCIENCE*, Vol. 83, January 17, 1936).

The program that will be outlined by the latter report may prove sufficiently comprehensive to justify further action by the union.

Election of new officers seems desirable to the present incumbents in view of circumstances that will be explained at the meeting.

If council members can not be in Atlantic City at the time indicated, it is hoped that such members will communicate promptly with the officers of their respective organizations in order that at least one representative of each society may be in attendance.

The meeting will be open to any biologist who may be interested and particularly to the officers of member societies, although official action must be by council members.

FRIDAY'S PROGRAM AT ATLANTIC CITY

SOME necessary changes have been made in the plan for the program of the general association meeting at Atlantic City on Friday, January 1, as originally out-