featuring exhibits of ancient man found in all parts of the world. At the academy there will be assembled in one hall all the present available fossil remains, weapons and tools as well as replicas of the sites on which these discoveries have been made.

Though final arrangements have yet to be consummated, Dr. Ralph Von Koenigswald will bring a cast of the earliest datable human fossil, "Homo Modjokertensis," Dr. Pierre Teilhard de Chardin will bring casts of recently unearthed remains of "Peking Man" and Dr. A. E. Jenks will contribute to the exhibition human skeletal remains found in Minnesota. At one end of the hall there will be a reproduction of the site at Clovis, New Mexico, where last summer Dr. Howard found the tools and stone points of the so-called "Folsom Man" in conjunction with the bones of extinct mammoths.

The one hundred and twenty-fifth anniversary of the Academy of Natural Sciences of Philadelphia, to be marked by the Symposium on Early Man, will commemorate the founding of the oldest institution of its kind on the American continent. In its earliest years, the academy was known to European scientists as the "Lyceum of America" and the scientific gateway to a virgin field. The institution has been a pioneer in many fields of natural history. During the past year more than twenty-six expeditions and field trips to all parts of the world have gone out from the academy; new work in geology and in the study of ancient man has been undertaken and a new department of education has been organized.

### BROADCASTS BY THE AMERICAN ASSOCIA-TION FOR THE ADVANCEMENT OF SCIENCE

THE program of radio broadcasts arranged for the meetings of the American Association for the Advancement of Science at Atlantic City and Philadelphia is as follows:

December 28, Monday, 7:30 to 7:45 р. м.

E. G. Conklin, Princeton University, president of the American Association for the Advancement of Science. Topic: "Science and Human Welfare."

December 29, Tuesday, 6:00 to 6:15 P. M.A. H. Compton, University of Chicago, sponsor. Topic: "Science in the News."

December 30, Wednesday, 5:00 to 5:15 P.M.

A. E. Hitchcock and P. W. Zimmerman, Boyce Thompson Institute. Topic: "How Do Plant Hormones Act?"

- December 31, Thursday, 6:00 to 6:15 P. M. Howard Blakeslee, David Dietz and John O'Neill, New York newspapers. Topic: "Science and the Press."
- January 2, Saturday, 6:00 to 6:15 P. M., Philadelphia. Otis W. Caldwell, Boyce Thompson Institute; Watson

Davis, Science Service; Franklin Dunham, National Broadcasting Company. Topic: "The Week of Science Meetings."

#### Columbia Broadcasting Company

December 28, Monday, 2:30 to 2:45 P. M.

- Howard E. Enders, Purdue University; Otis W. Caldwell, Boyce Thompson Institute; Evelyn M. Fansler, Atlantic City High School Science Clubs, and Alton Meister, New York City High School Science Clubs. Topic: "The Science Youth Movement."
- December 29, Tuesday, 2:30 to 2:45 P.M. Watson Davis, Science Service. Topic: "The Year in Science."

December 30, Wednesday, 2:30 to 2:45 P.M.

F. B. Knight, University of Iowa. Topic: "Is Education a Science?"

### ELECTION OF OFFICERS OF THE AMER-ICAN CHEMICAL SOCIETY

DEAN FRANK C. WHITMORE, of the School of Chemistry and Physics of Pennsylvania State College, has been elected president of the American Chemical Society for 1938. He will take office as presidentelect on January 1, succeeding Dr. Edward R. Weidlein, director of the Mellon Institute of Industrial Research, who will become president. Dr. Weidlein succeeds Professor Edward Bartow, of the State University of Iowa.

Other officers elected were:

Directors: Professor Townes R. Leigh, acting vicepresident of the University of Florida—director for the fourth district to succeed Professor E. Emmet Reid, of the Johns Hopkins University; Professor Robert E. Swain, head of the department of chemistry in Leland Stanford University—director for the sixth district to succeed Dr. Walter A. Schmidt, of Los Angeles; Dr. Willard H. Dow, president of the Dow Chemical Company, Midland, Mich., —director at large to succeed Dr. Milton C. Whitaker, of New York.

Councilors at Large: Dr. E. K. Bolton, chemical director of E. I. du Pont de Nemours and Company; Professor W. L. Evans, of the Ohio State University; Professor Edward Mack, Jr., head of the department of chemistry of the University of North Carolina; Dr. C. E. K. Mees, vice-president and director of research, Eastman Kodak Company.

Dean Whitmore was recently awarded the William H. Nichols Medal of the New York Section of the American Chemical Society, one of the highest honors in chemical science, "for his studies in metallo-organic compounds, especially those of mercury, and in the field of aliphatic chemistry, particularly in molecular rearrangements and in the polymerization of olefins." He will receive the medal, founded in 1902 to stimulate original research in chemistry, at a ceremony on March 5, 1937.

Before becoming dean of the school of chemistry and

physics at Pennsylvania State College in 1929, Dr. Whitmore was instructor in organic chemistry at Williams College and at Rice Institute, assistant professor at the University of Minnesota and professor and head of the chemistry department at Northwestern University.

He is consultant and member of the Scientific Advisory Committee of the Chemical Warfare Service. He has held many offices in the American Chemical Society, starting with the treasurership of the Southeast Texas Section in 1917, and including nine years of service as a national director and eight years as secretary and chairman of the Division of Organic Chemistry. He was a vice-president of the American Association for the Advancement of Science in 1932. He has also been chairman of the Division of Chemistry and Chemical Technology of the National Research Council and a member of other divisions of that organization.

## AWARD OF THE CHARLES FREDERICK CHANDLER MEDAL

THE sixteenth award of the Charles Frederick Chandler Medal of Columbia University has been made for 1936, the centennial of Chandler's birth, to Dr. John Howard Northrop, of the Rockefeller Institute for Medical Research. Dr. Northrop, who will deliver the annual Chandler lecture next spring, was cited for fundamental discoveries concerning bacteria, the constitution of protein and the chemistry of digestion.

The medal was founded in 1910 to honor Chandler, called the father of the American Chemical Society, who was born on December 6, 1836, and who, for more than half a century, accomplished pioneer work in industrial chemistry, advanced public health and directed the teaching of chemistry at Columbia.

Dr. Northrop received the degree of bachelor of science from Columbia in 1912, the master of arts in 1913 and the doctorate in 1915. He held the William Bayard Cutting Travelling Fellowship in 1915–16. He has been associated with the Rockefeller Institute since 1916, becoming a member in 1924. During 1918– 1919 he served as captain in the Chemical Warfare Service. He is a member of the editorial board of the *Journal of General Physiology* and of the National Academy of Sciences. He received the Stevens Prize of the College of Physicians and Surgeons in 1931, and Harvard University conferred upon him the honorary degree of doctor of science during the Tercentenary Celebration last September.

Previous recipients of the Chandler Medal include Leo H. Baekeland, William A. Hillebrand, Willis R. Whitney, F. G. Hopkins, Edgar R. Smith, R. E. Swain, E. C. Kendall, Samuel W. Parr, Moses Gomberg, John Arthur Wilson, Irving Langmuir, James Bryant Conant, George O. Curme, Jr., Jacob Goodale Lipman and William F. Giauque.

Besides Professor Thomas, Professer Leo H. Baekeland and Professor Arthur W. Hixson are members of the Chandler Lectureship Committee.

In making public the award Dr. Butler said in part:

Columbia University could not let the one hundredth anniversary of the birth of Professor Charles Frederick Chandler go without recognition and grateful acknowledgment of his outstanding scientific and university service.

In 1864 Chandler came to Columbia as one of the group which planned the establishment of the famous School of Mines, the first of its kind in the United States. His associates were Professor Thomas Egleston and General Francis Laurens Vinton. From that time he remained at the head of the department of chemistry at Columbia until his retirement in 1911. His eager and many-sided personality led him into various forms of public service, in each of which he distinguished himself.

He was dean and executive officer of the School of Mines for a third of a century, and in addition taught chemistry to the students of medicine at the College of Physicians and Surgeons, and served as Health Officer of the City of New York. He built many monuments, some of them visible and some invisible, but all of an excellence and a distinction which have made his name a memorable one.

Columbia University, in its every part, held his personality in warm affection and will always hold his memory in highest honor and gratitude.

# SCIENTIFIC NOTES AND NEWS

DR. AMBROSE SWASEY, the distinguished mechanical engineer, chairman of the board of directors of Warner and Swasey, Cleveland, Ohio, celebrated his ninetieth birthday on December 19.

BRIGADIER-GENERAL DAVID LEGGE BRAINARD, retired, known for his Arctic explorations, celebrated his eightieth birthday on December 21.

LEADERS in military and civil aviation, including members of the National Advisory Committee for Aeronautics, honored Wilbur Wright and Orville Wright on the thirty-third anniversary of the first flight by Orville Wright at Kittyhawk, N. C., on December 17, 1903. A wreath was placed on the grave of Wilbur Wright, and personal greetings, including a message from President Roosevelt, were presented to Orville Wright at his home. Those present included Dr. Joseph S. Ames, chairman of the National Advisory Committee for Aeronautics, and Dr. Charles G. Abbot, secretary of the Smithsonian Institution.