This year's meeting of the Association of Official Seed Analysts promises to be one of the best the association has ever held. Dr. William Crocker, of the Boyce Thompson Institute for Plant Research, will give an invitation paper on "The Physiology of Seed Germination." Mr. G. N. Collins, of the U. S. Bureau of Plant Industry, will give one on "The Nature and Interpretation of the Variations in Seed Testing." Reports on the recent Rome meeting of the International Seed Testing Association will be presented by Professor M. T. Munn, of the New York Seed Laboratory, and Messrs. Toole and Brown, of the Seed Laboratory of the U. S. Department of Agriculture.

EDUCATION.—Seven sessions of Section Q are planned for Thursday, Friday and Saturday, at Teachers College, Columbia University. The topics to be discussed are: (1) "The Mathematical Treatment of Data on Education Problems," (2) "Recent Improvements in Instruments for Measurement in Education Problems," (3) "General Experimental Studies," (4) "Experimental Studies in College and University Education," (5) "Experimental Studies in City School Systems," and (6) "Unclassified Experimental Studies." A joint dinner of Section Q with Section I (Psychology) will be the occasion for the presentation of the addresses of the retiring vice-presidents for these sections, Dr. Knight Dunlap (Section I) and Dr. Arthur I. Gates (Section Q).

Programs Related to Science in General.—The American Association of University Professors will consider some very important questions at its annual meeting this year. Among the topics before the meeting will be: "Methods of Selection and Promotion of College Teachers and the Probability of Establishing a Non-Commercial Placement Service for Them"; "Activities of Local Chapters"; "Recent Problems of Academic Freedom and Tenure and of University Ethics"; "The Economic Condition of the Profession," a matter of perennial interest, about which it seems difficult to accomplish very much through committees.

The Sigma Delta Epsilon Women's Graduate Scientific Fraternity will hold a breakfast meeting, to which all women in science are invited.

## FURTHER ANNOUNCEMENTS AND REPORTS OF THE NEW YORK MEETING

Later announcements about the approaching meeting may be found in Science and full information will be contained in the General Program, which will be available in the registration offices at New York on Thursday, December 27, and thereafter. A copy of the program will be supplied free to each person who registers at the meeting and additional copies

will be on sale at the registration offices, at seventy-five cents each. Paid-up members of the American Association who do not attend the meeting may each secure a free copy of the program by requesting it from the permanent secretary's Washington office, in the Smithsonian Institution Building. Requests should arrive before December 22. Others may secure copies of the program if they remit the price of seventy-five cents each.

It is planned that the general reports of the meeting will appear in two parts, as special issues of SCIENCE for January 25 and February 1. The first part is to contain accounts of the general features of the meeting and the business transacted by the council of the American Association. The second part is to be devoted to a full series of readable reports on the section and society programs, the material for these being supplied by the secretaries of those organizations. Paid-up members of the American Association who do not receive Science regularly may secure free copies of the two special issues by requesting them from the permanent secretary's Washington office. Free copies of special issues will also be supplied, if requested in writing, to all who have registered at the New York meeting, whether they are members or not. Others may secure them by remitting fifty cents.

Free copies of this preliminary announcement may be secured, on request, from the Washington office or at the registration offices at New York, as long as the supply lasts.

## SCIENTIFIC EVENTS FORESTRY IN SWEDEN

The Stockholm correspondent of the Herald Tribune reports that a hundred years of systematic forestry culture has been celebrated by the Swedish College of Forestry, located in the outskirts of Stockholm. Approximately one half of Sweden's exports are derived from forest products, whether in the form of lumber, wood pulp, newsprint paper or by-products such as charcoal, tar, wood alcohol or other kinds of chemicals.

At this centennial celebration many forestry experts from abroad were present, including Professor R. P. Holdsworth, of Yale; Professor G. A. Schenck, of the University of Montana; Professor M. Dawson, of Cambridge; Professor E. P. Stebbing, of Edinburgh, as well as specialists from Germany, Norway, Finland, Hungary, Esthonia, France, Poland, Latvia, Czechoslovakia and Russia.

The elaborate entertainment program included exercises at the Forestry College itself, a formal meet-

ing at the new Stockholm Concert House, presided over by ex-Admiral Arvid Lindman, head of the new Swedish Conservative Cabinet and chairman of the college board of directors; a banquet at the City Hall and a gala performance at the Royal Opera. These gatherings were attended by King Gustaf, Crown Prince Gustavus Adolphus and other members of the royal family, many Cabinet ministers and other government officials.

The Swedish College of Forestry, which has played an important rôle in the preservation of the national forests, was founded in 1828 by Israel Adolf af Stroem, called the Father of Swedish Reforestation. Ancient Swedish history is, however, replete with proofs of the care and interest that have always been lavished upon this form of natural wealth.

Royal letters dated 1284 and 1525 prohibited the cutting of certain trees, imposing severe penalties for violation. Another letter of 1647 commanded that for each felled oak or beech two other trees of the same kind should be planted. These orders were motivated by the need of timber for house and shipbuilding and because the forests served as shelter for valuable fur-bearing animals.

To-day the College of Forestry graduates annually a number of efficient and highly trained foresters who have received a thoroughly theoretical and practical education. The studies at the school in Stockholm, covering two and a half years, are preceded by a one-year course in the forests of the Omberg Mountain, in the central province of Ostergothland, or in Dalecarlia. Here the pupils are instructed in everything connected with trees and wild animals, such as timber cutting, drainage, stump pulling, charcoal burning, reforestation, tree counting, hunting and fishing. Sawmills, wood-pulp plants and timber floating are also studied.

These activities and other measures taken by the Swedish government to preserve the timber supply were described at the celebration. Particular stress was placed upon the national census of forests, a gigantic task now nearing completion, which has already given evidence that Sweden's forest reserves are considerably greater than previously had been assumed. The annual growth has been found to be greater than the cutting, so that at the present rate of exploitation Sweden's forest reserves will last indefinitely.

## EXPEDITIONS OF THE FIELD MUSEUM OF NATURAL HISTORY

THE Field Museum of Natural History, Chicago, has sent out three zoological expeditions during the past few weeks.

The Harold White-John Coats Abyssinian Expedition, sponsored and led jointly by Harold A. White,

of New York City, and John Coats, of Ayrshire, Scotland, has gone to Abyssinia to collect mammals and birds, a special objective being specimens of the reticulated giraffe for use in a group exhibit. C. J. Albrecht, of the museum staff; George Carey, of Baltimore, Md., and several other men are members of the expedition.

On November 10 the first contingent of the William V. Kelley-Roosevelts Expedition to Eastern Asia departed for a year or more of zoological collecting and exploration of little-known regions in French Indo-China, and territory northwest of Indo-China along the gorges of the Mekong River and abutting on the borders of Burma, Siam and Yunnan. William V. Kelley, a business man of Chicago, is sponsor of the expedition. The leaders are Colonel Theodore Roosevelt and Kermit Roosevelt. Suydam Cutting, of New York City, and Herbert Stevens are among those accompanying the Roosevelts. A second contingent, led by Harold Coolidge, Jr., of Boston, will sail on December 22. Other members of the second contingent are Dr. Josselyn Van Tyne, assistant curator of birds of the museum of zoology of the University of Michigan; Dr. Ralph E. Wheeler, of Cambridge, Massachusetts, and Russell W. Hendee, of Brooklyn, New York. After each division has accomplished its individual objectives, the two parties will join next June for further intensive work together.

The Crane Pacific Expedition of Field Museum, led by its sponsor, Cornelius Crane, of Chicago and Ipswich, Massachusetts, sailed on November 16, on Mr. Crane's yacht, The Illyria, to circumnavigate the Pacific Ocean, making zoological collections and investigations at many of the principal island groups of the south and western Pacific and at many places in Asia. The expedition's operations are expected to take about one year. Karl P. Schmidt, assistant curator of reptiles, is leader of the scientific section of the party. Among other members of the expedition are Dr. Albert W. Herre, curator of the museum of zoology at Stanford University; Dr. W. L. Moss, of the Harvard Medical School; a number of technical assistants, and several friends of Mr. Crane's.

## SCIENTIFIC RESEARCH IN GOVERNMENT LABORATORIES

In the Annual Report of the Secretary of Commerce Dr. Ray N. Hudson, assistant director of the Bureau of Standards, writes:

That far-sighted leaders of industry recognized the dependence of their progress upon advances in science is evidenced by the increasing call upon government laboratories for cooperation in research.