The subjects of the technical program are water-power development, light-metal industries, coal carbonization, executive training and the resources of the Southern Appalachian area. As a special attraction, a trip will be provided to Kingsport, Tennessee, the miracle city of the south, which ten years ago was a bare mountain village but now has the largest plant in the world making complete books, a wood by-product plant, a glass works, textile mills and a cement plant.

The students' part in this meeting is to be emphasized. Special arrangements are being made for them by R. C. Matthews, national secretary of Tau Beta Pi, and E. P. Carpenter, chairman of the Greenville Section, American Society of Mechanical Engineers.

The committee in charge consists of C. E. Ferris, W. J. Savage, William Whaley, W. E. Biggs and J. A. Switzer. W. R. Woolrich is in charge of the program.

A feature of the semi-annual meeting in Salt Lake City, July 1-4, 1929, is the scheme of excursions in connection with it. The copper mines and smelters, the Great Salt Lake, and the canyons near the city will provide an exceedingly interesting four days. The program of papers will deal with aeronautical development, the smelting industry, low-grade copper mining and possibly the beet-sugar industry. The committee in charge is composed of N. L. Stewart, Austen Gudmundsen, F. W. McEntire, George A. Parker, Leonard Cahoon, Woodworth Anderson, Herbert Landes and W. H. Trask, Jr.

Following the transcontinental tour of 1926 and the Great Lakes tour of 1928 the society is now planning a Six-National Parks Tour. The schedule will include the six largest and most important, namely, Rocky Mountain Estes Park, Grand Canyon, Zion Canyon, Bryce Canyon, Yellowstone Park and Glacier Park. In addition, the itinerary includes the Royal Gorge, the Hanging Bridge, Colorado Springs, Glenwood Springs, Pike's Peak, Garden of the Gods, the Colorado Highway and Niagara Falls.

As the tour is now planned it will take 30 days and cover approximately 8,000 miles. Of these, 16 days will be spent in the parks, and four in Salt Lake City at the time of the spring meeting. Of the mileage, 6,000 miles will be by train and 2,000 by automobile. It will take in 16 states of the Union and the Dominion of Canada.

The tour is to be arranged on the all expense plan and will cost approximately five hundred and eightyfive dollars (\$585) per person for two in a compartment or three in a drawing-room, and six hundred and ten dollars (\$610) for two in a drawing-room from New York and return. This includes round-trip railroad and Pullman transportation, tours through the parks, side trips, accommodations at the first-class hotels and all necessary expenses. Any one interested and desiring further information may obtain it from the headquarters of the society, 29 West 39th Street, New York City.

## THE ACTIVITIES OF THE CARNEGIE CORPORATION

GRANTS amounting to \$2,000,000, and payment of more than \$4,000,000 on grants voted in previous years, were made by the Carnegie Corporation of New York during the fiscal year ended September 30, 1928, according to the annual report of President Frederick P. Keppel. The list of appropriations shows that one third of the total amount voted went for the support of educational studies, scientific research and publications. The California Institute of Technology received \$200,000 for endowment of the fundamental researches in physics and chemistry conducted by Professor R. A. Millikan; the President's Conference on Unemployment received \$75,000 for a study of recent economic changes by the National Bureau of Economic Research, while the Carnegie Foundation for the Advancement of Teaching received \$50,000 in support of a cooperative study of education in Pennsylvania. To other organizations went amounts ranging from \$5,000 to \$50,000 in support of studies in pyorrhea, economics of medicine, land economics, noncollegiate technical education, cooperative education in Africa and traveling fellowships.

Another one third of the total voted went for the support of general activities for the advancement and diffusion of knowledge and understanding. The Carnegie Endowment for International Peace received \$150,000 for support of its program in the United States and the Institute of International Education received a large grant.

The library interests of the corporation—a longestablished Carnegie interest—are being cared for largely by grants made in other years. The appropriations for last year amount to \$140,000 and are chiefly for the maintenance of library schools. Adult education, which has become a lively educational activity in the United States, came in for grants totaling \$102,000. Fine arts departments in colleges and universities and large arts organizations are listed for appropriations that indicate a growing interest on the part of the corporation in making arts education an essential part of the college curriculum. To the American Federation of Arts grants totalling \$110,-000 were made for greater opportunity for administrative development over a five-year period. In addition, art endowment grants of \$50,000 each were made to Milwaukee-Downer College, the University of Rochester, Vassar College and Wesleyan University, and a system of art scholarship grants for prospective college teachers of the fine arts was maintained at a cost of \$48,000.

A feature of the corporation's year was in connection with the income of its smaller fund of \$10,000,000 to be expended in Canada and the British Colonies. From this source the corporation embarked on a five-year program in British Africa, following a visit to Africa and a report to the trustees made by the secretary and president of the corporation.

## SCIENTIFIC NOTES AND NEWS

Dr. H. H. TURNER, Savilian professor of astronomy at the University of Oxford, accompanied by Mrs. Turner, is coming to the United States in order to represent the British Association for the Advancement of Science at the New York meeting of the American Association. Dr. Turner will give a lecture on "The Scientific Retrospect."

Dr. L. L. Van Slyke, for thirty-eight years chemist at the New York State Agricultural Experiment Station at Geneva, is retiring from active service with the close of the year.

Dr. Elmer A. Sperry, president of the Sperry Gyroscope Company, has been elected president of the American Society of Mechanical Engineers. Announcement of Dr. Sperry's election has been made following a canvass of a national mail ballot of approximately 20,000 members of the association. He succeeds Mr. Alex Dow, of Detroit.

ARTHUR J. Wood, professor of mechanical engineering at the Pennsylvania State College, was elected president of the American Society of Refrigerating Engineers at the recent New York meeting.

Dr. J. Sederholm, director of the Geological Commission of Finland, has been awarded the Penrose medal of the Geological Society of America. The award will be made at the society's annual meeting which will be held in New York from December 26 to 29. It is the second award of this medal, it having been conferred the first time on the late Professor T. C. Chamberlin, of the University of Chicago.

Dr. W. T. Bovie, head of the department of biophysics at Northwestern University and pioneer in the field of electro-surgery, was awarded the John Scott medal and a premium of \$1,000 by the City of Philadelphia at the annual banquet of the American Radiological Society on December 6.

THE French government has awarded the Legion of Honor, grade of officer, to Professor Augustus Trowbridge, dean of the graduate school of Princeton University. This is a promotion from the grade of chevalier awarded for war services in 1918.

Dr. RAYMOND PEARL, director of the Institute for Biological Research of the Johns Hopkins University, has recently been made a foundation member of the Morphological Society of Paris.

At the ceremony on the occasion of the opening of the term at the University of Paris, the degree of doctor honoris causa was conferred on Sir Charles Sherrington, Waynflete professor of physiology at the University of Oxford and president of the Royal Society. As was recently reported in SCIENCE, the honorary doctorate was conferred also on Dr. W. S. Thayer, of Baltimore, formerly professor of medicine in the Johns Hopkins University.

The American Society of Mechanical Engineers medal has been awarded to Julian Kennedy, of Pittsburgh, Pennsylvania, for his services to the iron and steel industry. The student prize went to Clarence C. Franck, of the Johns Hopkins University, for a paper on "Condition Curves and Re-heat Factors for Steam Turbines." The junior award of the society was won by M. D. Aisenstein, of Berkeley, California, for his paper on "A New Method of Separating the Hydraulic Losses in a Centrifugal Pump." Robert M. Meyer, of the Newark College of Engineering, received the Charles T. Main prize for his paper on "Scientific Management and its Effect on Manufacturing."

LIEUTENANT-COLONEL A. E. HAMERTON has been appointed pathologist to the Zoological Society of London, in succession to Dr. H. H. Scott, who has taken up an appointment under the Colonial Office.

ARTHUR S. COGGESHALL, curator of paleontology at the Carnegie Museum, Pittsburgh, has resigned to accept a museum post at St. Paul.

DR. MERRILL E. CHAMPION has resigned as director of the division of hygiene of the Massachusetts State Department of Public Health. He will be succeeded on January 1 by Dr. Luiz Diez, of the New York State Department of Health.

DR. LEVERETT D. BRISTOL, who has served the Milbank Memorial Fund health demonstrations in New York as executive officer for six years, has resigned to accept an appointment in industrial health work.

Dr. Hans Molisch, professor of plant physiology of the University of Vienna, has a year's leave of absence from the university, which he will spend as investigator and lecturer at the Bose Institute at Calcutta.

Dr. Y. ISHIWARA, professor of pharmacology in the Tokyo Jikeikai Medical College, who has been with