be undertaken under the auspices of the Carnegie Institution of Washington.

The project, which calls for the establishment of some 20 scientific stations on six continents and in every zone except the Antarctic, is under the direction of Dr. Arthur H. Compton, of the University of Chicago.

Dr. Ralph D. Bennett, associate professor of electrical measurements at the institute, with the cooperation of Dr. J. L. Dunham of Harvard University, will undertake cosmic radiation studies in Alaska, California and Colorado. Dr. Bennett made preliminary radiation studies in Colorado last year and since then he has developed a portable counting tube apparatus. It is planned to set up this instrument at high altitudes in the Rocky Mountains for measurements of the stopping power of different materials for the particles which actuate the counting tube. Dr. Bennett has left Cambridge to join his party in the west.

During the investigations measurements of cosmic radiation will be carried on continuously, day and night, over a long period, to determine whether there is a diurnal variation. The survey will also make it possible to compare directly intensities of radiation at many points. These studies are expected to show definitely whether cosmic radiation is associated with terrestrial locality.

Dr. Robert B. Brode, of the University of California, visiting professor of physics at the Institute of Technology, will cooperate with Dr. Bennett and Dr. Dunham in measurements in the California mountains. In Colorado the party will have the assistance of Professor J. C. Stearns, of the University of Denver. Professor M. S. Vallarta, of the department of physics, will join the party of Professor Compton when it begins its investigations in the highlands of Mexico. Dr. Compton's party will also make measurements in Hawaii, Australia, New Zealand, Peru, the Canal Zone and in northern Canada in the vicinity of the north magnetic pole.

The Asiatic survey will be directed by Professor J. M. Benade, of Lahore, who will make investigations in Ceylon, Java and northern India. South African observations will be made by Professor S. M. Naude, of the University of Cape Town. Dr. E. O. Wollan, of the University of Chicago, will go to Spitzbergen and other European points. Dr. Allen Carpe, of New York, lost his life recently in the beginning of the cosmic radiation survey at the head of the Muldrow Glacier on Mt. McKinley in Alaska.

CONFERENCE OF THE INTERNATIONAL STANDARDS ASSOCIATION

ENGINEERS of eighteen nations met in Milan, Italy, on May 30 to open a series of technical conferences aimed to secure international uniformity in standards for airplane and automobile parts, cutting tools, iron and steel, and other subjects.

The conferences, to extend through the ninth of June, are under the auspices of the International Standards Association, which includes in its membership the national standardizing bodies of the United States, France, Germany, Italy and 14 other nations.

Ernest Wooler, chief engineer of the Timken Roller Bearing Company of Canton, Ohio, an American delegate, will discuss before the conference on ball and roller bearings the American proposal to replace the thousand different types and sizes now manufactured in the United States alone.

Subjects which will be studied by the conference on aeronautics in an effort to secure greater international uniformity in essential features of airplanes, are: direction of rotation of the engine, safety belts, propeller hubs, electric voltages aboard airplanes, floats for seaplanes, parts of the steering equipment and engine control levers, dimensions and arrangement of instruments, instrument dials, identification colors for pipe lines, screwed pipe connections and valves, screw threads and principles for the computation of rating of airplanes and engines.

Other conferences will be held on cutting tools, center heights and dimensions of shaft ends of electric motor and driven machines, shafting keys, fluid meters and sieves for testing purposes.

The countries which will be represented at the International Standards Association conferences through their national standardizing bodies are: Austria, Belgium, Czechoslovakia, Denmark, Finland, France, Germany, Holland, Hungary, Italy, Japan, Norway, Poland, Roumania, Russia, Sweden, Switzerland and the United States.

EXPERIMENTAL FORESTS ESTABLISHED IN MINNESOTA

THREE field laboratories, comprising a total of approximately 5,396 acres, have been set aside as experimental forest areas within the Chippewa and Superior National Forests in Minnesota by the U. S. Forest Service. These areas were chosen after a careful study as being representative of the various types and conditions found in the forested area of Northern Minnesota.

The Cutfoot Experimental Forest is located approximately twenty-four miles from Deer River and is well stocked with thrifty, growing timber which is largely Norway and jack pine, although other types are also represented. The Pike Bay Experimental Forest lies approximately six miles southeast of Cass Lake. It is predominantly an aspen-hardwood type, but includes a small area of virgin white and Norway pine.

The Kawishiwi Experimental Forest, comprising 2,635 acres, is about thirteen miles southeast of Ely, Minnesota, within the Superior National Forest. The three most important timber types on the Superior National Forest, and in the region immediately surrounding that forest, are represented within the experimental area. This portion of Minnesota is a distinct climatic region and the rock outcrop soil is unique in the Lake States. The result of studies made elsewhere in the Lake States Region can not be definitely applied to this large area of forest land and it is largely for the purpose of studying the proper methods of handling the jack pine, black spruce and aspen types that this experimental forest was established.

The federal forest research work in the Lake States Region is handled by the Lake States Forest Experiment Station which is maintained by the Federal Government in cooperation with the University of Minnesota at St. Paul. A branch station has been maintained for several years on the Chippewa National Forest. The designation of the Cutfoot and Pike Bay Experimental Forests will make it possible to concentrate the studies within the two areas, thus permitting a more efficient conduct of the studies and a more effective demonstration to the timberland owners in the vicinity who are interested in managing their own timber lands for the permanent production of timber. A branch station has also been established on the Superior National Forest and the designation of the Kawishiwi Experimental Forest is in furtherance of the research work at this branch station.

The Lake States Forest Experiment Station also maintains branch stations at Ruse, Michigan; Roscommon, Michigan (a fire studies station in cooperation with the State of Michigan); in Buffalo County, Wisconsin (for the study of erosion), and in North Dakota for the development of planting technique on the prairie regions of that state.

AWARDS OF THE AMERICAN MEDICAL ASSOCIATION FOR EXHIBITS AT THE NEW ORLEANS MEETING

CLASS I

AWARDS in Class I are made for exhibits of individual investigations, which are judged on the basis of originality and excellence of presentation. According to the report in the *Journal* of the American Medical Association they were:

The gold medal to Frank A. Hartman, C. W. Greene, J. J. Maisel and G. W. Thorn, University of Buffalo, for original investigative work on the development and use of a hormone from the suprarenal cortex and excellence of presentation.

The silver medal to C. W. Emmons, College of Physicians and Surgeons, Columbia University, New York, for original work on the variations in ringworm fungi and excellence of presentation.

The bronze medal to J. A. Bargen, P. W. Brown and H. M. Weber, Mayo Clinic and Mayo Foundation, Rochester, Minnesota, for original investigation of diseases of the colon and excellence of presentation.

Certificates of Merit, Class I, were awarded to the following:

To Abraham Levinson, Chicago, for exhibit illustrating continuation of investigations on the cerebrospinal fluid.

To Alton Ochsner, Earl Garside and Ambrose Storck, department of surgery, Tulane University Medical School, New Orleans, for exhibit illustrating the use of digestive ferments in prevention of adhesions.

To Sidney J. Wilson and Simeon H. Hulsey, Fort Worth, Texas, and Fred D. Weidman, Philadelphia, for exhibit illustrating excellent studies on chromoblastomycosis in Texas.

In addition, the following exhibit is deemed worthy of Honorable Mention:

That of John W. Towey, Powers, Michigan; Willis H. Huron, Iron Mountain, Michigan, and Henry C. Sweany, Chicago, for exhibit on occupational sensitization to fungus spores found in maple bark.

CLASS II

Awards in Class II are made for exhibits which do not exemplify purely experimental studies and which are judged on the basis of excellence of correlating facts and excellence of presentation. They were:

The gold medal to Max Ballin and Plinn F. Morse, Harper Hospital, Detroit, for excellence in presentation of exhibit on parathyroidism.

The silver medal to L. G. Rowntree and C. H. Greene, Mayo Clinic and Mayo Foundation, Rochester, Minnesota, for excellence of presentation of exhibit of comprehensive study on Addison's disease.

The bronze medal to Ernest Carroll Faust, department of tropical medicine, Tulane University Medical School, New Orleans, for excellence of presentation of exhibit on human helminth infections.

Certificates of Merit, Class II, were awarded to the following:

To Chevalier Jackson and Chevalier L. Jackson, Temple University School of Medicine, Philadelphia, for excellence of presentation of exhibit illustrating tumors of the lungs and tracheobronchial tree.

To Frank C. Neff, D. N. Medearis and Margaret Anderson, department of pediatrics, University of Kansas School of Medicine, Kansas City, for excellence of presentation of exhibit illustrating a study of the newly born.

To Henry F. Vaughan, Detroit Department of Health, Detroit, for excellence of presentation of exhibit illustrating plan of medical participation of the general practitioner in a public health program.

In addition, the following exhibits are deemed worthy of Honorable Mention: