of such products on the human organism and to cooperate with associations and scientific societies in the development of methods of analysis, $195,947.

For investigation and experiment in the utilization, for coloring, medicinal and technical purposes, of raw materials grown or produced in the United States, in cooperation with private interests as may be necessary, including building matters on the Arlington farm, $72,921.

For investigation and development of methods for the manufacture of table sirup and sugar and of methods for the manufacture of sweet sirups by use of new agricultural sources, $35,234.

For investigation and development of methods of manufacturing insecticides and fungicides and for investigating chemical problems relating to their composition, action and application, $34,800.

Investigation and development of methods for prevention of farm fires and of grain-dust, smut-dust and other plant-dust explosions and resulting fires, including fires in cotton gins and cotton-oil mills, $42,743.

Investigation and demonstration of improved methods or processes of preparing naval stores, etc., $10,000.

Chemical investigations of soil types, compositions and minerals, soil solution, solubility of soil formation, soil texture and soil productivity, $26,720.

Physical investigations of the important properties of soil which determine productivity, such as moisture relations, aerations, heat conductivity, texture and other physical investigations of the various soil classes and soil types, $17,225.

Investigations within the United States of fertilizers and other soil amendments and their suitability for agricultural use, $278,940.

Investigation of soils in cooperation with other government offices and mapping such investigations, $237,515.

Soil bacteriology investigations, $40,840.

Soil fertility investigations, $71,200.

Plant Industry

Pathological laboratory, $108,440; orchard diseases, including pecan diseases, $142,705; citrus canker investigations, $45,000; forest pathology, $131,160; blister-rust control, $471,520; crop physiology, $150,570; plant nutrition, $16,780; crop acclimatization, $200,800; crop technology, $54,340; investigation of plants yielding drugs, spices, poisons, oils, etc., $58,200.

Seed-testing laboratories, $64,538; cereal investigations, $737,200, including $375,000 to destroy barberry bushes, etc.; tobacco investigations, $58,740; alkali and drought-resistant crops, $23,900; sugar-plant investigations, $171,255; investigations and use of wild plants, grazing and weed control, $45,380.

Dry-land agriculture, $208,050; Western irrigation agriculture, $109,095; nut culture, $29,040; experimental gardens and grounds at Washington, D. C., $89,500; horticulture, $115,000; nursery stock investigations, $21,800.

Department of Agriculture farm at Arlington, Va., $57,000; foreign seed and plant introduction, $182,300; forage crop investigations, $120,500; biophysical investigations, $35,812.

Biological Survey

For maintenance of the Montana National Bison Range and other game reservations, $54,000.

Investigation of "the food habits of North American birds and other animals," including rearing fur-bearing animals, cooperation in destroying mountain lions, wolves, bob cats, coyotes, prairie dogs, gophers, ground squirrels, jack rabbits and animals injurious to agriculture and to protect stock by suppression of rabies in predatory wild animals, $568,000.

For acquisition of land and water for the Upper Mississippi River Wild Life and Fish Refuge, $30,000, being part of $1,500,000 authorized under previous laws. The bill authorizes the secretary of agriculture to incur obligations and contract for lands within the $1,500,000 total limitation.

RESULTS OF THE SUBARCTIC EXPEDITION OF THE FIELD MUSEUM

A REPRESENTATVE collection of natural history specimens of the subarctic, including a wide variety of zoological material, ranging from small worms weighing a few grains to a 1,500 pound walrus, was secured by the Rawson-MacMillan Subarctic Expedition of the Field Museum for 1926, according to an announcement by D. C. Davies, director of the institution. It was the first Field Museum expedition to the subarctic, and was led by Commander Donald B. MacMillan.

There are approximately 3,000 zoological, ethnological, geological and botanical specimens in the collection, which, added to the Pacific Eskimo material already on exhibition, gives the museum a more adequate representation of the natural history and ethnology of the subarctic.

The zoological collection includes some 650 fishes taken off of the coasts of Labrador and Greenland, as well as from lakes and ponds; worms, jelly fish, sea urchins, star fish, insects of all sorts and many small mammals, ranging from deer mice to lemmings, and a red fox.

Subarctic birds brought back to the museum include pigeon hawks, gyrfalcons, gulls, loons, ducks, geese, ravens, jaegers, arctic terns and other birds.

The ethnological collection in large part is from the Greenland Eskimo, with a smaller collection from the Labrador and Baffinland Eskimo. The material from the Greenland Eskimo, chiefly of the northwest coast, contains many beautiful feather mats and a large blanket of the type made for the royal family of Denmark, composed of vari-colored skins of many sea birds. Another outstanding acquisition is a completely outfitted Greenland kayak, some sixteen feet long, equipped with bone-tipped paddle, harpoon, throwing-stick, killing-lance, sealskin float and bone sack for harpoon line.

In addition the collection contains carved wooden models of natives in full costume, bone and steatite carvings of animals, models of kayaks showing their construction, models of snow huts, clothing, utensils of daily life and hunting equipment. They were all made by Eskimo craftsmen, and many of them are old and rare pieces.

The department of geology received more than 500 specimens of rocks from Labrador and west Greenland, while the botanical department obtained a variety of arctic plants, including little Arctic trees about the size of small shrubs.

ADDITIONS TO THE BOTANICAL LIBRARY OF THE SMITHSONIAN INSTITUTION

WHAT is said to be the most valuable botanical gift ever made to the Smithsonian Institution has reached Washington, arriving twenty-two years after its presentation. This is the botanical library of Captain John Donnell Smith, of Baltimore, consisting of some 1,600 bound volumes.

Captain Smith, who at the age of ninety-seven years is the oldest of American botanists, presented his library and also his plant collection of more than 100,000 specimens to the Smithsonian Institution in 1905, when he was seventy-five, with the understanding that he would retain them for his own studies as long as he wished. Though still active, Captain Smith desires to have his books installed at the present time in the institution, where they will be kept as a unit library.

The library includes books which are not duplicated in Washington, and at least one rare work of which there is no other copy in the United States. This is a volume by Gomez Ortega, published at Madrid, in 1797, which contains the first published descriptions of many important Mexican plants. An American botanist once made a typewritten copy of this book's many pages, in order to have the descriptions immediately at hand.

The library is particularly rich in works describing tropical American plants, especially those of Central America, a field in which Captain Smith has specialized. Many of the volumes were sent to England for binding. In 1908 the Smithsonian published a catalogue of the entire library, compiled by Alice Cary Atwood, of the Department of Agriculture.

At the time of presentation to the Smithsonian, Captain Smith's plant collection was the finest in existence for Central America. It is of great scientific importance because it includes many types. It contains, also, many valuable sets of plants from remote parts of the world. From China is a series of several thousand specimens prepared by the Irish botanist, Henry; from Tibet and central Asia, the Schlaginweig herbarium; from Syria, the Post collections, and there are from India, Australia, Europe and Africa other sets of almost equal importance. About half the herbarium was turned over to the Smithsonian several years ago, and has been the basis of much work by the institution's botanists.

Captain Smith became an honorary associate of the Smithsonian Institution many years ago. Born in 1829, he is the oldest living graduate of Yale, being a member of the class of 1847. His interest in botany dates from 1874. He was a close friend of Asa Gray and Sereno Watson, of Harvard University, and of Sir Joseph Hooker, who was long director of the Royal Botanic Gardens, Kew.

THE GEORGE HERBERT JONES RESEARCH LABORATORY AT THE UNIVERSITY OF CHICAGO

FURTHER information has been received regarding the recently announced gift of $415,000 to the University of Chicago for the equipment and endowment of chemical research. The donor, Mr. George Herbert Jones, is director of the Inland Steel Company and president of the Hillside Fluor Spar Mines, an Illinois corporation organized in 1921.

Plans are already under way at the university for the construction of the George Herbert Jones research laboratory, which is to be the first unit of new laboratories devoted to fundamental investigations in chemistry and its relation to medicine and industry.

When the full building program has been completed, Kent Chemical Laboratory will be used wholly for undergraduate work and all of the graduate work will be housed in the new buildings. These proposed extensions will also provide opportunity for developing research in fields of chemistry not now intensively cultivated at the university, such as photosynthesis, metallurgy, colloid chemistry and synthetic organic chemistry.

The new laboratory, provided for by Mr. Jones, will be used exclusively for the investigational work of the staff and the fifty to eighty research students normally enrolled in the department. The laboratory, according to Professor Julius Stieglitz, chairman of the chemistry department, will be characterized by small and private rooms in which expensive and elaborate apparatus can be built up and used without disturbance, and by special laboratories for work at constant temperatures, with high potential electric currents, for continuous night and day work, etc. Provision has been made by the donor for up-to-date equipment and for endowment for future needs of equipment.