One such motive is this: No man, no company, no industry can do business to-day without the aid of the priceless heritage of science and skill which has come down to it all the way from Tubal Cain to Arthur Compton without a cent of direct cost. Take away Faraday's work and where would the electrical industry be? There's a moral debt to be paid, and the best way to pay it is through the schools of applied science. Then, too, much of to-day's wealth is coming from natural resources we can never replace. Every pound of coal or iron, every gallon of oil, every foot of natural gas we consume makes it just that much harder for our children and their children to make a good life. This is going to hit Cleveland, which owes so much of its wealth and greatness to these resources, unless it builds up resources in science and skill to take their place. That is the way to make good to the future for what we are using up to-day, to build up science and skill.

An institute of applied science, such as Case, really asks nothing for itself. Every cent goes back to the community and the nation with its value multiplied, to make to-day's living better and to-morrow's future more secure.

## THE AMERICAN ACADEMY OF OPHTHAL-MOLOGY AND OTOLARYNGOLOGY

DR. FRANK R. SPENCER, of Boulder, Colo., was chosen president-elect of the American Academy of Ophthalmology and Otolaryngology at the annual session held in Chicago on October 11. He will succeed Dr. Frank E. Brawley, of Chicago, when the latter becomes president of the academy on January 1. Dr. Spencer is a graduate of the University of Michigan Medical School and has been a member of the faculty of the University of Colorado School of Medicine since 1905.

The academy decided to act as sponsor for a proposed Pan American congress of ophthalmology and otolaryngology. South American physicians attending the meeting in Chicago will arrange for the attendance of delegates from their respective countries to such a congress to be held in connection with the next meeting of the academy. It is understood that invitations to each of the countries concerned will have the sanction of the Department of State and will be forwarded through diplomatic channels.

Other officers elected were Drs. Arthur W. Proetz, St. Louis, first vice-president; Joseph F. Duane, Peoria, Ill., second vice-president, and Charles T. Porter, Boston, third vice-president; Secord H. Large, Cleveland, comptroller, and William P. Wherry, Omaha, Nebr., executive secretary, reelected. Dr. Erling W. Hansen, Minneapolis, was elected secretary for public relations, succeeding Dr. Ralph A. Fenton, Portland, Ore., who resigned. The following secretaries were reelected: Drs. William L. Benedict, Rochester, Minn., for ophthalmology; John L. Myers, Kansas City, Mo., for otolaryngology; Dean M. Lierle, Iowa City, for instruction in otolaryngology, and Albert D. Ruedemann, for instruction in ophthalmology. Dr. Albert C. Snell, Rochester, N. Y., was elected a member of the academy's governing council, and Dr. Frederick C. Cordes, San Francisco, to represent the academy on the American Board of Ophthalmology.

The academy continued the following appropriations for research: Dr. Olof Larsell, University of Oregon Medical School, Portland, \$400 for research on development of the internal ear; Dr. M. H. Lurie, Harvard Medical School, Boston, \$400 for research on the balancing apparatus of the ear, and for the Army Medical Museum at Washington, D. C., \$1,500 for maintaining collections of pathological specimens in diseases of the eye, ear, nose and throat. An appropriation of \$1,500 was also made for the establishment under the supervision of the academy of reading courses for young physicians serving as residents in hospitals who are preparing for specialization in diseases of the eye, ear, nose and throat. A grant of \$400 was made to Dr. Spencer for research on the action of drugs on tubercle bacilli in the nose and throat. The committee on physiological optics received \$50 and the committee on orthoptics \$200.

## SCIENTIFIC EXPEDITIONS

THE expedition sponsored by the National Geographic Society and the University of Virginia with the U.S. Coast Guard cooperating, which was to have sailed from San Francisco on September 19 on the Coast Guard cutter Hamilton has been postponed. The Hamilton has been ordered to Atlantic waters as part of the coast patrol. In preparation for the expedition tons of scientific equipment had been shipped to the Pacific Coast to be loaded on the Hamilton, and members of the expedition had spent months of intensive work in preparing apparatus for studying geology, magnetism of the earth, variations in gravity, earthquakes, marine biology, weather, ocean currents, and for collecting samples of the ocean bottom from great depths. The expedition was planned to conduct the most extensive program of scientific work so far attempted in the region of the Pacific Islands. Professor Wilbur A. Nelson, leader of the expedition, is returning to his work as professor of geology at the University of Virginia, to await conditions better suited to scientific research on the high seas.

THE second Fahnestock expedition to the South Seas of the American Museum of Natural History, organized by Bruce and Sheridan Fahnestock, will leave New York in the near future in the three-masted auxiliary schooner *Director II*. In addition to collecting material for six habitat studies for the new Whitney Memorial Bird Hall and specimens of fish, insects and minerals, islands out of position on existing charts will be remapped. It is expected that the ex-

A six months' expedition to make a comprehensive collection of the plants of Guatemala for the herbarium of the Field Museum of Natural History left Chicago on September 27 under the direction of Dr. Julian A. Steyermark, assistant curator of the herbarium, who sailed on the steamship Ulm from New Orleans. The expedition is sponsored by Stanley Field, president of the museum. It is planned to explore the little known Oriente area in the departments of Chiquimula, Jutiapa and Jalapa. Work in the desert area around Zacapa will be carried out during the rainy season, and Dr. Stevermark expects to find a number of unusual species of plants. The expedition then plans to move into the Sierra Madre region of western Guatemala, in the provinces of San Marcos and Huehuetenango. Particular attention will be devoted to the flora of the Tajumulco volcano, and collecting is contemplated in the district around Mazatenango.

## FIELD WORK OF THE U. S. GEOLOGICAL SURVEY

AMONG the members of the Geological Branch who have recently returned to Washington, D. C., after completing their season's field work on the projects indicated, are the following:

S. R. Capps, who studied the structural history of westcentral Idaho in its relation to the gold placer deposits.

H. G. Ferguson, who continued studies of structural and stratigraphic problems in Nevada and completed preliminary mapping of the western and central parts of the Sonoma Range quadrangle.

T. A. Hendricks and Paul Averitt, who investigated the

geology and oil possibilities in the western part of the Ouachita Mountains, Okla.

A. A. Baker, who studied the phosphate and coal resources and oil and gas possibilities in the southern Wasatch Mountains, Utah.

W. P. Woodring, who examined the geology and oil resources in the Santa Maria district, Calif.

W. C. Warren, who, with the aid of aerial photographs, mapped about 1,150 square miles of coal lands in southeastern Montana.

D. A. Andrews, who completed his fourth season of study of the stratigraphy, structure, economic geology and geomorphology along the northeast flank of the Bighorn Basin, Wyoming and Montana.

C. B. Hunt, who completed his fifth and final season of investigating the geology of the Henry Mountains, Utah, and examined gold placer gravel deposits and unusual erosion features in the canyon of the Colorado River between Hite and Lee's Ferry.

Members of the Alaskan Branch have completed the season's field work in Alaska and have returned to Washington for the office and laboratory studies required to put their resulting maps and notes into shape for publication. F. H. Moffit examined the eastcentral part of the Alaska Range, embracing principally the country between Delta and Johnson Rivers. J. C. Reed carried on geological surveys in the northwestern part of Chichagof Island, southeastern Alaska. J. B. Mertie, Jr., investigated the potential tin fields of western Seward Peninsula. Gerald Fitzgerald made extensive topographic surveys in the vicinity of Porcupine River from Fort Yukon to the Canadian Boundary. T. V. Ranta revised much of the early exploratory mapping of the country between Nabesna and Chisana Rivers, near the head of Tanana River. Philip S. Smith inspected a number of the more accessible mining districts in central Alaska, and collected information as to new mining developments in progress.

## SCIENTIFIC NOTES AND NEWS

THE Royal Society, London, according to a wireless report in *The New York Times*, awarded on November 2 the Copley Medal to Professor Thomas H. Morgan, director of the William G. Kerekhoff Laboratories of the California Institute of Technology, for his work in genetics, and the Davy Medal to Dr. James W. McBain, professor of chemistry at Stanford University, for his work in colloid chemistry.

THE Sedgwick Memorial Medal, awarded for distinguished service in public health, was presented to Dr. Thomas Parran, Jr., Surgeon General of the United States Public Health Service, on October 17 at the sixty-eighth annual meeting of the American Public Health Association in Pittsburgh. Dr. Milton J. Rosenau, director of the Division of Public Health of the School of Medicine of the University of North Carolina, made the presentation.

DR. FRANCIS CARTER WOOD, director of the Institute of Cancer Research of Columbia University, was presented with the Clement Cleveland Medal for 1939 at the annual dinner of the New York City Cancer Committee.

A CITATION for distinguished service to agriculture was presented to Dean Emeritus F. B. Mumford, of the Missouri College of Agriculture, at the annual banquet on November 2 of the Association of Alumni and Former Students. The banquet was held on the last evening and formed part of the centennial celebration of the university.