Chattanooga, Cleveland and Knoxville, to Jellico, numerous stratigraphic sections of the Paleozoic beds were measured and many structure sections of the Southern Appalachians were made. On a side trip from Cleveland to Ducktown, Copper Hill and beyond, Archeozoic and Proterozoic beds were examined. In addition, coal, iron, zinc and copper mines; dolomite, limestone, slate and marble quarries; and iron, aluminum, and acid (industrial) plants were visited.

Across central Kentucky, the Blue Grass region of horizontally-bedded limestones was traversed. From Cincinnati to Columbus and thence across southeastern Indiana to New Albany, the glaciated area was studied. In western Kentucky, from Louisville to Mammoth Cave and Bowling Green, the cave and sink topography was almost continuously under observation. Thence the beautiful Blue Grass region of Tennessee, the phosphate mines about Nashville, the Wilson Dam power project at Muscle Shoals, and finally home.

From seats of vantage in the trucks, which passed across the plains, down into the valley depths, and over the mountain tops, the ever present and continuous opportunity was one of unobstructed vision. Under such conditions on this trip from a Gulf state to a Great Lakes state and back over a different route, obviously the great thing was the study of some of the larger phases of geology. Especially is this true of that part which may be termed geologic control of industrial environment. It was the major feature of the trip.

The tour aroused considerable interest among members of geologic departments of a number of universities and in deference to their requests it may be appropriate to mention something about the equipment, expense, etc. The two trucks were one-ton, high-gear Fords, equipped with bodies especially designed for field trips about the college. Three of the four seats were removed from one of the cars and in it the baggage and camp equipment were carried, while the other one was used as a passenger car. Only the maintenance (gasoline, repairs, etc.) cost, which scarcely exceeded the original individual deposit of twenty-five dollars, was charged to the members of the party, consisting of two instructors, Professors Morse and Vestal, and ten students. The living expense was approximately the same amount.

W. O. M.

REPORT OF THE DIRECTOR OF THE NEW YORK BOTANICAL GARDEN

IN his annual report to the board of managers Dr. N. L. Britton, director-in-chief of the New York Botanical Garden, stressed the need of funds to more completely develop the usefulness of the garden, commented on the greatly increased interest in plants of all kinds and spoke of the difficulty of preserving the beauty of the natural features of the reservation with the constantly growing number of visitors and with what he characterized as insufficient police supervision.

The following officers were elected to the Board of Managers: Dr. Frederic S. Lee, *president;* Henry W. de Forest and Frank L. Sturgis, *vice-presidents;* John L. Merrill, *treasurer;* Henry de la Montague, Jr., *assistant treasurer;* Dr. N. L. Britton, *secretary.* For the last three years Dr. Lee has served as vice-president of the board.

Dr. Britton's report deals with the progress made in the improvement of the grounds, in the increase, development and study of the collections of plants, specimens and books and in educational and scientific work. A somewhat insufficient force of gardeners and laborers also has militated against the more perfect maintenance of the older plantations.

The collections are now among the largest and most important anywhere, but their extended usefulness and increase, the further development of the reservation of nearly 400 acres, the completion of the buildings and the extension of educational and scientific work require more funds than as yet have been made available.

Approximately 16,000 kinds of plants have been in cultivation during the year, about 9,000 of which were under glass and 7,000 outdoors. The increase of the record over 1921 is largely covered by the planting in the iris garden and the new rock garden. The garden had the cooperation of the American Iris Society in the work in the iris garden; Mrs. Mortimer J. Fox and T. A. Havemeyer gave their aid in increasing the collections of lilies, Mr. Havemeyer also

contributing a valuable series of lilacs. Messrs. Bobbink and Atkins, in continued cooperation with the Horticultural Society of New York, gave 2,700 plants for the rose garden.

In the rock garden the arrangement of gravel and top soil and the planting of over 400 kinds of plants, including over 5,000 individuals, have been largely the work of Dr. E. B. Southwick, custodian of herbaceous grounds.

The rearrangement of the cactus collection and the improvement and development of the southern part of the garden reservation along Pelham Parkway also are dealt with in the report. The latter was carried forward at two points. One of these lies east of the mansion approach entrance, where about 350 feet of the boundary wall and fence have been built. The other area lies between the iris garden entrance and the Bronx River, where some 400 feet of the boundary wall and fence, including piers for the hemlock grove path entrance, built from the bequest of Emma Chambers Jones, grading and drainage have been done and some 400 feet of path system partly built and a screen of trees planted.

Appended reports were made by Dr. H. A. Gleason, assistant director; Dr. John K. Small, head curator; Dr. Murrill, supervisor of public instruction; Kenneth R. Boynton, head gardener; Dr. A. B. Stout, director of laboratories; Dr. Henry H. Rusby, honorary curator of the economic collection; Mrs. N. L. Britton, honorary curator of mosses, and others of the staff.

SCIENTIFIC NOTES AND NEWS

AT the recent meeting of the Geological Society of America, at Ann Arbor, David White, who recently retired as chief geologist of the United States Geological Survey, was elected president. The following vice-presidents were elected: William H. Hobbs, William H. Emmons, T. Wayland Vaughan, Edgar T. Wherry.

PROFESSOR M. F. GUYER, chairman of the department of zoology of the University of Wisconsin, was elected president of the American Society of Zoologists at the recent Boston meeting.

THE Society of American Bacteriologists has elected the following officers for 1923: Professor E. G. Hastings, University of Wisconsin, *president;* Major A. Parker Hitchens, U. S. Army Medical School, *vice-president;* and Dr. J. M. Sherman, U. S. Department of Agriculture, *secretary-treasurer.*

AT the annual meeting of the American Physiological Society at Toronto, December 27, 28, and 29, 1922, the officers elected were: Professor Anton J. Carlson, University of Chicago, *president;* Professor Charles W. Greene, University of Missouri, *secretary;* Professor Joseph Erlanger, Washington University, St. Louis, *treasurer;* Professor Arno B. Luckhardt, University of Chicago, and Professor John R. Murlin, University of Rochester, were elected to the council.

DR. ELSIE CLEWS PARSONS has been elected president of the American Ethnological Society, New York.

SECRETARY HOOVER has designated Dr. Fay C. Brown, assistant director of the Bureau of Standards, to be acting director.

SIR WILLIAM H. BRAGG, Quain professor of physics in the University of London, has been elected a corresponding member of the Paris Academy of Sciences in the section of physics.

PROFESSOR J. SCHUR, mathematician of the University of Berlin, has been elected a member of the Berlin Academy of Sciences.

AS DR. CHAUFFARD, professor of clinical medicine at the School of Medicine, who has been the vice president of the Paris Academy of Medicine, has become president for the year 1923, in accordance with the constitution, the academy has elected Dr. J. A. Dolèris vice president. Dr. Dolèris is an honorary obstetrician to the hospitals of Paris. The academy also elected Dr. Souques as annual secretary, and Professors Pouchet and Schwartz as members of the administrative council.

RICHARD V. AGETON, of the Bureau of Mines, who has been doing examination work for the War Minerals Relief Commission, is acting as assistant chief mining engineer of the bureau.

DR. P. V. WELLS of the optics division of the Bureau of Standards has resigned to take up research work for the E. I. du Pont de Nemours Company, Parlin, New Jersey.

JEROME ALEXANDER, M.Sc., has now an office in the Chemists Building, New York City, as