H. S. Holmes, Petersburg High School, Petersburg.
Miss Martha Lipscomb, Thomas Jefferson High School,
Richmond.

W. I. Nickels, Jr., Lane High School, Charlottesville.

VIRGINIA ACADEMY OF SCIENCE SPONSORING

Professor J. A. Rorer, *chairman*, director, Extension Division, University of Virginia.

Dr. George W. Jeffers, vice-chairman, State Teachers College, Farmville.

L. F. Addington, Wise.

L. C. Bird, president, Phipps and Bird, Inc., Richmond. Francis S. Chase, executive secretary, Virginia Education Association, Richmond.

Dr. I. A. Updike, Randolph-Macon College, Ashland.

The junior academy will meet with the senior academy at the regular annual meeting, have a program of its own and present exhibits of the work done by members of the science clubs. It is hoped also to have exhibits at the Thanksgiving meeting of the Virginia Education Association in Richmond. The senior academy plans to foster and assist these science clubs in any way it can and to encourage the development of more clubs.

Members of the junior academy will eventually become members of the senior academy, and will gradually take their places as leaders in the scientific life of the state.

## SUMMER WORK IN BOTANY OF THE UNIVERSITY OF MICHIGAN

This year, owing to international conditions, members of the faculty of the University of Michigan, according to the Alumni Journal, are confining their activities largely to work in the United States. The summer camps include the Biological Station, Douglas Lake; Camp Davis, Jackson Hole, Wyo., where work is being done in surveying, geology and botany; Camp Filibert Roth, the forestry station at Golden Lake, and the camp at Wilderness Park, near Mackinaw City, where a field course in geography is being offered.

Members of the department of botany are engaged in trips to areas from Alaska to Panama. Professor Harley H. Bartlett, department chairman, and Tobias Lasser have gone to the Chagres River, Panama, for malaria investigations; Professor D. V. Baxter will make a collecting trip to Alaska. Other collectors include Professor F. M. Pagan, who will collect in Mexico; Professor C. A. Arnold, in Colorado; Professor B. M. Davis, in Oregon; Dr. J. L. Baldwin, Jr., in the mountains of West Virginia, North Carolina, South Carolina and Georgia, and Dr. E. U. Clover, in the Havasupai Canyon, Ariz. Professor W. R. Taylor will be at the Woods Hole Marine Biological Laboratory. After spending the college year at the University of Puerto Rico, where he collected mosses

and liverworts, Professor W. C. Steere will devote the summer to work at the Biological Station at Douglas Lake. Professor L. E. Wehmeyer will be at Camp Dayis.

Members of the Forestry and Conservation School are doing experimental work at the Chase S. Osborn Preserve at Sugar Island and at "Ringwood," near St. Charles. Professors W. F. Ramsdell, L. J. Young and others are engaged in this study. In addition, Professors E. C. O'Roke and S. A. Graham are engaged in research at and near Camp Filibert Roth; Professor D. M. Matthews is carrying on research on the relation between logging costs and forest management on the Pacific coast and in the "Inland Empire"—Idaho, Washington and Montana; Professor S. W. Allen is leading two expeditions for the American Forestry Association in the Rocky Mountain region, and Professor D. V. Baxter is conducting a study and collection of fungi in Alaska.

From the University Herbarium, Dr. E. B. Mains is studying the fungi of the Colorado mountains; Dr. and Mrs. C. L. Lundell, the flora of Texas, and Dr. A. H. Smith, Michigan fungi.

## THE BROWN UNIVERSITY ECLIPSE EXPEDITION

An attempt to prove definitely that the zodiacal light of the sun can be photographed during a total eclipse will be made by an expedition to South America headed by Professor Charles H. Smiley, chairman of the department of astronomy of Brown University, to observe the eclipse of October 1.

The expedition, which is sponsored also by "the Skyscrapers," an amateur astronomical society of Providence, R. I., will set up high-speed cameras near the village of Quixeramobim, Brazil, at the eastern shoulder of South America about 100 miles northwest of Pernambuco. At this point the total eclipse will occur at 10 A.M., and will last for nearly five minutes.

Accompanying Professor Smiley will be Mrs. Smiley and Arthur A. Hoag, of Barrington, R. I., a junior at the university. Dr. Alice Farnsworth, head of the department of astronomy at Mount Holyoke College, may join the group in South America. Good weather is anticipated, since it seldom rains or is even cloudy in Quixeramobim in October.

Although only three other astronomers have reported seeing the zodiacal light during an eclipse of the sun, Professor Smiley photographed what he describes as "similar phenomena" during the total eclipse of June 8, 1937, when he took pictures from a vantage point high up in the Peruvian Andes. These showed a double wedge-shaped light area fanning out from above and below the sun, and extending at least 25 times the diameter of the sun into space. It was cen-

tered along the ecliptic. The phenomenon was distinctly separate from the corona. Professor Smiley hopes to verify these results, and to obtain more conclusive photographs on his forthcoming expedition. He is especially interested in determining whether the zodiacal light can be seen and photographed at sea level. Other observations, including his own in Peru, have been made from altitudes of at least 14,000 feet.

Two astronomical instruments recently devised, the coronograph and the coronavisor, now permit astronomers to view the bright inner corona of the sun at any time, but an eclipse is still necessary to see the outer corona and the fainter zodiacal light.

The expedition plans to leave Providence about August 15. With the European war eliminating many steamer routes, it will probably take a boat for Rio de Janeiro, and then retrace its route *via* the coast of Brazil, either by land, air or water, to Quixeramobim.

CORRESPONDENT

## THE DETROIT MEETING OF THE AMER-ICAN CHEMICAL SOCIETY

The American Chemical Society will meet in Detroit from September 9 to 13. All divisions will be represented on the program. According to the announcement of the society nineteen symposia have been planned.

The Division of Agricultural and Food Chemistry is sponsoring a symposium on Fruits and Fruit Products and another on Animal Nutrition, the latter emphasizing phases other than vitamin chemistry. It is joining with the Division of Fertilizer Chemistry in celebrating the one hundredth anniversary of Liebig's paper on Agricultural Chemistry. The papers to be given will evaluate the significance of Liebig's contributions in the light of modern agricultural chemical concepts. The Division of Biological Chemistry has organized a program on vitamins and nutrition in which the Division of Agricultural and Food Chemistry will cooperate. Two sessions will be held for presentation of papers on miscellaneous subjects within the field of the division.

The Division of Biological Chemistry is planning symposia on phases of the protein problem; tentatively, titles selected are Aspects of Intermediary Protein Metabolism and Aspects of Sulfur and Protein Metabolism. The usual program on vitamins and nutrition will be held jointly with the Divisions of Agricultural and Food Chemistry and Medicinal Chemistry.

The Division of Cellulose Chemistry will meet for three general sessions.

The Division of Chemical Education in two symposia will discuss the first two years of college chemistry and chemistry in the high school.

The Division of Colloid Chemistry will present a program of diversified papers.

The Division of Fertilizer Chemistry will sponsor a

symposium on Liebig in which his contributions to agricultural and fertilizer chemistry will be discussed. This program commemorates the one hundredth anniversary of Liebig's epoch-making address before the British Association for the Advancement of Science. The Division of Agricultural and Food Chemistry will join in this celebration. A program of general papers will be offered.

The Division of Gas and Fuel Chemistry has arranged two sessions of miscellaneous papers and a symposium on Atmosphere Conditioning for Metallurgical and Chemical Processes.

The Division of the History of Chemistry will offer a short program of miscellaneous papers.

The Division of Industrial and Engineering Chemistry has organized three symposia: Glass—What Is Old? What Is New? under the chairmanship of Alexander Silverman; New Textile Fibers, Fabrics, and Finishes under the leadership of Gustavus J. Esselen, and Unit Processes under the direction of R. Norris Shreve.

The Division of Medicinal Chemistry will cooperate with the Divisions of Agricultural and Food Chemistry and Biological Chemistry in a program on vitamins and nutrition. It also is sponsoring a symposium on Methods for the Standardization of Drugs and a program of general papers.

The Division of Microchemistry will meet for two sessions of miscellaneous papers.

The Division of Organic Chemistry will hold six sessions for the reading and discussion of papers.

The Division of Paint and Varnish Chemistry is arranging one session for papers on resins and plastics, two on paint and varnish and another symposium on Automotive Finishing.

The Division of Petroleum Chemistry is featuring an extensive symposium on Petroleum Chemistry's Contribution to the Automotive Field. This will not only include the better known uses for power and lubrication, but will consider uses of petroleum products in coatings, plastics, shock absorbers, etc.

The program of the Division of Physical and Inorganic Chemistry includes three symposia: The Transfer of Energy in Molecular Collision; Chemical Equilibrium at High Pressures and Elevated Temperatures, and Fluorine Chemistry. Sessions will be available for papers on physical, inorganic and analytical chemistry. The division will meet, as usual, for dinner.

The Division of Rubber Chemistry is sponsoring a symposium on Rubber in the Automotive Industry to be held on Thursday. Ample opportunity will be provided on the following day for the presentation of other papers on rubber chemistry. The division will hold its banquet on Thursday evening in the Book-Cadillac Hotel. W. J. Cameron, of the Ford Motor Company, will be the speaker.

The Division of Sugar Chemistry and Technology will have a program of miscellaneous papers in two sessions.

The Division of Water, Sewage and Sanitation Chemistry plans three general sessions. On Thursday the members will visit the Springwells Filtration Plant, the Detroit Sewage Plant and the Dearborn Sewage Plant. Lunch will be served at the Dearborn Inn, followed by a short visit to Greenfield Village.