There is no better way of getting a good grasp of your subject, or one more likely to start more ideas for research, than teaching it or lecturing about it, especially if your hearers know very little about it, and it is all to the good if they are rather stupid. You have then to keep looking at your subject from different angles until you find the one which gives the simplest outline, and this may give you new views about it and lead to further investigations. I believe, too, that new ideas come more freely if the mind does not dwell too long on one subject without interruption, but when the thread of one's thoughts is broken from time to time. It is, I think, a general experience that new ideas about a subject generally come when one is not thinking about it at the time, though one must have thought about it a good deal before.

J. J. Thomson was born at Cheetham Hill, near Manchester, England, on December 18, 1856. He attended Owen's College, Manchester, in the 70's, and entered Trinity College, Cambridge University, in 1876. With Kelvin and Clerk Maxwell he formed one of an illustrious trio, none of whom succeeded in being Senior Wrangler. He was Second Wrangler and Second Smith's prize man in 1880, and he was elected as a fellow of Trinity College in the same year. In 1883 he was made lecturer at the college. In 1884 he became a fellow of the Royal Society, of which he was president from 1916 to 1920. From 1884–1918 he was Cavendish professor of experimental physics at Cambridge University, from which position he retired to become master of Trinity College. Naturally he was the recipient of numerous honors and distinctions, the author of countless papers and of several books, the most famous of which is his "Conduction of Electricity through Gases."

When a man dies one thinks of the spirit as vanishing and only of the body as remaining; but in the case of J. J. Thomson there is much of the reverse in the picture, for the spirit of the great leader is the thing which, born to science half a century ago when he founded his new school, lives still in his students and in their students, a spirit enthroned for all time in the empires of natural philosophy.

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SCIENTIFIC EVENTS

SCIENTIFIC DEVELOPMENTS IN THE U.S.S.R.

Nature gives the following information concerning the new botanical gardens in Armenia and the construction of a cyclotron in Moscow.

The construction of a powerful cyclotron, capable of producing 50 million electron volt deuterons, will be commenced in Moscow early in 1941, according to a decision of the Academy of Sciences of the U.S.S.R., based on a report submitted by the Physical Institute of the Academy. A magnet, the core of which weighs about 1,000 tons and solenoid of 18 tons, is to be installed. A special building to house the cyclotron will be erected in the grounds of the new home of the Physical Institute of the Academy, being built on the Bolshaya Kaluzhskaya Ulitsa in Moscow. The old apparatus in the Soviet Union, which is in the Radium Institute of Leningrad, is capable of giving an energy of 4 million electron volts to particles; another, nearing completion at the Physico-Technical Institute, also in Leningrad, will be capable of imparting an energy of 10–12 million electron volts.

New botanical gardens, attached to the Armenian Branch of the Academy of Sciences of the U.S.S.R., were recently opened in Erivan, capital of the Soviet republic of Armenia. The gardens, which have some three thousand species of plants, have grown up during the course of five years on the dry, stony, desert soil between the settlements of Avan and Kanaker, near Erivan, which has been reclaimed. One of the most interesting departments of the gardens is the section devoted to the plants of Armenia. Ultimately, some 2,600 specimens of the flora of this republic will be collected there; the section already has 350 specimens. In the center of this section has been built a pond, resembling the high mountain lake of Sevan. In the pond have been planted specimens of water plants of Armenia. In the southern part of the gardens the Geographical Department is concentrated. More than half the area of the gardens is occupied by arboreal plants. The flower gardens are exceptionally rich; in the Avenue of Roses and Fountains more than a hundred varieties of roses have been planted.

THE DIVISIONAL PROGRAMS FOR THE ST. LOUIS MEETING OF THE AMERICAN CHEMICAL SOCIETY

ACCORDING to the *News Edition* of the American Chemical Society, all divisions except the Division of Fertilizer Chemistry have programs planned for the St. Louis meeting, which will be held from April 7 to 11.

The Division of Agricultural and Food Chemistry is planning two symposia, one on "Fortification of Foods with Minerals and Vitamins" and the other on "Fats." The division plans to participate in the vitamin program

being arranged by the Division of Biological Chemistry. Time will also be available for general papers on agricultural and food subjects.

The new Division of Analytical and Micro Chemistry is planning six sessions for presentation of papers within the field of the division.

The Division of Biological Chemistry is again arranging its usual program of vitamin papers. It will also hold sessions for discussion of miscellaneous biochemical subjects.

The Division of Cellulose Chemistry will meet for two sessions devoted to general papers.

The Division of Chemical Education is again organizing a student program. In addition, the customary student breakfast will be held. The division will sponsor a symposium on "The Last Two Years of College Chemistry." It also plans sessions for miscellaneous papers within its field.

The Division of Colloid Chemistry will meet for two sessions of miscellaneous papers.

The Division of Gas and Fuel Chemistry will hold three sessions for the presentation of general papers and a symposium on "Smokeless Fuels and Air-Pollution Abatement."

The Division of the History of Chemistry plans two sessions of miscellaneous papers. Attention is directed to the fact that the division does not confine its interests to biography, but solicits papers on the historical aspects of all branches of chemistry. Non-members of the division are invited to contribute papers or exhibit historical books, manuscripts or apparatus.

The Division of Industrial and Engineering Chemistry is sponsoring a symposium on "New Engineering Technique." A program of general papers also will be arranged.

The Division of Medicinal Chemistry has arranged a symposium on "Some Current Projects in Medicinal Chemistry." Two sessions will be available for the prsentation of miscellaneous papers on medicinal chemistry.

The Division of Organic Chemistry will offer six sessions of papers.

The Division of Paint, Varnish and Plastics Chemistry is arranging a symposium on "Phenol-Formaldehyde Resins and Plastics." Sessions will be available for miscellaneous papers within the field of the division.

The Division of Petroleum Chemistry will sponsor a symposium on "Analytical Methods Used in the Petroleum Industry." Time will also be available for other papers on petroleum chemistry. This meeting will mark the twentieth anniversary of the founding of this division. The event will be appropriately celebrated at a special dinner Tuesday evening, April 8.

The Division of Physical and Inorganic Chemistry has organized symposia on "The Nomenclature of Inorganic Chemistry" and on "The Thermodynamics of Electrolytic Dissociation." Time will also be available for other papers within the field of the division. The division will meet for dinner on Monday evening, April 7. Authors are requested to note that papers on analytical chemistry, heretofore presented before this division, should now be submitted to the newly formed Division of Analytical and Micro Chemistry.

The Division of Rubber Chemistry will meet on Thursday and Friday for a program of papers on general subjects pertaining to rubber chemistry and technology and for a symposium on "New Developments in the Processing of Rubber."

The Division of Sugar Chemistry and Technology is scheduling papers describing contemporary work in the monosaccharide field, in commemoration of the appearance of Fischer's first papers on the sugars. In addition, time will be available for the presentation of miscellaneous papers within the field of the division.

The Division of Water, Sewage and Sanitation Chemistry will have two general sessions.

SCIENTIFIC MEETINGS

THE fifth annual meeting of the Association of Southeastern Biologists will be held in Auburn, Ala., on April 11 and 12 at the Alabama Polytechnic Institute, under the presidency of Professor Robert C. Rhodes, of Emory University. Accommodations are being provided in the dormitories; reservations should be made through Professor Reed O. Christenson, of Auburn. One portion of the program will consist of a symposium on "Biological Problems Affecting the Welfare of the Southeastern States." The leaders will be: Dean M. J. Funchess, of the College of Agriculture and Experiment Station, Alabama Polytechnic Institute; Dr. Charles N. Leach, International Health Division of the Rockefeller Foundation, and the Alabama State Board of Health; Dr. Benjamin Schwartz, U. S. Department of Agriculture, and Dr. A. E. Hopkins, U. S. Bureau of Fisheries. Abstracts of papers to be presented at the meeting must be in the hands of the secretary, Dr. Donald C. Boughton, Regional Laboratory, Auburn, not later than March 15.

THE thirty-fourth annual meeting of the American Home Economics Association will be held in Chicago, from June 22 to 26, with the Stevens Hotel as headquarters. This organization, founded in 1908, now has over 15,000 members scattered through fifty affiliated home economics associations in the United States, the District of Columbia and Puerto Rico, besides about 2,300 affiliated home economics student clubs in colleges and high schools. Dr. Gladys Branegan, dean of the division of household and industrial arts at Montana State College, is president of the association. Miss Frances L. Swain, director of household arts in the Chicago public schools, is chairman of the committee on local arrangements. The program is in charge of a committee whose chairman is Miss Lita Bane, head of the department of home economics at the University of Illinois. The exhibits will, as usual, include those by commercial concerns and by govern-