dresses will generally be accompanied by illustrations and in many cases by motion pictures. Other topics will be announced later.

An exhibit of scientific apparatus will be a prominent feature of the forthcoming Toronto meeting of the American Association. Preparations for the exhibit are in charge of a special committee, resident in Toronto, consisting of Professor E. F. Burton, chairman, Mr. L. E. Westman, secretary, Professor F. B. Kenrick and Professor R. B. Thomson. The University of Toronto will provide space for the exhibits, and exhibits of non-commercial institutions and private individuals will be exempt from a small charge made to commercial organizations to cover expenses. Those who contemplate taking part in this feature of the Toronto meeting should communicate with the secretary of the special committee.

REDUCED RAILROAD FARES for those attending the annual meeting of the American Association for the Advancement of Science at Toronto have been granted by four of the large passenger associations, which offer a rate of a fare and one-half, on the certificate plan, for the round trip. The railroad associations that have granted the reduced rates The Canadian Passenger Association, are: which includes practically all of the Canadian railroads; The New England Passenger Association, which includes the states of Maine, New Hampshire, Vermont, Massachusetts, Rhode Island and Connecticut; The Trunk Line Association, which includes the states of New York, Pennsylvania, Maryland, New Jersey, Delaware, Virginia (in part), West Virginia (in part) and the District of Columbia; and The Central Passenger Association, which includes the states of Ohio, Indiana, Michigan and Illinois. Effort is now being made to secure reduced rates from the other passenger associations. A complete list of railroads offering reduced rates will be given, together with instructions regarding the purchase of tickets on the certificate plan, in the preliminary announcement of the Toornto meeting.

SCIENTIFIC NOTES AND NEWS

DR. E. D. BALL has resigned as assistant secretary of agriculture. He will remain at the department as director of scientific work.

PROFESSOR MORTIMER ELWYN COOLEY, dean of the college of engineering and architecture of the University of Michigan, has been elected president of the American Engineering Council of the Federated American Engineering Societies.

SIR WILLIAM POPE has been elected an honorary fellow of the Canadian Institute of Chemistry.

DR. DWIGHT C. BARDWELL has left Berkeley, Cal., where he received his Ph.D. at the University of California, to accept a position as assistant physical chemist at the Rare and Precious Metals Station of the U. S. Bureau of Mines at Reno, Nevada. Dr. Bardwell will work under Dr. S. C. Lind on research problems presented by the radium at this station.

JAMES E. IVES has resigned his position as research associate and lecturer in physics at Clark University to become a physicist in the office of industrial hygiene and sanitation of the United States Public Health Service. His headquarters will be in Washington, D. C.

GL'ENN E. MATTHEWS has accepted a position as research chemist in the photographic department of the Eastman Kodak Co., Rochester, N. Y.

DIRECTOR H. FOSTER BAIN of the Bureau of Mines has appointed a board of engineers, consisting of Mr. M. H. Roberts, Dr. R. C. Tolman and Professor W. L. DeBaufre, to study the production of helium in Texas.

DR. LOUIS A. BAUER, director of the department of terrestrial magnetism of the Carnegie Institution of Washington, sailed from New York on October 5 to join the magnetic survey vessel, the *Carnegie*, at Balboa, Canal Zone. He will remain with her until the completion of the present cruise at Washington about the middle of November. Some special investigations are to be undertaken in the Caribbean Sea and Atlantic Ocean during the homeward trip. DIRECTOR A. A. JOHNSON, of the New York

State Institute of Applied Agriculture, who was in Armenia to study conditions for the establishment of industrial and agricultural schools, and later went to Moscow by the request of Secretary Hoover to take charge of the food administration of the surrounding famine area, has completed his mission and has sailed for New York to resume his work.

DR. STEPHEN S. VISHER, a Bishop Museum fellow of Yale University, is studying hurricanes and their effects on man and on the distribution of life in the Pacific. He is now in the Fiji Islands.

WE learn from Nature that an expedition to Sumatra, under the leadership of Mr. C. Lockhart Cottle, is to sail towards the end of the year for the purpose of making zoological and museum collections. A special effort will be made to obtain particulars of the lifehistory of the orang.

According to the Journal of the American Medical Association, Dr. August Hermeier Wittenborg, professor of anatomy in the medical department of the University of Tennessee, has been refused citizenship in the United States. Failure to register for service in the war was given as the reason for the withdrawal of Dr. Wittenborg's petition for naturalization. Dr. Wittenborg is a German by birth, but has resided in this country for several years.

DR. C. R. STOCKARD, professor of anatomy, Cornell University Medical College, will deliver the First Harvey Society Lecture at the New York Academy of Medicine on Saturday evening, October 22, 1921, at eight-thirty. His subject will be "The Significance of Modifications in Body Structure."

THE first meeting of the Physics Club of the Bureau of Standards for the season will be held on October 17. The speaker will be Dr. A. L. Day, whose subject will be "The Study of California Earth Movements." This is to be the first of a series of about ten lectures on the general subject of physical measurements pertaining to the earth. Meetings of the Physics Club are held on consecu-

tive Monday afternoons at 4:30 in the assembly room of the east building of the Bureau of Standards and are open to all who may care to attend.

MR. J. H. JEANS, secretary to the Royal Society, has been appointed Halley lecturer for 1922, at Oxford University.

THE following lectures have been arranged for delivery at the Royal College of Physicians: The Mitchell lecture, on "The Relations of Tuberculosis to General Conditions of the Body and Diseases other than Tuberculosis," by Dr. F. Parkes Weber, on November 1; The Bradshaw lecture, on "Subtropical Esculents," by Dr. M. Grabham, on November 3; and the Fitz-Patrick lecture, on "Hippocrates in Relation to the Philosophy of his Time," by Dr. R. O. Moon, on November 8 and 10.

DR. ARNO BEHR, a well-known industrial chemist, Perkin Medalist and charter member of the American Chemical Society, has died at his home in South Pasadena, Cal., in his seventy-fifth year.

As has been noted in SCIENCE the board of curators of the University of Missouri has voted to establish a four year course in medicine as soon as hospital facilities can be provided for clinical instruction. For a number of years the medical course at the state university has consisted of two years. We learn from the Journal of the American Medical Association that the extra session of the legislature. recently adjourned, appropriated \$250,000 for the erection of a state hospital at Columbia for the purpose of providing clinical material for the medical students. It is expected that a similar sum will be appropriated at each session of the legislature until \$1,000,000 has been appropriated for hospital facilities. The legislature also appropriated \$200,000 for the erection of a new building for State Hospital No. 2 at St. Joseph.

On September 22, President Harding by public proclamation accepted and added to the present Muir Woods National Monument, California, 128.14 acres of land, a gift to the United States from Mr. and Mrs. William Kent, of California, and from the Muir Woods and Mt. Tamalpais Railroad. The Muir Woods, a notable grove of redwood trees, became the property of the United States on June 9, 1908, when Theodore Roosevelt accepted 295 acres from Mr. and Mrs. Kent and proclaimed the area a national monument. Situated on the south slope of Mt. Tamalpais about seven miles in a direct line across the bay from San Francisco, it contains numerous redwood trees, reaching to a height of 300 feet and having a diameter at their base of 18 or more feet.

Nature states that a joint research committee has been formed by the National Benzole Association and the University of Leeds which will take over the direction of research in the extraction and utilization of benzole and similar products in England. The National Benzole Association is concerned with the production of crude and refined benzole, and, according to its constitution, one of its objects is to carry on, assist, and promote investigation and research. The term "benzole" is used in its widest sense, so the field of activity of the association embraces carbonization and gasification processes, by-product coke-oven plants, gasworks, etc., but at the present time it is concerned mostly with the promotion of home production of light oil and motor spirit. Success in this direction is thought to rest largely with chemical investigations into the possibilities of the various processes concerned, and it is with this object that cooperation with the university is sought. The joint committee which has been formed consists of equal numbers of representatives from the university and the association, and the initial membership is as follows: Professor J. W. Cobb, Professor J. B. Cohen, Professor A. G. Perkin, Professor Granville Poole, Professor A. Smithells, Mr. W. G. Adams, Dr. T. Howard Butler, Mr. S. Henshaw, Mr. S. A. Sadler, and Dr. E. W. Smith. Research work undertaken will be carried out under the supervision of Professor Cobb, and reports embodying the results will be published at intervals.

THE British Medical Journal writes: "At

the request of the Surgeon-General of Trinidad, made through the American consul in that island, the surgeon-general of the United States Public Health Service has, with the consent of the Treasury Department, undertaken to send to Trinidad a quantity of the chaulmoogra oil preparation used by that service for the treatment of leprosy. The amount to be supplied will be sufficient for 500 treatments. The courtesy of the United States government departments concerned must be freely acknowledged; but the fact that the government of the United States was applied to by the medical authorities of an important British colony for this assistance appears to show that there is something lacking in the relations between the colonial medical authorities abroad and at home, and in the cooperation between the different British government departments, more particularly as the researches on the therapeutics of chaulmoogra oil in leprosy have been largely carried out by distinguished officers of the Indian Medical Service."

UNIVERSITY AND EDUCATIONAL NEWS

THE General Education Board has given Vassar \$500,000 to increase the salaries of the faculty. Toward this sum \$100,000 has been promised by Mrs. Edward S. Harkness on condition that \$1,500,000 more be raised within two years.

THE new medical building of the University of Alberta has now been completed. The support of the people of the province has made possible the establishment of a well-manned and well-equipped medical school, which together with several closely allied hospitals can undertake the thorough education of medical and dental practitioners.

DR. JOHN LEE COULTER has been elected president of the North Dakota Agricultural College. He takes the place occupied by Dr. E. F. Ladd, who was elected to the United States Senate last March.

DR. P. W. WHITING, of St. Stephens College, Annandale-on-Hudson, N. Y., has resigned to take up work as associate research