was appointed chief chemist, in 1916, chief metallurgist, and in 1919, assistant director.

Aside from his work on smelter smoke Dr. Cottrell has been intimately connected with work on the separation and purification of gases by liquification and fractional distillation. During the world war and subsequently the development of the Norton or Bureau of Mines process for the recovery of helium from natural gas has been his special care, and it was chiefly through his efforts that a plant for recovering helium on a large scale for military aeronautics has been erected near Petrolia, Texas.

Dr. Cottrell is a member of the American Chemical Society, Mining and Metallurgical Society of America, the American Electrochemical Society, the American Institute of Mining and Metallurgical Engineers, and the American Association for the Advancement of Science. He was awarded the Perkin medal by the New York Section of the Society of Chemical Industry in 1919 in recognition of his work on electrical precipitation.

SCIENTIFIC NOTES AND NEWS

DR. AUGUSTUS TROWBRIDGE, professor of physics at Princeton University, during the war lieutenant colonel and head of the sound ranging service of the A. E. F., has accepted appointment as chairman of the division of astronomy, mathematics and physics of the National Research Council for the year beginning on July 1.

DR. HUBERT WORK, of Colorado, first speaker of the house of delegates of the American Medical Association, has been elected president of the association.

The council of the British Medical Association, at the meeting of April 14, resolved unanimously to recommend the Annual Representative Meeting that Dr. David Drummond, should be elected president of the association for the year 1921-22, to take office at the Annual Meeting to be held at Newcastle-on-Tyne in 1921. Dr. Drummond is vice-chancellor and professor of medicine, University of Durham, and consulting phys-

ician, Royal Victoria Infirmary, Newcastle. The council decided also to accept an invitation from the Glasgow and West of Scotland Branch to hold the annual meeting of 1922 in Glasgow.

Dr. Otto Klotz, director of the Dominion Observatory, has been elected president of the Seismological Society of America.

DR. WILLIAM H. WELCH and Dr. Ira Remsen, both of Johns Hopkins University, have been appointed to the Board of Electors for the Hall of Fame of New York University.

DR. JOHN H. FINLEY has received the gold medal of the Geographical Society of Paris, in recognition of the English edition of his book, "The French in the Heart of America." The French edition of the same work was crowned by the *Academie* with an award of 1,500 francs.

Professor Ray S. Owen, of the department of topographic and highway engineering of the University of Wisconsin, has been made Officier d'Academie by the French government for his work in the intelligence department of the army.

THE Howard Taylor Ricketts prize of the University of Chicago for 1920 has been awarded to Ivan C. Hall for his work on "Studies in Anaerobiology." This prize is awarded annually on May 3, this being the anniversary of the death of Dr. Ricketts from typhus fever while engaged in investigative work on this disease in Mexico City in 1910.

THE Boylston Prize of \$300 has been awarded to Messrs. Stuart Mudd, Samuel B. Grant and Alfred Goldman, fourth year students of medicine, for their research on "The Effect of Chilling on the Mucous Membrane of the Throat and Tonsil," performed in the pathological laboratory of the Washington University School of Medicine.

Dr. Lyman J. Briggs, formerly physicist in the Bureau of Plant Industry, U. S. Department of Agriculture, who had been on temporary assignment to the Bureau of Standards for research on aeroplane problems during the war, has been transferred permanently to the staff of the Bureau of Standards.

H. H. Hansen, chemist in charge of feeding stuff analysis in the West Virginia Experiment Station, has been appointed state chemist of Delaware in charge of a new laboratory which has been equipped in Dover, by the State Department of Agriculture to conduct the chemical and seed testing work of the state.

DR. ARTHUR W. Dox has resigned as chief in chemistry of the Iowa Agricultural Experiment Station to accept the position of research chemist for Parke, Davis & Co., Detroit, Mich.

Dr. E. H. Starling, professor of physiology in the University of London, who has gone to India to advise the British government with regard to the foundation of a central medical research institute for India, will visit Bombay, Poona, Bangalore, Calcutta, Delhi and Kasauli.

Professor Richard P. Strong, of Harvard University, will attend the annual congress of the British Royal Institute of Public Health, which is to be held this year, upon special invitation from Belgium, from May 20 to 24, in the city of Brussels.

Joseph T. Singewald, Jr., associate professor of economic geology at the Johns Hopkins University, who has been on leave of sosence since December to carry on geologic investigations in Peru, has returned to Baltimore.

Dr. WILLARD J. FISHER, assistant professor of physics in the University of the Philippines, and since July, 1919, acting head of the department, is leaving the university to return to the United States this summer.

Mr. Calvert Townley, president of the American Institute of Electrical Engineers, visited the sections of that body at Chicago, Milwaukee, Ann Arbor, Detroit and Toronto during April. He delivered addresses at each place.

THE meeting of the New York Section of the American Chemical Society on the evening of

May 7 was devoted to papers on the general subject of Colloids and Colloidal Chemistry in accordance with the following program: "The general chemistry of gelatine," by Jacques Loeb; "Silica gel and its uses," by W. A. Patrick, and "Electroendosmosis," by T. R. Briggs.

A LIEBIG museum was opened at Giessen on March 26, when an address was given by Professor Burger on the relation of Liebig to medicine.

APPLICATIONS for three Ramsay memorial fellowships for chemical research will be considered by the trustees. They must be received by June 15, by Dr. W. W. Seton, organizing secretary, Ramsay Memorial Fund, University College, London. The fellowships will each be of the annual value of £250, with, possibly, a grant of not more than £50 per annum for expenses, and tenable for two years, with the possible extension of a year.

Dr. E. Schwalbe, director of the pathological institute at the University of Rostock, was killed during the recent rioting.

UNIVERSITY AND EDUCATIONAL NEWS

The Mississippi legislature has appropriated \$250,000 for a new chemical building at the University of Mississippi which will provide laboratory and other facilities for students in the medical school. An additional appropriation of \$10,000 was made to secure permanent equipment for the medical school, exclusive of chemistry. Additional funds were appropriated for the university with which salaries of all teachers could be reasonably increased. The total appropriation for the university exceeds \$1,000,000.

Mr. F. A. Heron has given to Queen's University, Belfast, the sum of £5,000 to provide the necessary equipment for teaching physical chemistry, and £1,000 towards the provision of accommodation for the department.

James T. Jardine, investigator for the United States Forest Service, has been elected director of the Oregon Agricultural College Experiment Station.