SCIENTIFIC EVENTS

CHEMICAL RESEARCH IN FRANCE AND ENGLAND

The Paris correspondent of the *Journal of Industrial and Engineering Chemistry* writes: "Scientific research is at this moment passing through a serious crisis. It is going to lack personnel. The alarm has been sounded by Professor Daniel Berthelot, the son of Marcellin Berthelot. In a recent speech he called attention to the utilitarian direction of all scientific research, and more especially chemical. We have here in France many schools of chemistry, but they are all schools of industrial chemistry. Almost without exception they are concerned with producing the industrial chemist, and, little by little, we are seeing the laboratories attached to professorships abandoned—laboratories such as that of Fremy at the Museum of Natural History, which have been the nurseries of the research chemists. The necessity which the younger generation feels of earning a living as soon as possible is the cause of this state of affairs. Add to this that most of the laboratories lack funds and can not bear the costs of theoretical research whose economic profit may be far distant. The public authorities, however, seem willing to consider these questions, and to-day, for instance, you may see in the French parliament, a deputy, Mr. Maurice Barres, offer one of the arguments which you Americans have so wisely brought to the solution of the social problem: 'It is useless to quarrel with wealth; it is better to use its activity to create more; and in this creation of wealth we chemists have a large duty to fill.'"

The London correspondent says: "In applied chemistry we are faced in Great Britain with a state of uncertainty and chaos without parallel in the recollection of any of us. No one can form any just estimate of the future supply or price of coal or other fuels; no one has any sure data upon which to base an opinion as to the future of the principal metals and other raw materials. Accounts from Germany and Austria are singularly conflicting and it is not easy for us to know whether in chemical industry we are to export to those countries at a reasonable profit or whether we shall suffer from acute competition from those countries. And in our own financial state nothing seems certain beyond the fact that grievous and necessary taxation will continue for a long period and will hamper the development of business and the starting of new enterprises. We have recently lived through times infinitely more anxious, and our neighbors in France and Italy have far more difficult problems to solve than we have. Our anxieties are as nothing to theirs and the state of political industrial and financial chaos in Germany, Austria and Russia is such as to be beyond conception. We are not merely perplexed by this; the aspect continually changes and it is hopeless for us to try and imagine what will happen in the east of Europe. In time some sort of settlement or stability will be achieved, but the details of the process are beyond the wit of man to imagine."

MEDICAL EDUCATION IN THE UNITED STATES

For the twentieth consecutive year the *Journal* of the American Medical Association publishes this week statistics dealing with medical education in the United States. In all medical schools during the last session there were 14,088 students, or 1,036 more than during the previous session. These increases are in the first, third and fourth year classes, smaller second year classes following the small freshman enrolment in the fall of 1918 caused by war conditions. The increased enrolments have been most marked in Class A medical schools, the number enrolled this year having increased from 87.9 to 89.6 per cent. of all students. The percentage in Class B schools decreased from 8.3 to 4.8, and in Class C schools it increased from 3.8 to 5.6.

The number of graduates this year was 3,047, or 391 more than in 1919. The number of graduates of Class A colleges was increased by 470, while the numbers graduating from Class B schools decreased by 116. Of the Class C colleges, there were 37 more graduates than in the previous year. The number of graduates holding degrees from colleges of

arts and sciences increased from 1,180 to 1,321, which is 43.5 per cent. of all graduates.

The number of medical colleges is eighty-five, the same number as last year. In 1904, when the Council on Medical Education was created, the United States had more medical schools than all other countries of the world combined. While the number of colleges has been reduced from 162 to 85 during the sixteen years, the number enforcing an entrance requirement of two years or more of collegiate work increased from four (2.5 per cent. of all colleges) in 1904, to seventy-eight (92.9 per cent.) in 1920. The number of medical students was decreased from 28,142 to 13,052—the lowest number—in 1919; but during the same period, the number who had higher preliminary qualifications was increased from 1,761 (6.2 per cent. of all students) in 1904, to 13,408 (95.2 per cent.) in 1920. The number of graduates was reduced from 5,747 to 2,656—the lowest number—in 1919; but the number having higher preliminary qualifications was increased from 369 (6.4 per cent. of all graduates) in 1904, to 2,842 (93.3 per cent.) in 1920.

WORK OF THE BUREAU OF MINES

DR. F. G. COTTRELL, director of the Bureau of Mines, announces the appointment by Acting Secretary of the Interior Hopkins, of F. B. Tough as supervisor, and R. E. Collom and H. W. Bell as deputy supervisors, to administer the operating regulations on oil and gas leases under the Department of the Interior. Mr. Tough will be stationed at Denver, Colorado, and will have personal charge of operations in the Rocky Mountain fields, as well as supervisory charge of operations on government lands in all fields. Mr. Collom will be stationed at San Francisco, California, and will have charge of operations in the California oil fields. Mr. Bell will be stationed at Dallas, Texas, and will supervise operations in the Louisana fields.

Mr. Tough is a graduate mining engineer. He has had seven years' experience in actual engineering and practical work for the Southern Pacific Company in the California oil fields and as petroleum technologist with the Bureau of Mines for four years. While with the Bureau of Mines, he covered practically all the oil fields in the United States, and has done much work in correcting water problems in Illinois, Colorado, Wyoming and California. He is the author of Bulletin 163, "Methods of Shutting off Water in Oil and Gas Wells." For the past year and a half he has been in charge of the conservation work in the Wyoming fields, under the cooperative agreement with the Rocky Mountain Petroleum Association, which has contributed $30,000 a year for the Bureau of Mines to demonstrate methods of drilling and operating wells in order to minimize the waste of oil and gas and damage to oil and gas sands. This work was so satisfactory that the Rocky Mountain Petroleum Association, consistng of the Midwest Refining Company, the Ohio Oil Company, and the Continental Oil Company, voluntarily suggested a renewal of the cooperative agreement for the second year and Mr. Tough will continue to supervise this cooperative work.

Mr. R. E. Collom is also a graduate mining engineer. He has had a number of years' experience in the mining camps, but has spent most of his time in the oil fields of California. He was deputy supervisor for the California State Mining Bureau, where he worked principally in the Santa Maria oil field, from which position he was transferred to San Francisco as assistant chief supervisor. Mr. Collom has been with the Bureau of Mines for one year, during which time he has been in many fields in the United States, and was in charge of the Dallas office of the Bureau of Mines for several months. He worked in the Texas and Louisiana oil fields, particularly in the Wichita Falls and Ranger Districts, where, with the assistance of W. A. Snyder and J. B. Kerr, a number of operating problems were solved and valuable recommendations made to the oil companies. Mr. Collem is the author of a manuscript to be published by the Bureau of Mines relating to development problems in the oil fields.

Mr. Bell is a graduate mining engineer