

is gathered here an international group of chemists from nations that were on opposite sides during the great war.

On my last day on the other side of the Atlantic I spent a few hours in Quebec. There, many years ago, two great generals fought each other on the Plains of Abraham. Those generals both died in the battle and there on the front of the Parliament House I saw the statues of Wolfe and of Montcalm standing side by side. In that Parliament House meet the representatives of a nation part of whose people still speak French and part of whom speak English. Those two statues are, to me, prophetic of that which must come if Europe will not destroy herself. We are learning during these days the help which comes from talking over our scientific problems together. There is almost no limit to the advances which the world may make if nations can be willing to live together at peace. I have a great hope that states will learn those same lessons of the value of international cooperation and helpfulness that scientific men learned long ago. Let us hope that our meeting may contribute a little toward that end as well as do something for the advance of chemistry.

### SCIENTIFIC EVENTS

#### THE ROYAL SANITARY INSTITUTE

THE *British Medical Journal* reports that the thirty-third congress of the Royal Sanitary Institute, which was held at Bournemouth from July 24 to 29, was attended by some 500 persons, including delegates from the British dominions and colonies and from many foreign countries, as well as by representatives of government departments, county and town councils, and other public bodies. The president of the congress was Major General J. E. B. Seely, M.P., who in his presidential address protested against economies at the expense of the public health, and said that the three very important principles which lay at the basis of the congress were, first, the vital necessity of the health of the people to the maintenance of the British Empire; second, that national health required the organization of all the various agencies; and third, that the health policy of the nation should not be merely the

prevention of disease and premature death, but the increase in human capacity and happiness. Great advances had been made in the provision of cleaner towns, better sanitation, good water supplies, food control, drainage and sewerage, but not enough had been done for the education of the people in a healthy way of life. The housing problem could be solved only by steady and persistent work in every district over a number of years. Curtailment in the school medical service had been spoken of in the interests of economy, but he considered that that service was not only saving the lives of hundreds of children, but was laying the foundation for a healthy nation in years to come. Meetings for the reading and discussion of papers were held in five sections: Sanitary Science, Engineering and Architecture, Maternity and Child Welfare, including School Hygiene, Personal and Domestic Hygiene, and Industrial Hygiene. In the Section of Sanitary Science a discussion was held on methods of securing continuous treatment of persons infected with venereal diseases, in which papers were read by Dr. J. Johnstone Jervis, Dr. W. E. Facey, Mr. Kenneth Walker, and Dr. Joseph Cates. In the Section of Maternity and Child Welfare including School Hygiene, papers were read by Dr. John Robertson on the regulation of the distribution of milk and food at maternity and child welfare centers, and by Dr. D. C. Kirkhope on certain preventive and curative aspects of the school medical service. Papers were also read on different aspects of maternity welfare by Mr. Aleck W. Bourne, Dr. R. Veitch Clark, and Dr. R. J. Maule Horne. In addition to the meetings of the sections, a number of conferences were held of sectional representatives, such as sanitary authorities, medical officers of health, engineers and surveyors, veterinary inspectors, sanitary inspectors and health visitors. The popular lecture, on "The value of clean fresh air," was delivered by Professor Leonard Hill, F.R.S., who said that physiologists could help greatly to point the way to a happy and healthy life, but ignorance and custom enveloped the people, and it was problematical whether our civilization might not stifle itself like older civilizations and die out. The discipline and the laws

of health, which included moral restraints, alone could save it.

#### THE FRENCH DYE INDUSTRY<sup>1</sup>

THE issue of *La Nature*, April 15, contains an interesting summary of the French dyestuff industry, particular attention being paid to progress made since 1914. In 1913, 2,000 tons of dyes, of the value of seven million francs, were imported. Eighty-five per cent. came from Germany and ten per cent. from Switzerland. The balance of the consumption of 9,000 tons represented French manufacture. It is pointed out, however, that the dyestuff factories of France, of which there were four, were almost completely dependent on Germany for intermediates, the home production of which represented scarcely ten per cent. of the requirements. There were in addition German works which received intermediates or even finished dyes from Germany. The article refers to the ready adaptation of the dye works in Germany to the manufacture of munitions during the war, and does not omit to point out that, without the means of obtaining synthetic nitric acid, which the enemy had also perfected, his dye works would not have been of the slightest use to him.

The French efforts during the war are described at length. In April, 1916, the Syndicat National des Matières Colorantes was established, which had relations with the state and further arranged to take over after the war the national factories used in the manufacture of explosives. The Compagnie Nationale des Matières Colorantes et de Produits Chimiques was constituted in January, 1917, and at once set to work. Two factories rapidly grew up, the first at Nogent-les-Vierges on a semi-technical scale, and a large factory at Villers-St-Paul, with a contemplated capacity of 4,000 tons of synthetic indigo a year. This was abandoned during the German advance in 1918 and the material removed to Lyons, but it has again been set in operation, and, as a result of intensive work, the total production of the French factories had grown from 175 tons in 1919 to 765 tons in 1920. Since that time the production has decreased on account of the economic crisis, although the capacity of pro-

duction is now stated to exceed 13,000 tons. With a few exceptions, dyes of all the main types are manufactured and progress is being made.

The company has two large centers of production. The Oissel Works, installed at the old national factory, with an area of 39,000 sq. m. of buildings, is connected with the main line from Paris to Rouen. The power is generated by turbo-alternators of the most modern type, each of 1,000 kilowatts. The factory is at present making intermediates, of which more than sixty are being produced, together with sulphur dyes and azo-dyes. These are produced directly from the intermediates without isolation of the latter from solution.

The second works is that at Villers-St-Paul, with an area of 35,000 sq. m. of buildings, on the main line from Paris to Compiègne. A very modern boiler plant is installed, which when complete will consume 300 tons of coal daily. In this works are made the dyes which require special apparatus, such as indigo and alizarine, phthalic acid and basic dyes derived from it, triphenyl and diphenylmethane dyes, pyrazolone dyes, etc. Vat dyes are also made, and there are large research laboratories.

At Saint-Denis the old works has been enlarged, while a new works at Isère grew up during the war. It is stated that prices are now high owing to high costs of raw materials, and the yields could also be improved by the further efforts of the chemists, and particularly of the engineers.

#### GOOD ROADS SCHOLARSHIP

NAMES of judges appointed to award the four years' university scholarship offered in connection with the national good roads essay contest are announced by the Highway Education Board.

The judges are: Henry C. Wallace, secretary of agriculture; George Horace Lorimer, editor of the *Saturday Evening Post*, and Dr. John Grier Hibben, president of Princeton University. The judges accepted responsibility for the award of the scholarship at the invitation of Dr. John J. Tigert, United States commissioner of education, who also is chairman of the board.

They have been supplied with copies of

<sup>1</sup> From *Nature*.