

# Civil Engineers Discuss Fuel and Power Problems

A meeting of the Canadian Society of Civil Engineers was held in Toronto on March 26th and 27th, to discuss the fuel and power situation. A number of papers were presented at the sessions. Interesting discussions followed the reading of the papers. The program was as follows:—

Opening address, by Sir William Hearst, Prime Minister of Ontario. The Fuels of Canada, Mr. B. F. Haanel, Chief of Fuel Division, Department of Mines, Ottawa. Discussion, Mr. L. M. Arkley, M. Can. Soc. C. E., Assistant Professor of Mechanical Engineering, Toronto University. Transportation from the Fuel Viewpoint, Mr. W. N. Neal, General Secretary of The Canadian Railway Association for National Defence, Montreal, Que. The Rational Development of Canada's Coal Resources, Mr. W. J. Dick, A.M. Can. Soc. C.E., Mining Engineer of the Commission of Conservation, Ottawa, Ont. Utilization of Peat, Mr. John Blizard, A.M. Can. Soc. C.E., Technical Engineer, Division of Fuels and Fuel Testing, Mines Branch, Department of Mines, Ottawa, Ont. Discussion, Mr. James Milne, M. Can. Soc. C.E., Mechanical and Electrical Engineer, Department of Works, City of Toronto. The Low Temperature Carbonization and Briquetting of Bituminous Coals, Mr. E. Stanfield, Division of Fuels and Fuel Testing, Mines Branch, Department of Mines, Ottawa, Ont. An illustrated address on "The Erection of the Quebec Bridge," Mr. Geo. F. Porter, M. Can. Soc. C.E., Engineer of Construction, St. Lawrence Bridge Company, Montreal, Que. Ontario's Efforts to Relieve the Fuel Situation, Mr. Albert Grigg, Deputy Minister, Department of Lands and Forests, Ontario, Toronto, Ont. Wood as an Emergency Fuel, Mr. E. J. Zavitz, Provincial Forester, Ontario. Gas for Light, Heat and Power, Mr. Arthur Hewitt, General Manager Consumers' Gas Company, Toronto. Central Heating as a Means of Conserving Fuel, Mr. F. G. Clark, M. Can. Soc. C.E., Chief Engineer, Toronto Electric Light Company, Toronto, Ont. Oil Fuel and the Possibilities of its Use, Mr. R. W. Caldwell, Chief Mechanical Engineer, Imperial Oil, Limited, Sarnia, Ont. Canada's Water Powers and their Relation to the Fuel Situation, Mr. J. B. Challies, M. Can. Soc. C.E., Superintendent of Dominion Water Power Branch, Department of the Interior, Ottawa, Ont. Discussion, Mr. H. G. Acres, M. Can. Soc. C.E., Hydraulic Engineer, Hydro-Electric Power Commission of Ontario, Toronto, Ont. Railway Electrification, Mr. John Murphy, M. Can. Soc. C.E., Chief Electrical Engineer, Department of Railways and Canals, Ottawa, Ont. The Possibilities of the Relief of Fuel Consumption in Canadian Industry by the Increased Use of Hydro-Electric Energy, Mr. J. M. Robertson, M. Can. Soc. C.E., Director, Southern Canada Power Co., Montreal, Que. The Possibilities of Lessening Fuel Consumption in Canada by the Adoption of Electrical Heating, Mr. P. H. Mitchell, A.M. Can. Soc. C.E., Consulting Engineer, Toronto, Ont.

## Premier Hearst Addresses Engineers.

Sir William Hearst extended a hearty welcome to the engineers. Sir William said he was pleased to welcome such an eminent body of scientific men, and that added interest would attend their conference because they were to discuss the fuel question. While coal had not been discovered in Ontario, there were, however, numerous waterfalls, by which power could

be developed. The resources of peat were as yet unknown, but money had been provided by the Legislature to deal with the problem and experiments would be carried out. A co-operative scheme had been agreed upon between the Dominion and Ontario Governments on the question of peat fuel, and fuel distribution had also been discussed. While the peat resources could not be relied upon for next winter, the Government had taken up the question of wood supply, and it was hoped enough wood would be secured to meet emergencies.

## B. F. Haanel Urges Development of Fuel Resources.

B. F. Haanel, Chief of the Fuel Division of the Department of Mines at Ottawa, read an address upon "The Fuels of Canada." Mr. Haanel declared that if Canada was to-day largely dependent upon coal and oil from the United States, it was due to apathy toward the development of home resources, not to the scarcity of the fuel within the Dominion. "We have been culpably neglectful of our fuels," he declared. "And some day in the future we will be faced with great suffering if we do not now render our own fuel resources available." Mr. Haanel contended that Canada had fuel resources sufficient to make her independent of the United States if they were developed. He read to the engineers statistics to show how largely Canada was depending upon the States and presented estimates of her resources of coal and peat. Canada, he said, had 37,000 square miles of peat bogs. The conversion of these bogs into good commercial fuel involved no particular research work. It had been made into excellent fuel for domestic and industrial purposes for many years in European countries. In closing, Mr. Haanel advocated concerted pressure to get vigorous development of Canada's Resources.

The big item in connection with peat, in the opinion of George W. Allen, secretary-treasurer of the Canadian Gas Association, was that peat could be used for producer gas and the by-products turned into so many uses that great efficiency and economy resulted. The fact that peat could replace bituminous coal in this regard made it almost a national crime to use coal for purposes of producing gas.

## W. N. Neal Tells What Railways Have Done.

W. N. Neal, general secretary of the Canadian Railway Association, was not able to be present to deliver in person his address upon "Transportation From the Fuel Standpoint." The address as read to the members was an instructive review of the problems the railways had faced and overcome in connection with the shortage of fuel. Mr. Neal estimated the haulage of coal as one-fifth of the total tonnage handled by the railways, and that coal, he stated, had been carried farther in Canada for less money than any other country in the world. It cost less to haul a ton of coal 60 miles than to team it a mile in the city of Toronto. The address told of the efforts made by the railways to relieve the coal scarcity by instituting radical economies. The reduction in the number of passenger trains had effected a saving of 600,000 tons of coal. The number of sleeping cars had been reduced, observation cars eliminated, and the freight loads increased. In closing, Mr. Neal said that the railways took a great deal of pride in their record in regard to the carrying of fuel.