

recently been erected at Spokane, Washington and St. Paul, Minnesota. These kept them in close touch with stock conditions in the west and they were, therefore, interested in its progress.

"The Coal Areas in Alberta" was the subject of an address by D. B. Dowling. He traced the geological location of the Alberta coal fields and mentioned the surface seam of anthracite in the Crow's Nest district, which was 135 feet thick. Because of its vast resources of soft coal Alberta was, he said, similar to Wales.

Alberta Power Resources

James White, assistant to the chairman of the Commission on Conservation, dealt with "Power of Alberta—Water, Coal and Natural Gas." Referring to the development of power throughout the world he stated that 75,000,000 horse-power had been developed, of which 29,000,000 is used in the United States, 13,000,000 in the United Kingdom and 6,000,000 in the British Dominion and dependencies. Coming to Alberta he pointed out that the power available was at its lowest in the winter owing to the frost. So far as water power is concerned, Calgary is more valuably situated than any other city in Alberta, the six powers on the Bow River having an aggregate minimum of 60,000 horse-power with regulated river and less than one-half of that amount with unregulated river. The Rocky Rapid power on the Northern Saskatchewan, which is sixty miles from Edmonton, would require the erection of a dam 85,000 feet high. The Baptiste power, 170 miles from Edmonton might be developed to the extent of 12,000 horse-power, and another one on the Baptiste River would yield 6,000 horse-power. There are numerous other sources but they are for the present too remote to be of practical value.

Water, said Mr. White, is, however, only one source of power and the prevailing impression that it is cheaper than steam power is correct only under certain conditions. Compared with steam power it has the following advantages:—

- (1) Cost of operation is usually much lower.
- (2) Very few attendants are required in the plant and no fuel is required excepting for heating the building.

On the other hand there are the following disadvantages:—

- (1) Usually the cost of development and installation is much higher than with steam power.
- (2) The situation of the water power plant is fixed by nature and as a rule a transmission line is required to transmit the electric energy to the user.
- (3) The service is less reliable owing to the possibility of (a) injury to the transmission line and (b) lack of power due to unusually low water.

During recent years, owing largely to the introduction of the steam turbine the capital cost of modern steel plants and of many hydro-electric power developments are coming closer together and some engineers predict that at an early date steam-electric power will be produced at less expense, other things being equal, than hydro-electric energy. Alberta, he said, contains 87 per cent. of the coal in Canada and is, therefore, in an excellent position to produce steam power.

J. A. Cunningham, president of the British Columbia Refining Company, spoke on the development of the natural resources of the western provinces. The war, he said, had brought us into closer contact with the outside world. On the other hand, our vast borrowings of capital made it necessary that we should not produce in large quantities and production should be stimulated. There are a number of articles, he said, which should be manufactured on the coast or in Alberta. There was, for instance, \$78,000,000 worth of paints and oils which passed through Vancouver and Seattle each year to be manufactured in the east and then shipped back to the west again. Similar examples could be found in the case of rubber and silk.

Industrial difficulties were dealt with by Senator G. D. Robertson, minister of labor. He stated that the government was supporting the international unions and spoke highly of their strength and good management and of the same program which they endeavored to enforce. The United Mine Workers of America, he said, had a mem-

bership of 500,000 in Canada and the United States and as they had promised to rebuild the coal industry in Alberta, they should have the support of the province. Much of the present good feeling between the United States and Canada is due to the international unions and they could always be relied upon to carry out their contracts. They were opposed to the radical element which has been particularly active among miners, who urged the confiscation of property and the overthrow of government. This would mean, said the minister, that one-eighth of the population would control the country. As an instance of the loss which is continually being incurred through labor disputes, he referred to the eighty strikes which took place in Canada during the month of June as a result of which 1,004,000 days of work were lost, involving the sum of \$3,500,000. This increased the cost of living to everyone.

Canada and the Orient

Captain Robert Dollar, head of the well-known Pacific shipping firm, dealt with "Opportunities in the Far East," and said that western Canada has chances for trade development there which may never again be found. "In the early days," he said, "the development of this great country took up all of our time and money; our manufacturers were kept busy producing goods for our own needs. At that time we were a world within ourselves. Now the conditions are entirely changed. We are now producing more than we can use; therefore, we must either sell the surplus in foreign countries, or curtail our production. This latter none of us want to consider. Instead of curtailing, we all look forward to increasing our production, so there is only one way out, and that is to increase our sales in foreign countries.

"Some people think, 'Well, this don't interest me,' but I want to say to you that there is not a man in this room that is not interested, either directly or indirectly, and I am pleased to note that nearly all of you belong to the farmer class. All farmers are, or should be, intensely interested; every manufacturer, the merchants, bankers, railroads, and ship owners. The war, increased taxes, and the results of the war, have intensified the situation. The war tax must be paid, and how can it be paid? Certainly not by us trading amongst ourselves—to use a common expression, 'swapping jack-knives'—but by selling our products to other countries and receiving from them new money, or by exchange of commodities, which is as good, especially if it is raw material from which we can manufacture and export the finished product, and anything we can do to make all classes of the community see and understand this vital question will be time and money well spent.

"For many years after the civil war in the United States, they, like ourselves, were busy in the development of the great western states, which took up all of their time and attention. As a consequence, foreign trade was neglected. At that time it was not a necessity as it has become of late years. But now the whole country is aroused by the necessity of more foreign trade, and there is intense interest in all classes of the community. In every city in the States, foreign trade clubs and committees have been formed, and there are meetings almost every day to devise the ways and means of accomplishing the desired results.

"Now, in Canada, there is some interest, but not as general as it should be, and it is up to every one of us who appreciate and know the value and the absolute necessity of foreign commerce, to be up and doing, and to convince our neighbors that we must have it. When the whole community are convinced of the importance of it, then you will see plenty of commerce with the outside world. Therefore I hope I have convinced you of the necessity of foreign trade."

Plea for Scientific Development

Dr. R. D. MacLaurin, professor of chemistry, in the University of Saskatchewan, spoke on "A Field for Reconstruction." "During the past five years," he said, "Canada's national debt has rapidly increased until it has reached the sum of \$1,950,000,000, incurring interest charges to the amount of \$115,000,000. Our adverse balance of trade with