

As we have now seen, the present need of coal is urgent and world-wide. If the United States, either in the interests of her own people or in the interests of the peoples whom she may conclude to be more needy than Canada, should decide that it is more necessary to supply such nations with coal, with the result that Canada's normal supply be substantially reduced, who may reasonably find fault with such a course? Even apart from governmental action, could anyone find fault with the United States coal merchants if, in their efforts to capture as much as possible of the 160,000,000 tons of annual international coal trade, they sought to deal where they could do so most advantageously? If, under such circumstances, Canada be judged to be not the best market for the United States coal dealer, from whence does Canada hope to supplement any substantial lack in supply of her coal demands? Let me emphasize the fact that there is nothing new in these possibilities so far as Canada is concerned. The handwriting on the wall has for years been legible. The whole problem has been one calling for ablest statesmanship and not for political or other temporizing and expediency. The problem will never yield to any makeshift policy. I have often marvelled that so little has actually been accomplished with respect to its permanent solution.

No Menace More Serious

It is gratifying to realize that serious effort is now being made towards the development of our lignite and peat resources; also, towards the increased utilization of our coal fields in the east and west. I understand that work preparatory to the construction of the carbonized lignite briquetting plant to be erected under the direction of the Honorary Advisory Council for Scientific and Industrial Research for the Dominion government is being pressed ahead with despatch. This is to have a capacity of 30,000 tons of briquettes per annum. It would take over 600 of such plants to replace our present coal importation from the States. However, we are very glad that this start has been made.

From the foregoing comments it is evident that an intelligent outlook upon world conditions shows scarcely any aspect of them to be of more serious moment—immediate or prospective—than this coal problem. During these warm days we should be careful to take our counsel and warnings from an intelligent outlook upon these conditions and what they betoken for the future, rather than from our feelings based upon the present state of the thermometer. Whether conditions of curtailed fuel supply for Canada be delayed from materializing this coming winter or next winter, or until some time in the future, nevertheless, as I stated before, I am firmly convinced that there is no menace to Canada's economic and general welfare at all comparable to the fact that she is at present so largely dependent upon a foreign country for her fuel needs. Without this foreign supply, Canada most assuredly would be put to desperate straits. Gentlemen, is not the fuel problem of this Dominion one of magnitude and great gravity?

Canada's Water-Power Heritage

Canada, it is true, is richly endowed with water-power, but she can never depend upon this asset as a sole source of heat. We have about 19,000,000 estimated 24-hour low-water horsepower, of which less than 2,500,000 h.p. has been developed. By no means may all the water-powers be economically developed.

For many years past I have been emphasizing the comparatively limited use which can be made of electric energy as a wholesale substitute for coal for heating—including the heating of buildings. There is no use whatever entertaining hope that hydro-electric energy as a heating agent may become an adequate substitute for coal for the citizens of Canada, and consequently a realization of this fact will facilitate the concentration of effort upon sources from which real relief may be derived.

What, then, is to be done? In a word, we must develop our own coal reserves. Considering the country as a whole, Canada in respect of quantity, quality and accessibility for mining purposes, possesses coal deposits which compare favorably with those of the greatest coal mining

countries of the world. Speaking in round numbers, she has nearly 1,000,000,000 tons of semi-anthracite coal, 315,000,000,000 tons of bituminous coal, and 10,000,000,000,000 tons of sub-bituminous coal and lignite.

I shall not dwell on these enormous reserves. It seems out of place to emphasize how much we have latent when alongside of it we are not able to show how beneficially these assets are being used both for our own support and for the assistance of other needy nations. When the population of the prairie provinces are insured against yearly fuel shortage, we shall be more interested in hearing emphasis laid upon the enormous fuel reserves of these provinces; and when Canada produces more than her present amount of 2% of her total annual oil consumption we shall be more interested in hearing emphasis placed upon the statement that we have the biggest oil fields in the world.

Development Only Sane Policy

Canada's only sane policy is to develop, and that as rapidly as possible, both her own fuel and power resources, and by co-ordination of transportation and other cognate agencies to provide for the distribution and storage of fuel in all communities of the Dominion. In some respects it is more important to move coal and have it adequately stored and distributed throughout Canada than it is to remove the grain out of the country.

In this connection may I comment that we have heard so repeatedly about the necessity of laying in our coal supplies early that I have wondered why no provision has been made to aid that large proportion of the wage-earning population, who covet the ability to lay in their coal early, but who are unable to finance the proposition. The agriculturist is not only counseled to market his grain but governmental and financial agencies make exceptional provision by way of furnishing funds and credit to facilitate grain-marketing operations. Does it not seem as though some corresponding provision, with resulting insurance to the stability and advancement of the country, could be provided in connection with the laying in of the annual coal supply?

In concluding may I digress a moment, for there is one aspect of this fuel situation which I conceive to be of essential importance, and I feel it desirable just to mention it. In so doing I know you will not feel that I am seeking to impose upon you any view foreign to the main theme of our discussion.

Human Power Limited

A few years ago I attended an irrigation conference in western Canada. At that time great development was taking place in the irrigation areas, and in the enthusiasm of these circumstances the official program of the conference bore this motto: "Intelligent men no longer pray for rain—they pay for it." At the time I felt that this suggested an ill-advised spirit in which to undertake irrigation or any other work. Probably those who selected the motto did so somewhat unwittingly and did not stop to consider what it may imply. Man certainly could pay for the digging of the ditches and for the construction of other physical structures incident to irrigation development, but man does not own the water nor can he, by payment, command the rain to replenish it.

For a number of years my work in London took me past that busiest spot in the world—the Royal Exchange—and I used to observe upon its pediment the motto selected by Prince Albert from the Scriptures of Truth: "The Earth is the Lord's and the fulness thereof."

Now, what I wish here to suggest is that in any problem, especially in one of the magnitude and seriousness of the fuel problem of Canada, we cannot afford to deal with it solely on the basis that we, of ourselves, are alone sufficient best to solve it. The Creator has placed coal and other resources in the earth beneficently to serve the needs of man, who, of himself, has not the control over all essential factors germane to these resources nor the wisdom how best to dispose of them. If, for example, man could simply have paid for the rain or its equivalent, we may assume that we would not be experiencing the distressing conditions of dry-