ditions this, one of the greatest of our resources, would be an act of folly. If we are guilty of it, our children will be forced to pay an annual return upon a capitalization based upon the highest prices which 'the traffic will bear.' They will find themselves face to face with powerful interests entrenched behind the doctrine of 'vested rights' and strengthened by every defence which money can buy and the ingenuity of able corporation lawyers can devise. Long before that time they may, and ve y probably will, have become a consolidated interest, dictating the terms upon which the citizen can conduct his business or earn his livelihood, and not amenable to the wholesome check of local opinion."

This prophecy of the ex-President is daily in process of fulfilment. In view of all the exigencies facing her—both national and international—Canada cannot afford to have great water-powers, like those of her boundary waters, pass into the hands of powerful private interests, but must retain full command of all the nation's resources.

Common Aims and Aspirations a Great Asset

Nothing is further from the thought of the writer than to suggest that it is, or that it would become, the arbitrary desire of the United States to deprive Canada of the coal which at present is so necessary to life in Canada. It is important, however, to take cognizance of the fact that a nation, pressed by the demands of its own people, may be compelled, under certain conditions, to deprive other nations—in part, at least—of even the necessaries of life until the needs of its own citizens are met. No country can be expected to send out of its confines that which is essential to the very existence of its own people.

Canada is, indeed, exceedingly fortunate in being neighbor to a country whose national aims and sympathies are so akin to its own. Our great Ally to the south has extended to Canada specially generous consideration in the present coal shortage. Dr. H. A. Garfield, United States Fuel Controller, has announced that recognition will be given to Canada's needs for coal as though she were one of the States of the Union.

No one can contemplate the hearty efforts made to relieve the suffering begotten of the Halifax catastrophe without placing the greatest value upon the readiness of our neighbors to co-operate where assistance is really needed. In response to the distress of Halifax the governor of Massachusetts telegraphed assuringly: "The people of the Commonwealth of Massachusetts are ready to answer any call that may be made upon us. Massachusetts stands ready to go the limit in rendering every assistance you may be in need of." The governor of Maine telegraphed: "Any help Maine can give is yours," while many others sent corresponding messages. Sentiments like these, however, cannot better be summed up than in the inspiring message sent by President Wilson to:—

"His Excellency the Governor-General of Canada:

"In presence of the awful disaster at Halifax the people of the United States offer to their noble brethren of the Dominion their heartfelt sympathy and grief, as is fitting at this time, when to the ties of kinship and community of speech and of material interests are added the strong bonds of union in the common cause of devotion to the supreme duties of national existence."

Obviously, so long as such sentiments govern men's actions, the people living on the North American continent cannot be deprived of that which is essential to their existence; nevertheless, with the growing scarcity of coal, the United States, no matter what her goodwill or desire for exchange of commodities, may not be able to cope with the prevailing need, and Canadians must be prepared to help themselves by the development of their own fuel resources in a way that they have never done before. There is no doubt that if this effort is made, the United States, in the spirit and disposition recently manifested in the statements above quoted, will see that Canada is fairly dealt with. We should not, however, trespass unduly upon friendly accommodation.

Coal Resources of Canada

The alternative open to Canada, and it is this to which special attention is directed, is to develop, and that as rapidly as possible, her own fuel and power resources, and by co-

ordination of transportation and other cognate agencies to provide for the early annual distribution, including reasonable reserves, of fuel to all communities in 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 move the grain out of the country

The coal fields of Canada may conveniently be divided into four main divisions:—

- (1) The bituminous coal fields of Nova Scotia and New Brunswick.
- (2) The lignites of Manitoba and Saskatchewan, and the lignites, sub-bituminous and anthracite coal fields of Alberta and the eastern Rocky Mountain region.
- (3) The semi-anthracite and bituminous fields of Vancouver Island, Queen Charlotte Island and the interior of British Columbia, and the lignites of Yukon.
- (4) The low-grade bituminous and lignites of the Arctic-Mackenzie basin.

The coal areas and estimated quantities for the different provinces are shown in the following table. There should, of course, for practical consideration, be a substantial reduction made in these quantities, due to waste in mining operations:—

Estimated Coal Resources of Canada*

PROVINCE	Area of Coal Lands Square miles.	Semi- Anthra-	Bituminous Tons.	Sub- Bituminous Tons.	Lignite Tons.
Nova Scotia . N. Brunswick Ontario Manitoba Saskatche'an Alberta Brit. C'l'mbia Yukon Northwest	521 121 10 48 13,406 81,878 6,045 2,840	845,900,000	10,691,000,000 166,000,000 217,918,000,000(a) 77,923,000,000 a) 275,000,000(a)	932,053,000,000	27,500,000 176,000 000 65,793.000,000 29,095,000,000 5,715,500,000(b) 5,159,000,000(b)
Territories ArcticIslands	300 6,000		6,600,000,000	a saliboar	5,280,000,000
Total	111,169	845,900,000	313,573,000,000	932,053,000,000	111,286,000,000

(a) Includes some anthracite coal. (b) Includes some sub-bituminous coal.

*Consult "Coal Situation in Canada" by W. J. Dick. in Transactions of the Canadian Mining Institute, 1916.

Canada's coal and coke production in 1916 was as follows*:—

HOWS :-	
Nova Scotia New Brunswick Saskatchewan Alberta	,,,,,,,
British Columbia Yukon	4,559,054 2,584,061 3,300
Total	14,483,395
Sold for export to United States Sold for export to other countries	10,701,530 1,451,075 284,513
Total sales	12,437,118
men	1,241,463
	2.046.277

Peat Resources of Canada

Respecting the peat bogs of Canada, Dr. Eugene Haanel, Director of Mines, Canada, from time to time, has strongly urged the necessity of developing our peat resources, and at the recent annual meeting of the Commission of Conservation of Canada he gave an able, forceful and serious address upon this subject which the people of Canada cannot too carefully consider. Dr. Haanel again affirmed the commercial and economic practicability of peat production. Throughout

(Continued on page 50, Construction News Section)

^{*}From figures issued by Mr. John McLeish, B.A., F.S.S., Chief of Division of Mineral Resources and Statistics, Ottawa.