Conservation

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Power to New York From St. Lawrence

Suggested Transmission of Energy at High Voltage to Industrial Centres Of United States

At a recent meeting of the American Institute of Civil Engineers, Mr. Percy H. Thomas, a prominent expert authority on long distance transmission, urged the construction of super-power stations to generate electric energy to supply Boston, New York, Philadelphia and Washington and intermediate cities. To achieve this, he suggested that electric energy be obtained from the Cedar rapids of the St. Lawrence and that "super power" plants be erected at the anthracite and bituminous mines of Pennsylvania.

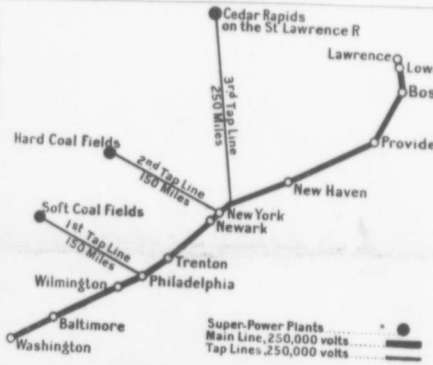
The area it is proposed to supply with electric energy is the most populous and highly developed industrial section of the United States. Such supply would only be possible by the use of a higher voltage than heretofore considered practicable, 250,000 volts, which permits the transmission of electric energy over distances hitherto believed to be beyond economic range. The scheme is of particular interest to Canada, as the proposed market could readily absorb all the power produced by the Long Sault as well as the surplus from Cedar rapids.

Mr. Thomas, in presenting the scheme, stated that the most important advantages of the project are the conservation of coal and the relief of railways from the burden of hauling it. To conserve fuel most effectively requires both the development of as much water-power as may be economically justified and the burning of coal in the most economical manner, as well as the use of low grades of coal. Other advantages are mutual support and interchange of power between the various plants, leading to cheaper production.

The proposed system consists of a main 250,000-volt line, connecting Washington with Boston, via Baltimore, Wilmington, Philadelphia, Newark, New York, New Haven and Providence. This line would be fed from a group of large stations at the nearest bituminous and anthracite coal-fields. Each group of such powers would feed the main line through a tap line. The energy generated in the suggested large plant or group of plants on the St. Lawrence river would feed the main line by another tap line of about 250 miles long which would connect with the main line probably where it crossed the Hudson river. The total distance to New York will be about 300 miles.—*L. G. Denis.*

The Commission of Conservation

Write to the Commission of Conservation for information respecting the natural resources of Canada. Parliament created it to get this information for you. For a decade, its experts have been investigating Canada's natural wealth and how best to develop it. Its reports and files are filled with information on lands, fisheries, game, minerals, forests, water-powers and town planning and the problems relating to their efficient utilization.



PROPOSED SUPER-POWER SUPPLY, WASHINGTON - NEW YORK - BOSTON

Wood Protection

The effect of the lumber scarcity, and its antecedent, the depletion of the forest, is being felt by the ambitious householder who undertakes to make his own repairs or improvements. Costs of material are rapidly mounting, and the expense entailed causes a delay in making repairs.

In many cases, however, the necessity for repairs is due to delay in protecting woodwork. By the use of paint, much of the labour and expense of renewal would be obviated. It is remarkable how little thought is given to the protection of wood where it is exposed to the weather. The alternate absorption and drying out of moisture are conducive to decay. By painting the woodwork, moisture is excluded and the life of the wood will be greatly lengthened.

Grow the Small Fruits at Home

In the process of getting the most out of the backyard garden, many amateur gardeners have overlooked the cultivation of small fruits.

Fresh fruit on the table has almost become a luxury. The high prices which these fruits are commanding, and their growing scarcity on the market, are due largely to lack of help and the enhanced cost of picking and transportation.

The growing of raspberries, currants and gooseberries is very simple, and their value both for use as fresh fruit and for baking and preserving purposes, should make their cultivation much more extensive. There are no fruits that respond more quickly to good treatment, but they will also stand a considerable amount of neglect. Large fruit and productive bushes, however, can only be expected when they are given proper attention

Soil Fertility in Western Canada

Conservation of the Soil and Rotation for Drought Areas, Etc., Subjects for Conference at Winnipeg

"Our farmers are not all conservationists. . . . The fertility problem on the prairies is a somewhat different one from that of the older provinces. We have an abundantly fertile soil, but a scientist has recently estimated that, if we shipped away only 100 million bushels of wheat annually from Saskatchewan we would ship away fertility—nitrogen phosphorus and potash—with a market value of $23,560,000 not including freight. We are not concerned about *bringing back fertility;* but we are deeply concerned about the *conservation of fertility.*"

In addressing the eighth annual meeting of the Commission of Conservation, Dr. W. J. Rutherford, of the University of Saskatchewan, gave expression to the above opinion.

The marked variation in crop yield in the Prairie Provinces, as shown by the following table of production of spring wheat, raises the question as to whether it is not possible to stabilize production, either by the inauguration of more efficient methods of farming, more suitable rotation of crops for drought areas, or other soil conservation measures:

PRODUCTION OF SPRING WHEAT

	Acres	Yield Per acre	Bushels
MANITOBA			
1910	2,755,818	12.35	34,039,773
1911	3,081,547	20.22	62,309,000
1912	2,824,000	22.30	62,984,000
1913	2,785,000	19.01	52,943,000
1914	2,601,000	14.75	38,365,000
1915	2,797,719	24.76	69,274,000
1916	2,721,898	10.88	29,608,000
1917	2,445,000	16.75	40,953,800
1918	2,908,968	16.25	48,142,100
1919	2,880,301	14.25	40,975,300
SASKATCHEWAN			
1910	4,226,992	15.84	66,964,653
1911	5,253,836	20.75	109,017,000
1912	5,579,000	19.16	165,895,000
1913	5,716,000	21.35	121,465,000
1914	5,344,000	13.74	73,427,000
1915	8,919,282	25.12	224,050,000
1916	9,016,851	16.33	147,235,000
1917	8,263,250	14.25	117,751,300
1918	9,249,260	10.00	92,493,000
1919	10,587,363	8.50	89,994,000
ALBERTA			
1910	674,665	9.98	6,736,680
1911	1,334,186	21.64	28,872,000
1912	1,378,000	21.54	29,675,000
1913	1,310,000	23.00	30,130 000
1914	1,150,000	21.00	24,150,000
1915	2,098,123	31.12	65,289,000
1916	2,886,798	24.95	64,539,000
1917	2,845,600	18.25	51,932,000
1918	3,848,474	6.00	23,091,000
1919	4,341,905	8.00	33,935,000