

REGINA, November 23, 1912.

HON. GEORGE BELL, M.L.A.,  
*Provincial Treasurer,*  
Regina, Saskatchewan.

SIR,—I have the honour to transmit to you herewith the report of an "Inquiry into the Practicability of producing Power at Coal Centres and distributing it throughout the Province," as provided under vote number forty, miscellaneous, 1912 estimates, and pursuant to an order of His Honour the Lieutenant Governor in Council of date April 25, 1912.

The inquiry from the nature of the case was confined to a great extent to the collection of scattered data the result of experiment on the part of a great many practical and scientific bodies and carried far afield wherever there was a likelihood of finding information that would help towards a solution of the problem, and but very little actual experimenting was done. The results are a compilation of this data and the conclusions that have been drawn therefrom.

The inquiry naturally divided itself into various parts and investigation was made of each of these as far as information could be obtained.

The following is a schedule roughly outlining an analysis of the problem and showing the various parts of the investigation as above with the pages set opposite where the date and the discussion thereon will be found. Quantity, location and quality of lignite deposits..... 7, 18.

Methods of transforming lignite to power:

Steam boilers and engines.....	25, 31, 34.
Producer gas and gas engines.....	25, 64, 74.
Coal gas and gas engines.....	51, 69, 90.
Synopsis of data.....	93.
Briquettes.....	54, 100.
Various combinations of above.....	81.

Method of transmission:

By electrical wires.....	103.
By gas mains.....	94.
By transportation of coal on a railway.....	99.

Market for power..... 103.

Estimates of various plants..... 105.

Conclusions..... 130.

Recommendations..... 131.

I beg to especially call your attention to page 90, where the conclusion is arrived at as to the most promising method of treating the lignite in transforming it into power ready for transmission, where it is shown to be by means of producer plants and the use of the gas in the gas engines with steam engines as auxiliary to carry part of the load. It would seem that further investigation and experiment following this line is exceedingly desirable.

An important finding of the inquiry is also included on page 127, which deals with the commercial possibility of the manufacture of lignite coal gas and its distribution through gas mains to the various centres.