He said: Honourable senators, before proceeding with my remarks on the motion for second reading, perhaps I may be permitted, as chairman of a committee, to say thank you to the Leader of the Government for his very kind remarks made with respect to chairmen of committees. While in my own case I think his remarks are somewhat exaggerated, nevertheless, I appreciate them, as I am sure the other chairmen do.

In sponsoring a bill for the incorporation of a pipeline company, I am a little out of my usual field. However, I can give the Senate the benefit of the information which has been given to me by the sponsors of the application, and if the Senate sees fit to give second reading to the bill, as I assume it will, then I shall move that it be referred to the Standing Committee on Transport and Communications. The sponsors of the bill will be present at the committee, and will be able to furnish fuller information than can I, in my ignorance, concerning this pipeline.

The purpose of this bill is the incorporation of a pipe line company pursuant to the National Energy Board Act, to gather and transmit natural gas liquids from western Alberta to the west coast of Canada. This project will include construction of a gathering system in the gas fields of Alberta, and a 580-mile, 8-inch pipe line from Edson, Alberta, through the Yellowhead Pass route, to Port Moody, British Columbia. A very substantial proportion of the products is intended to be shipped to Japan and other foreign markets.

The natural gas liquids involved in this project are ethane, propane, butanes and pentanes, all of which are constituents of wet natural gas which forms a substantial part of the natural gas reserves of Alberta. Ethane, propane and butanes are widely used in petrochemical manufacturing plants as the raw material for such products as ethylene, propylene and butylene, which in turn are used in the manufacture of synthetic rubbers and plastics, plastic fibres, ethylene glycol, or anti-freeze, and to produce paints, solvents, explosives, pharmaceuticals, detergents and many other products. In the expanding petrochemical manufacturing industry the uses for these basic raw materials is considered limitless. The fourth constituent of wet natural gas is propane, which is widely used for domestic and commercial heating in areas where natural gas is not available.

To date, a large proportion of these liquids have been consumed as part of the natural gas, whether it be in exported or domestic use. This constitutes a loss to the country of a valuable resource which, if extracted, can be profitably used for the purposes which are above described. The Alberta Govern-

ment has recognized the value of these components and has enacted legislation which subjects all natural gas export permits to the reservation that these liquids might be required to be extracted in the province before the export of the natural gas. To date this legislation has not been invoked.

The initial capacity of the 8-inch pipe line will be 17,000 barrels per day. The pipe line will be designed to carry a number of petrochemical products in addition to the four above described basic raw materials. The design of the pipe line to accommodate these other products will be of significant value to the petrochemical industry in Alberta as it will allow the secondary industry a means of access to the west coast.

The purposes of the Mountain Pacific project will in no way duplicate any of the established gas or oil pipe lines in Canada, which can generally be divided into two groups: firstly, oil pipe lines and, secondly, natural gas pipe lines. In the first class are such pipe lines as Trans-Mountain, carrying oil from Alberta to the west coast, and Interprovincial Pipe Line, which carries oil from Alberta to eastern Canada. Secondly, there are the natural gas pipe lines such as West Coast Transmission which transports vapour gas from inland British Columbia to the west coast, the Alberta and Southern Pipeline which connects Alberta to U.S.A., and the Trans-Canada Pipeline from Alberta easterly to Ontario. The only liquid gas extraction plant and pipe line is that of the Pacific Transmission Company connecting Empress, Alberta and Winnipeg, Manitoba and using as its source of supply natural gas in the Trans-Canada Pipeline system.

The Mountain Pacific project has been planned by two Canadians, both experienced in the oil and gas industry. One is Peter Colwell Bawden, and the other is Gus A. Van Wielingen, both of whom are from Calgary.

Mr. Bawden was born in Toronto and, like a number of other young men, followed the advice of Horace Greeley and went west, and the west has been good to him. He is the son of Mr. Harry Bawden of Toronto, whom I have known very well for a good many years. Mr. Bawden is an investment banker in Toronto who is highly regarded and experienced, and I think he is known to a good many honourable senators. His son, Peter Bawden, is the majority owner and president of Peter Bawden Drilling Limited, one of the largest oil well drilling companies in Canada. This company commenced business in 1952 with one drilling rig and about 20 employees; today, together with its whollyowned subsidiaries, it controls 28 drilling rigs