(January 7, 1935)

Canada's Last Frontier

By Richard Finnie, F.R.G.S.

President James:—Gentlemen, before presenting our guest speaker today might I, on your behalf, tell his Worship the Mayor* how happy we are to have him with us at our first meeting of the New Year.

Our guest speaker today, Mr. Richard Finnie, F.R.G.S., has a very unique distinction in having addressed more Canadian Club meetings than any other one single speaker. Mr. Finnie was born in the Klondike, and from early youth the Arctic was his main hobby. He made his first expedition to the Arctic at the age of seventeen and since then he has carried out many more expeditions of a more intensive nature.

This address, as you know, is illustrated. Mr. Finnie has five reels, but rather than show these five reels which will take something over an hour, Mr. Finnie suggested that he show one or two. I said not to do that as I understand the pictures are exceptionally good. Those who can stay, do so, and those who cannot do so will have an opportunity when the reels are changed to slip out. Mr. Finnie will know that if you leave, it is no reflection upon him or his pictures.

I have very much pleasure in calling upon Mr. Finnie, the subject of his address being, "Canada's Last Frontier."

Mr. Finnie:—Mr. Chairman, gentlemen, it is popularly thought that the day of pioneering is over — that that day passed with the covered wagon and the opening up of the West. But pioneering is still going on today, just as intensely and just as romantically as ever before.

*Mayor Simpson was a guest at the Head Table.

The spirit of the pioneer remains the same. It is only the methods that have changed, for the covered wagon has been replaced by the aeroplane and the tractor power-boat, and the gold-pan of old California and the Klondike has been superseded by the diamond drill. This modern pioneering is going on today right here in Canada, and especially in a section of it a third as large as the entire Dominion, stretching from the 60th parallel of latitude to the North Pole itself. It is also popularly thought that the Northwest Territories thus far north are of no use as they are almost entirely covered with snow and ice. In the motion pictures which we are about to have thrown on the screen, you will see practically no snow or ice. In fact many of the scenes might have been taken around the Great Lakes but actually all were taken on the fringe of the Arctic circle and beyond it, and it is perhaps this fact that gives the film its romantic value. The film then is a portrayal of civilization surging forward into the last great frontier line.

(The Showing of film commences)

REEL No. 1.

The map will give you a conception of the geographical relationship of the country, with which we have to deal today, with the rest of the Dominion. You will see from Edmonton (which is the only city marked on this map of Canada) there are little dots proceeding northward which take us down the Mackenzie River, one of the greatest on the Continent about 1,500 miles until we branch off, going up the Great Bear River and into the Great Bear Lake. We are now on our way across the Dominion, crossing the prairies and heading from the jumping-off place, as it were, which is Edmonton. Edmonton, a city with a population of 80,000 enjoys the distinction of being the most northerly city on the North American Continent and it is the outfitting centre for prospectors, trappers, visitors, missionaries, mining engineers,—everyone who is keen to venture into Canada's Western artery of the sub-Arctic. Twenty-five miles from Edmonton is South Cooking Lake which is headquarters for two flying companies operating in and out of the far north. These are the Mackenzie Air

Service and the Canadian Airways. The plane you see on the right belongs to the Mackenzie Air Service while the other, which just came in, belongs to the Canadian Airways, and flew more than 56,000 miles in Northern service between June and September. We ourselves preferred to go everywhere, on the initial stage of our journey at least, by train rather than by plane for the sake of the local color. This is the most northerly railway on the North American Continent having a direct main line connection. It runs 300 miles from Edmonton to Alberta. Fort McMurray is 300 miles distant. Why the railway was not continued the additional 300 miles I do not know, unless to give the business to taxi companies operating between the two towns. Of the several taxi companies perhaps the most interesting from a human interest standpoint is that belonging to Cathie Owens who is the most colorful among the famous women in this part of the North. Formerly she drove a dog team and was reported to be the best dog driver and is now the best taxi driver.

In appearance Fort McMurray formerly was typically a frontier town. This film was taken before most of the business section was swept by fire. It has been replaced. Buildings have been rebuilt in a modern manner and thus it has, perhaps, lost some of its color. The River Athabasca flows forward, joining up with the great Mackenzie River, the sub-base being Fort McMurray. We are continuing northward, this time by boat. We are aboard the "Northland Echo", a vessel belonging to the Hudson's Bay Company, which plies 280 miles north. And so we proceed down the Athabasca River out to the Athabasca Lake, down the Slave River until we arrive at Fort Fitzgerald, Alberta, in the evening. Here navigation in the Slave River is interrupted by 1,600 miles of rapids, known as the Rapids of the Drowned. Formerly, quite a few fatal accidents occurred when intrepid pioneers shot the rapids in their scows. Nowadays, however, all passengers and freight pass over the road which avoids the rapids altogether. There has not been a scow through the rapids since 1927.

All of us have heard about the Great Bear River and

the remarkable mineral discoveries there. In Canada there are quite a number of people who are interested in mining and, consequently, are interested in Great Bear Lake to a greater or lesser extent, but who do not pretend to know very much about sub-polar geography. Perhaps for this reason, they have a firm conviction that the mineral wealth of Great Bear Lake cannot be of any practical value because they say Great Bear Lake is too remote, too inaccessible, more than 1,000 miles north of Edmonton. You could not get supplies in. You could not get ore or concentrates out, except by aeroplane, and that is too expensive.

Those of us who are familiar with conditions, actually obtaining in the country know that transportation does not afford any unsurmountable problem. With recent activity in Great Bear Lake, a very severe lack of transportation facilities was felt and so this past Summer two companies —the Hudson's Bay Company and the recently-formed Northern Transportation Company, built a whole fleet of vessels especially for transportation in and out of Great Bear Lake and there you see one of the vessels which was built at Fort McMurray. This vessel was floated down the Slave—down the Athabasca and Slave Rivers—and here is being pulled out of the water at Fort Fitzgerald, prior to being hauled over the portage road to the foot of the rapids at Fort Smith. This vessel, weighing about 11 tons, is about 72 feet in length and constitutes the largest, heaviest and bulkiest ever brought over the portage road in the Summer time. The work was under the charge of the Ryan Brothers, a colorful pair who found their way to Fort Fitzgerald in 1915 and began a transportation business which is today a million dollar enterprise. They own franchises which entitle the Ryan Brothers to the sole right to take freight over the portage. In consideration of these they undertake to maintain the road which is a difficult and expensive one, having been built over muskeg. There is no gravel within 300 miles of this point. The Ryan Brothers say it cost them $10,000 a year for the maintenance and building of this road. But the cost will gradually decrease. They handled this freight with great dispatch. However, there has been a good deal of

dissension over the franchises granted the Ryan Brothers. In view of this another road was built paralleling that one, so that there will be no dearth of transportation facilities between the two points.

We are now almost within sight of Fort Smith lying at the foot of Slave River Rapids. At this point, we were very interested to see there were brand new tracks coming from the side of the road to the main road and continuing towards Fort Smith. This marked the opening of the new road paralleling the old road. And thus we arrived triumphantly at Fort Smith with our vessel. Our actual running time was about three days over portage and the Indians looked on rather apathetically. They, themselves, seldom took any part in work of this kind. They considered it a little too strenuous. I regret to say civilization has no way of improving these people. Our next engineering problem was to get the vessel down here to the edge of the Slave River.

Strong men worked on it with pulleys and ropes and meanwhile Mike Ryan walked ahead of the tractor, guiding it ever so carefully. Mike is the kind of man who is master of every situation. He is imperturbable, never loses his temper and yet gets things done. Now the vessel is ready to be launched. A Canadian Airways plane takes off for Great Bear Lake. The vessel also takes off but not so rapidly. No sooner was she launched than preparations were made to put into the water another vessel. This time it is a barge which was brought over the portage road prior to the first vessel. The Margaret A, weighing about 80 tons was brought over the portage road in the Winter time. While preparations were made to launch the Margaret A. the Indians again looked on smoking their pipes. Now the Margaret A is almost ready for the long track down the MacKenzie to the Arctic Ocean.

Formerly the settlement of Fort Smith was dominated by the buildings of the Hudson's Bay Company. But now there has been a marvellous change. It is now one of the most active shipyards in the world. Here, more than 500 miles north of Edmonton, we find six or seven large vessels in course of construction, all for transportation in and

out of the Great Bear Lake. Fort Smith was not without its social life. It boasted of the only tennis court in the Northwest Territories. That covers quite a bit of territory—more than one million square miles. The contractors, who had undertaken to build these vessels for Great Bear Lake transportation, had agreed to have them all completed and ready for the water by the first of July. But difficulties came in the way and the result was that the first of these vessels was not started on its way until July 10. This brought about a rather serious situation to the far north where the season for water navigation is comparatively short. Navigation must cease around the end of September or the beginning of October at the latest. There was a great deal of work before the two companies which were pioneering with transportation facilities in the far north. First of all, some heavy mining machinery awaited transportation. There were compressors, drills, tractors and all manner of equipment. The next item of the cargo was dynamite—fifty tons of it. At first the men handled it rather gingerly, as one would expect. But after a while they handled it in a care-free manner. One of the men said, "After all, this dynamite is not so dangerous, so long as it does not explode."

But on July 15, the barge was ready to leave. Meanwhile another barge having been completed started on its way down hill with still another in the offing. Flying the red flag we started on down seeking to keep abreast of the other barge. But we were carrying dynamite and that served as a warning to other vessels to avoid a collision if possible. We proceeded towards the Slave River and towards the Great Slave Lake. We passed the distributor supply vessel of the Hudson's Bay Company, bringing a miscellaneous freight of passengers including a few tourists. It is too bad that tourists do not realize how delightful is a trip down the McKenzie by boat.

The Great Slave Lake is the fifth largest on the North American Continent so that after a time one is almost out of sight of land. We entered the McKenzie River proper which flows out of the Great Slave Lake northwest. Our flag hung limply at the mast. The weather was ideal. The

atmosphere was semi-tropical rather than sub-Arctic and the temperature was around 90 degrees in the shade. It was of a country such as this that Robert W. Service, Yukon bard, wrote—"There's a land where mountains are nameless and rivers run, God knows where." But since Service's time much of the country has been mapped, mountains named and rivers charted from source to mouth, due to the miracles of modern pioneering. Vessels carry Indian pilots who have uncanny ability to read weather, pick out channels and avoid sandbars. The McKenzie River is perfectly navigable from source to mouth if care is exercised. And so we arrived at one of the settlements established about 1845. We passed on our respects to Mr. George Douglas, a fur trader, who suggested to his wife that we go on an inspection tour of the settlement. It is sometimes said that the North is no place for white women. I have come in contact with white women who would rather live in the far north than anywhere else. They have hobbies and pastimes. It happens Mrs. Douglas' pastime is gardening. You will observe these ladies are not clad in the manner generally believed—in buckskin. Some of them are wearing the latest things in Summer styles complete with high-heeled shoes. Among their pastimes is slumming and visiting Indian families.

All sorts of vegetables are grown all the way down the McKenzie River to the Arctic circle and beyond it. The growing season is very intensive. It has to be remembered that we are in the vicinity of the Land of the Midnight Sun. Swimming is enjoyed in the McKenzie River during the Summer. It is no stunt.

On the 4th of August we made final preparations to continue our trip along the Great Bear River towards the Great Bear Lake. Before we could proceed it was necessary that we get rid of some of our cargo at least. Great Bear River is about 90 miles in length. Its average depth is hardly more than five or six feet and in its middle are six miles of rapids. Consequently, any vessels which ply it must be of shallow draft, drawing not more than two feet of water. The dynamite was the first to go off. I meant it was the first item to be transferred. We had been living

and sleeping with this dynamite, so that we had ceased to let it worry us. So, late in the afternoon we moved away at one side of the mouth of the Bear River. Simultaneously, we saw two other vessels moving from a berth on the opposite side. These vessels belonged to the Hudson's Bay Company whereas the other vessel with which I was travelling belonged to the Northern Transportation Company. This situation added zest to the adventure. A race ensued. It was feared by our crew that the Hudson's Bay vessel would get into the rapids before us and that might block the channel. Then our crew dropped out of the race, having to tie up to the bank to effect engine repairs. We kept going all night long since we still feared that the Hudson's Bay Company vessel might offer further competition. We made very good time for 35 miles until around ten o'clock next morning when we found ourselves in shallow water. Had we arrived at this point at least two weeks earlier in all probability we would have encountered no difficulty whatever. As it was Spring, the flow had subsided and the water was at an unusually low level. We had to make the best of the situation. Since the water was so shallow, it was decided we should remove the steel from our cargo and lighten the craft as much as possible. We placed this cargo in small scows while the Indians looked on. These small scows were between 40 and 50 feet long, all powered with gasoline engines. They can run up and down without difficulty through the rapids of Great Bear River, carrying up to three or four tons of freight. They may make almost half a dozen trips if necessary in an emergency, and probably for a long time to come this type of vessel will carry much of the freight between the upper and lower reaches of the river or rather through the rapids.

Now, we ourselves are starting off once more with the aid of cables, of course. Our two diesel engines will be kept going but we are depending mainly on the cable for propulsion and as it is wound round a capstan the slack is taken up on the spool on the little scow alongside. The nearby camp remained in sight for days at a time. In rather more than a day we covered half a mile. We hoped

eventually we would round a bend so that we would not have to look at the camp any more. The water here is as cold as ice and clear as crystal.

I should like to say a word about the men who make up crews of this kind—men found in the far north. The old weather-beaten prospector of fiction, who actually did inhabit the far north years ago and today to a lesser degree, is now gradually being replaced by a different type of man — a man who comes from a good family with a good cultural background, who very frequently is a university student or graduate. He is in the north not only for the life of adventure but because he believes in its future. He is willing to work just as hard as the old timer so he has become known as "the cultured roughneck." The old pioneers opened up the country. They did the preliminary work and now the youngsters will carry on that development.

Now we come to a place in the channel which is so narrow and tortuous that it would be impossible to get both our vessels through simultaneously. We decided to let the power barge slip back into the current with the idea of manoeuvring separately. However, the current proved very strong, so strong that the winch was not strong enough to hold the vessel against the current with the result that it was swept away so that both vessels were helpless. It was very depressing. Our crews found it all the harder to bear when the Hudson's Bay vessel approached us. Pride goes before a fall! We were in the soup! While awaiting an aeroplane to take me to Great Bear Lake, I went down the Mackenzie 52 miles to inspect the spot. The discovery of oil near Fort Norman in 1921 precipitated a stampede. There is only one company engaged in the production and refining of oil at this point. According to a sign on the river bank fuel oil sells at 32 cents a gallon. Formerly, imported gasoline sold at $3 a gallon. The well and refinery are maintained not so much as a money-making venture but rather as a convenience to those who have need of gasoline and fuel oil. Nearly everyone needs them. Even the Indians have outboard motors on their canoes. Thus it has become a great aid in

the development of the far north. Enough oil and gasoline could be produced here to supply the entire district.

Back on the settlement at Fort Norman I was very much relieved to see a plane appear on the horizon and come down at the junction of Great Bear River with the Mackenzie. The plane was a junkers' type and the pilot was an old friend of mine, Walter Gilbert, who had flown me over the north magnetic pole in 1930. We took off over Fort Norman on a misty morning heading up Great Bear River. A fellow-passenger on this flight was Mrs. Walter Gilbert. This was her first visit to the far north but flying was no novelty to her. She was a licensed pilot. Soaring over the camp at the foot of the Bear River Rapids I looked for the vessels which had been stranded. I was delighted to see they were out of difficulties. They had ingeniously manoeuvred themselves off the ledge upon which they had been stranded. Meanwhile, these little scows were going to and fro carrying freight to be deposited at the top of the rapids. These feathery fingers of rapids stretched almost across the river at many places. We circled round several times making sure the vessels were all in good condition and then flew over the portage road which had been built by the Dominion Government recently, completed with the object of avoiding the rapids altogether. Old-timers seem united in the belief that the portage road would be of little use because it was cheaper to move freight by water. They felt the government would have done better to have expended the money deepening and widening the channel. We came down next at the head of the Great Bear River, having flown 90 miles from Fort Norman. We next flew over Great Bear Lake which is the largest lake in Canada. It has an area of 12,000 square miles and ranks third among the lakes in the continent. It has the longest shoreline of any fresh water body in the world. Mrs. Gilbert did not seem to be troubled by that statistical information!

After a couple of hours flying we were at the eastern extremity of Great Bear Lake right over the mining areas where we stopped to refuel. This has nothing to do with the story this afternoon except that it will give an idea of

the proximity of the Great Bear Lake mining areas to the Arctic. We rounded the river mouth proceeding westward shortly coming in sight of the settlement of Copper Mine. It was here I made my headquarters in 1930-31 while living and studying among the Eskimos, sometimes miscalled blond Eskimos. These people have now obsorbed much of civilized culture which has hardly been to their advantage. Mrs. Gilbert stepped ashore to shake hands with the Eskimos and I stepped ashore also. I looked about me for familiar faces. Some of my old friends were there. They had not forgotten me. They called me by my name—Ivack—meaning walrus.

We took off after a few hours and arrived at Cameron Bay before dusk. Cameron Bay is in a sense the capital of Great Bear Lake. Cameron Bay is a clearing station. There is a post-office here, while a trading post is maintained.

In fair weather and in foul, in Summer and in Winter, the aeroplanes of the North keep on schedule and perform miracles of modern pioneering with such regularity that they scarcely achieve mention in the newspapers. There is such a standard of skill and efficiency set that there is scarcely ever an accident or a casualty and without accidents how can harassed reporters continue indefinitely to record the skill and daring of these Northern pilots? To these pilots in no small measure is due, without exaggeration, the development of this vast hinterland of ours, the Northwest Territories. Building operations were going on at Cameron Bay. The finishing touches were being put to a new log cabin while the Indians looked on. Here are children of some of the pioneers of Great Bear Lake —some of the new white residents. These children were born in the country. In all probability they will grow up there and some day be numbered among the leading citizens of the district. At the Cameron Bay post the Canadian Airways schedule is listed, the movements of the planes being recorded on a bulletin board. This plane has come in carrying stuff from Fort McMurray and this fellow is taking out lettuce. The people are only too glad to avail themselves of that delicacy. The importing gardener

there is an old prospector that was sent south by friends who took up a collection, really to pay his funeral expenses. With the money he returned to Cameron Bay to start a restaurant. Such is the indomitable spirit of the true Northerner. The pilot who brought the lettuce is now preparing to start southward with a load of His Majesty's mail. You must not get the impression that Northern pilots carry only mail, vegetables, fur and passengers. There is no limit to the radius and the variety of loads which may be carried by these planes in the far north. They carry everything—even kitchen stoves. The Northern pilot will carry prospectors, mining engineers or trappers to almost any point marked on the map or not on the map and pick him up again at any specified time. These prospectors are able to cover a tremendous amount of territory.

Here are the Cameron Bay barracks of the Royal Canadian Mounted Police. Constable Tom McBrien is proud of a team of huskies with which he patrols during the Winter. The husky dog is not an inherently vicious or untrustworthy animal. He will react according to the way he is treated.

Here is D'Arcy Ardien, pioneer of Great Bear Lake, who has been happily married to an Indian woman for twenty-five years. He owns many claims south of Great Bear Lake.

To come back to these husky dogs of the North. In most years their staple diet is fish. These nets must be constantly kept in repair.

We leave Cameron Bay to visit several adjacent mining camps within a radius of a very few miles. There are perhaps half a dozen more or less active mining camps today.

All the buildings you see here are constructed of native timber. I mention this simple fact for the reason that the far north is thought to be barren. Men here are cutting up their timber with their own little saw mill, grading the lumber for building purposes. In the Bear Lake vicinity, tall trees grow to a height of 60 feet and more and 18 to 20 inches diameter at the base. These grow all the way

200 miles beyond the Arctic circle. And here is a mine. Despite the name, "Bear Exploration Radium Company," the company is concentrating wholly on silver at present.

We are on our way to visit another camp near Bear Lake. The boys at the camp here are playing with a chunk of native silver weighing about 16 pounds which is used for the shot-put at the annual Arctic picnic. Each of these sacks is worth $500 to $1,000 and there are more than 1,000 sacks that contain radium-silver concentrates which are awaiting shipment. They will be sent to the radium refinery at Port Hope, Ontario.

Back at Cameron Bay I find a small auxiliary vessel has arrived carrying food and gasoline for the settlement. However, the arrival of the auxiliary vessel did not create much disturbance in Cameron Bay but the people were looking forward to the arrival of the large freight which would render the camps active once more. Finally we said good-bye to Cameron Bay, flying southward 35 miles. I was told I was entering White Cliff Falls which is north of the mouth of the Chemsal River which enters into the Great Bear Lake. A civil engineer who has been there studying its possibilities as a power site said, in his opinion, it was one of the most favorable Hydro-Electric power sites in the Dominion, capable of producing sufficient electrical energy for the entire mining area of Great Bear Lake. The Falls would deliver power both in Summer and Winter since they have behind them a great natural reservoir system. These mills down stream are the properties of the White and the Eagle Silver Mines which company has opened on the power site. The superintendent of the camp was very proud of his little garden. It seems everyone who was anybody had a garden.

I have spoken briefly about the inconvenience which had been caused by the delay in the arrival of supply vessels. Every man at the various camps carried on as best he could with the materials on hand. Here at White Eagle Camp we find some of them. On this hillside some of the most remarkable silver discoveries in the Great Bear Lake area were made. The white line you see is silver. The vein is 25 inches across and this assay has as

much as 2,000 ounces to a ton of ore. Down at the foot of this hillside is the entrance to the mine itself. The men have been laboring under very severe handicaps. They have run short of gasoline and without gasoline they cannot operate compressors and diamond drills. They ran short of dynamite, not to speak of imported foods. They are carrying on as best they can, clearing out the muck from the mine and making preparations for the Winter day when the supply ship arrives. Day by day they are turning their eyes towards the west in the hope of catching one or other of the supply vessels. At last on the first of September last, the Great Bear power boat which we had left in the rapids suddenly appeared, rounding the bend of the Chemsal River approaching the White Eagle Camp, carrying a miscellaneous freight of gasoline, fuel oil and food—everything needed to render the camp active again. The crisis was over. It had been a very real one.

If this or other vessels had failed to get through Great Bear Lake (but all the vessels did get through, including the Hudson's Bay Company), the Great Bear Lake area would have suffered a blow from which it would have required several years to recover. That picture of depression has forever disappeared. No longer can the skeptics you meet say that the mineral wealth of Great Bear Lake is of no use to anybody—that you cannot get it out and that you cannot get supplies in and out. With this pioneering enterprise of ours we had blazed 1,500 miles by water all the way from the end of the steel to the Great Bear Lake and the difficulties which we had encountered in the rapids, (this I would emphasize), were essentially difficulties of pioneering enterprise. Never before had boats so large as ours been brought into the Bear River, let alone into Great Bear Lake. In the future if similar vessels were to be brought into the Bear River, they could get down with much less trouble, since our experience would be of profit to them.

All the activity portrayed on the screen this afternoon has revealed this wonderful mineral wealth of Great Bear Lake, the building and launching of vessels, the influx of

mining engineers and adventurers — all this activity is thrilling. Here is a ribbon of silver extending goodness knows how far into the earth. All this mineral wealth coupled with great natural resources form the nucleus of a great new empire.

President James briefly thanked Mr. Finnie for his very interesting story, and the beautiful films which he had illustrated and clarified his lecture.