

(March 16th, 1936)

The March of the Mining Industry

By HON. CHARLES MCCREA, LL.D.

MR. COURTICE, Chairman:—Mr. McCrea and members of the Canadian Club — You may have observed that this is mining day, and we are honored by having at our head table many of the leading representatives of the mining world, and we extend to them a very hearty welcome. I should like to extend a special welcome to the Hon. Paul Leduc, Minister of Mines for Ontario. We appreciate very much Mr. Leduc's attendance at this meeting, for it exemplifies the cosmopolitan spirit of the Canadian Club.

We are all interested in the development of our great mining industry, an industry which has grown from small beginnings till it challenges even agriculture in the matter of its importance to the country. Its progress has been one of courageous adventure stimulating to the imagination. There has been a great deal of romance in the march of the mining industry, and we are particularly pleased in having Mr. McCrea with us as guest speaker today, for on this subject there is no man who is better informed or more interested in the development of the industry.

He has had a long and distinguished connection with the mining industry, for many years practising law in the mining areas of northern Ontario, and later for eleven years holding the portfolio of Minister of Mines with great distinction. He has made an outstanding contribution to the development of mining in this country. This has been acknowledged in many ways, and was recognized by the University of Toronto when it conferred upon him the honorary degree of Doctor of Laws.

I just heard today that he is a very accomplished curler.

While I may not like him particularly for that, such a person has my respect. I do know that he is a very fine golfer, and that is a horse of a different color. It is a very great honor for us to have him here today, and as you all know him so well, may I, rather than introduce him to you, offer him, on your behalf, a very hearty and sincere welcome.

Mr. Chairman, Hon. Mr. Leduc and Gentlemen of the Canadian Club:—I am indebted to you for the honor extended today in affording me this opportunity to address you.

The title of my address is "The March of the Mining Industry," and I confess, at the outset, that my difficulty is to know where to begin and what to say to tell even a part of the story.

The industry is growing in importance, playing an outstanding part in the economic life of Canada, winning an ever-widening circle of friends and gripping the imagination of Canadians and others beyond our borders. It is on the *qui vive*, it is on the march.

Its record is one of progress and expansion;—progress in method, progress in achievement, expanding in production, expanding in values, expanding in the distribution of its benefits—increasing its opportunities to those seeking employment. It has made more markets for our farmers, our factories. It has provided additional traffic for our railways, is a good taxpayer and has instilled faith, hope and enthusiasm in a large section of our people who, jaded, tired and worn by a prolonged depression—the greatest in one hundred years—are feeling the benefits and blessings distributed by a growing basic industry.

This year of Our Lord, 1936, will see the end of seven years since the economic crash in 1929—seven lean years in the business world. Will these seven lean years end in 1936? Who is bold enough to prophesy the business future with certainty. As we scan the world situation during the period referred to and look at it today the picture is not what we can truly term a happy one. The Western world, particularly in the Mediterranean section, is upset—war and rumors of war, nations striving for a bigger place in the sun, economic disturbances, monetary disturbances, excited,

agitated peoples. In the Eastern world across the Pacific the same picture presents itself. War and rumors of war—monetary and economic disturbances, all creating an oppressing effect on the outlook for international peace. World trade, international trade, slowed down by two-thirds from its high peak, while here in Canada we all have experienced our share of commercial havoc, although enjoying a greater measure of safety and more grounds for hope and optimism. We are fortunate indeed to belong to a great Empire and within that Empire to have, as a people, the destinies of Canada in our keeping.

Many "ships of state" are tossing in angry waters and from day to day we ask—"What of the morrow?" As Canadians we are proud of our Empire, our heritage, our liberty, our freedom—only eleven million people in an area of great resources larger than the great United States of America with its population of one hundred and thirty millions. We are proud of our founders, our pioneers—their courage, their capacity, their unbounded faith in the future. We are proud of their achievements. In the material world they laid their business foundations in the main upon the primary industries of forestry, agriculture, fish and fur, but of late years mining has become one of Canada's basic mainstays.

Seated at the head table to-day is a galaxy of men representative of the mining industry: prospectors (upon whom the industry depends), geologists who read the riddles of our rocks, engineers directing the mining development, metallurgists, who extract the gold and other metals from the ores, capitalists and promoters who gather and expend the monies necessary for development. All of them are graduates of the "school of hard knocks" and experience whose motto in a material mining world is the motto of a greater spiritual world: "search and ye shall find, knock and it shall be opened unto you." They are typical of the men upon whom the industry rests. Their vocabulary does not contain the word "fail." There is only room for some of these at the head table, but they, and the men they stand for, are proud of their achievements and of the progress of the industry.

The infant industry of yesterday—the small boy of

yesterday—has grown up. He has, so to speak, come to town. What a dashing, handsome, vigorous, generous, young fellow is this "Mr. Mining Industry"!

In his younger years he did not get much recognition. In fact, some people cast nasty glances at him and passed him by—but this youth had a charm and fascination about him. He did not mind but took it in good part. He just laughed and kept on working. Today "Mr. Mining Industry" strolls about town and meets some of his old pals in the 'primary industry trade'—"Mr. Agriculture," "Mr. Lumberman," "Mr. Manufacturer," "Mr. Fur Trader," and some of the business friends who, for these gentlemen, in former days, handled their business for them in a large way.

Mr. Mining Industry asks them how business is and how they are getting along and gathers from what they say that business is bad. What a tale they tell him—hard times—low prices—lost markets—unemployment—inability to pay debts—mounting taxes—depreciated farm values—men leaving farms—reduced values of real estate, both rural and urban—battles in Parliament over the many problems which the falling off of business produced, over wheat and wheat boards, railway deficits, trade treaties, assistance for the unemployed—moratorium legislation. Trouble and plenty of it.

Mr. Mining Industry assured them of his friendship and told them that he was already assisting them in many ways by buying, annually, many millions of dollars worth of farm products, forest products, factory products, machinery, by employing many men and adding more to the payrolls each year. He also pointed out that he was contributing in a substantial way to railway traffic and thus assisting to ease the railway burden. In fact, they began to realize that the mining industry was a tower of strength to the country and that in it lay hopes and expectation for an even greater and more powerful assistance.

He told them that Canada's mineral production for 1935 had a value of approximately \$310,000,000, that the Province of Ontario had contributed aver one-half of the total mineral production of the Dominion, or \$159,000,000. He also told them that in the production of metals Canada's output for 1935 was valued at \$221,797,000 and that On-

tario's share in that total was \$142,919,462; in addition the total Canadian gold production for 1935 was approximately \$116,000,000 and again the Province of Ontario had contributed more than one-half or some \$78,000,000. Even more interesting was his statement that from 1930 to 1935 Ontario's gold production had a value of \$414,000,000 in new wealth and that up to the end of 1935 Ontario's gold production had reached the enormous total of \$665,000,000, and he further advised his interested and enthusiastic hearers that a partial distribution of the mineral wealth produced in Canada in 1935 was, according to the *Financial Post*, as follows:

To—employees	\$99,000,000
—power companies	11,000,000
—farmers	11,500,000
—manufacturers	60,000,000
—railroads	12,000,000
—shareholders	58,000,000

and that mining was now playing a prominent part in keeping the nation's business wheels spinning.

Mr. Mining Industry had more good news for his friends. They heard from him that the values of Ontario's mineral production in 1934 had exceeded the value of Ontario's field crops in that year and that, although the figures were not yet finally available for 1935 field crops, it would appear that the mineral production of \$159,000,000 for Ontario in 1935 would likely exceed the value of our crops in the same year.

All of this information was most enlightening to Mr. Mining Industry's friends, but he did not stop there. He gave them a comparative picture of what the industry has done for the railways and quoted to them railway statistics of freight shipments which had appeared in *Gold Magazine*, reprinted from the *Financial Post*:

	Mine Products	Agricultural Products	Forest Products	Products of Manufacturers
1932	12.3 million tons	16 million tons	5 million tons	9.4 million tons
1933	12.03 " "	13.8 " "	5.5 " "	9. " "
1934	16.2 " "	13.8 " "	7.06 " "	10.9 " "
1935	22.8 " "	13.9 " "	8.1 " "	18.5 " "

and in connection with these tables there was also the following comment thereon:

"It takes freight to keep the wheels of a vast railway network moving.

"To the Mining Industry must go the credit for being the most rapidly growing source of freight in Canada.

"During the past three years, the freight tonnage classified as mine products has nearly doubled.

"At a time when revenues from other sources have stood still, increased comparatively slowly, or actually decreased, the mines of this country have supplied the railways with more and more tonnage.

"The Mining Industry has been the railways' loyal friend."

But there are places where even the railways cannot carry freight and then we have to call on wings—man-made wings—argosies of the air—and these are playing such an important part in the development of our mineral areas. The mining boys are up to the minute and Mr. J. B. Tyrrell, who sits on my right at this table, has just told me that one of the companies in which he is interested has given a contract for the flying into a mining venture of five hundred tons of freight to be handled by wings.

Airways are rolling back Canada's frontiers and mining activity in the North in 1935 furnished these airways with sufficient volume of business to establish Canada, on a *per capita* basis, as the leading nation of the world in air mileage flown, passengers carried, freight transported and air mail handled and flown.

Freight flown	16,000,000 pounds
Passengers carried	120,000
Mail flown	1,000,000 pounds

Truly a year of progress and expansion for aviation in Canada. In 1935 Canada flew approximately four times as much freight as the United States.

The reception of the facts and figures Mr. Mining Industry was quoting warmed his heart, for his friends were now becoming decidedly enthusiastic, so he imparted to them further some statistics on the relation which mining bore to primary production as a whole—thus:

In 1920, he told them, it was 10%
 In 1929, it was 16-2/3, and in
 1935, 20% to 25%.

With pardonable pride, he also told them, how gold production was expanding in all directions, and as proof he pointed out that in 1935 some seventeen new gold mines in Canada commenced operations—eight in Ontario, five in British Columbia, three in Quebec and one in Manitoba. Further, that on the basis of 1935 production, as set out in a recent issue of the *Financial Post*, when we look over the world situation:

Canada stands *first* in production of platinum, nickel and asbestos,

Canada stands *second* in production of zinc, radium and cobalt,

Canada stands *third* in production of gold, copper and silver,

Canada stands *fourth* in production of lead.

During 1935 Canada exported—

non-ferrous metal products to value of approximately \$120 millions

non-metallic mineral products to value of 18 millions

Total \$138 millions

In the same period Canada's net obligations to foreign shareholders, in the way of dividends and interest, whether governmental, municipal or corporation, were a total of \$219 millions

"Thus Canada's mineral exports paid over 63 per cent. of the Dominion's net obligations to foreign countries. Canada is a debtor nation. This little-realized role of the mining industry is of paramount importance."

Having provided this convincing proof of the benefits conferred by mining on the other primary industries of lumbering and agriculture, and having made it clear that mineral products were not in competition with them, Mr. Mining Industry had his friends accompany him into the North for a closer view of what is occurring there in the mineral areas. They proceeded to the top of a very high mountain from where they could view the great Canadian Pre-Cambrian Shield. With a sweep of his arm, the location was indicated of this great metal-bearing rock area which, commencing at the Atlantic seaboard, embraces the greater part of the Province of Quebec across a width of seven hundred miles to the eastern boundary of Ontario, through the great Province of Ontario hundreds of miles wide, on through two-thirds of Manitoba, one-half of Saskatchewan, northern Alberta, on and up through the Northwest Territories to the Arctic Circle—this great formation, the mother of metals, is the source of Canada's great mineral future. To-day, sitting at the head table, is Gilbert LaBine, with others entitled to the credit for daring and enterprise in penetrating those Northern Arctic areas and bringing to light the wealth of radium found there, now being produced for the benefit of Canada and the Empire and mankind, and being refined at the little town of Port Hope in Ontario.

Mr. Mining Industry urges his friends to observe that within the boundaries of this great shield are some of our great mining camps—the great nickel-copper, platinum and tributary fields of Sudbury, the silver fields of Cobalt, the gold fields of Porcupine and Kirkland Lake, and easterly across the border into Quebec was the great Noranda mine, and lesser mines and properties of the Quebec section of the Pre-Cambrian, which are attracting attention far beyond the borders of Canada. On, in a westerly sweep, could be seen the mining areas of Matachewan, Shining Tree, Michipicoten, Little Long Lac, Pickle Crow, Red Lake, God's Lake, San Antonio, Flin Flon; and he impresses upon his friends the importance of these various sections in the future development of the mining industry. He emphasizes to them that these discovered areas, and other producing mines,

are beacons, not to warn people away, but rather to point the direction to greater opportunity and greater riches lying hidden in the bosom of "Old Mother Earth."

Mr. Mining Industry further pointed out that in the mining expansion during the year 1935 there were 2,500 new jobs opened up as a result of the development and exploration in various mining areas across Canada.

For a close-up look at a big mining operation, Mr. Mining Industry took his friends on a visit to the works of the great International Nickel Company and the world famous nickel belt in the District of Sudbury. At Copper Cliff, Mr. Mining Industry proudly showed them around the smelter and the refining plant, a portion of this vast nickel-copper enterprise. He told them that in addition to these the Company had other plants at Port Colborne, Ontario, Huntington, West Virginia in the United States, at Clydach in Wales, the Wiggins Works in England, and a platinum refinery at Acton, England, electric furnace works at Birmingham, England, and foundry plants for technical foundry practice at Bayonne, New Jersey—all dependent upon the famous nickel-copper ore bodies in the Sudbury region. He further pointed out that the capacity production for copper per year was 240,000,000 pounds, of nickel 180,000,000 pounds, and that important precious metals also occurring in these ores were gold, silver, platinum, palladium, selenium and kindred metals, and that thousands of men are employed on these operations and the construction work in progress. The proven ore reserves of the Nickel Company at December 31st, 1935, were over 200,000,000 tons.

Next they proceeded to the great Frood mine which, with the other properties owned by the Company, supplies the raw material. Here all was hustle and bustle, for at this particular property they mine 10,000 tons of ore a day, 140,000 carloads. There 3,600,000 board measure of timber per month, or between 40,000,000 to 50,000,000 feet board measure annually, go underground for mine use. Over 2,700 men are on the payroll at this one mine and for 1935 they were paid over \$3,750,000. The hoisting skips handle eleven tons a trip, travelling at the rate of 2,600 feet

a minute and every twenty-four hours there go down underground 140,000 feet board measure of timber. 4,500 pieces of drill steel up and down each day and 2,000 men are hoisted and lowered daily to work in a well ventilated, well regulated, mine operation.

This great Nickel Company paid out in 1935 for freight charges the large sum of \$3,500,000, it bought 225,000 tons of Nova Scotia coal,—thus distributing its mine wealth in that section of Canada,—and it purchased 150,000 tons of coke, produced largely at Sault Ste. Marie, Ontario. As Mr. Mining Industry put it to his friends: "One has but to think to realize and understand the benefits both direct and indirect which this industry brings to the lumbering industry, to the farming industry, to the railways, and to have an appreciation of how the distribution of this new wealth benefits all lines of trade and commerce."

Another of the great mines of this Company is the famous Creighton Mine, where expanding operations are under way and there is being installed at that property a huge mine hoist, built in Montreal, equalling in size any built in Europe. It weighs 1,200,000 pounds and will operate from a depth of 4,000 feet. Mr. Mining Industry did not have to do much talking for Mr. Agriculture, Mr. Lumberer, and their business friends in other lines who accompanied the party, stood aghast at the magnitude of the operations they observed there.

Their next expedition was to the great Porcupine Mining camp. There again all was hustle and bustle. Mr. Mining Industry gave them a quick run over Hollinger, the great mine which started years ago with a thirty-ton stamp and up to the end of 1934 had produced metal worth \$224,000,000. "Just remember," said Mr. Mining Industry to the party, "from 1911 to 1935 major disbursements of this mine are accounted for as follows:

Paid in wages	\$79,767,891.65
" " supplies	50,006,365.67
" " taxes	10,512,090.30
" " dividends	77,418,400.00"

He also detailed the early beginnings of the Dome Mine,

which commenced with a 40 stamp mill, but his friends interrupted to say that this was one mining operation of which they had knowledge, for its spectacular rise to prominence in a world mining industry was universally known. Mr. Mining Industry, however, continued with some further facts and concluded by pointing out that they might be interested in the depth of mining operations and they were surprised to learn that at the Hollinger they are sinking below 5,000 feet and that at the McIntyre they are down over 5,375 feet. He could not help emphasizing to these friends that these well-known gold mines, Hollinger, McIntyre, Dome, all going strong, with payrolls of thousands of employees, had records of achievement which he was proud to tell them, and that, although these mines had been operating for a quarter of a century, they were still strong and vigorous with long lives still ahead, and that in addition the lesser mines of the Porcupine camp held great promise for the continued success of prosperity of the field.

The next hop of the visitors was to the great Kirkland Lake belt where outstanding mines like Lake Shore, Teck-Hughes, Wright-Hargreaves, Sylvanite, Kirkland Lake and Macassa were turning out increasing values in gold. Lake Shore, one of the world's outstanding gold mines with decades of life still ahead of it for gold production, was of great interest to the party. They learned that in 1917 that property was milling sixty tons per day. In 1935 2,300 tons per day. Total dividends paid were \$40,000,000 and in 1935 the payroll approximated \$2,500,000, while another \$2,500,000 went to manufacturers and railroads for supplies and equipment. The depths of mining operations in the Kirkland Lake Camp were also a source of great interest for the visitors: At Kirkland Lake Gold they were down to 5,850 feet, at the Lake Shore they were at the 4,450 foot level, and at the Teck-Hughes they had reached 6,250 feet. Mr. Mining Industry recounted the story of this Camp, and its great producing mines, which, similar to those of the Porcupine and other camps, required each day great quantities of timber, supplies and equipment. As the party proceeded on its way, Mr. Agriculture said: "Do they ever eat any turkey here?" and the immediate reply was

that in the little town of South Porcupine fifty tons of turkeys came in for last Christmas from Alberta. No matter which way the visitors went through the two camps there was evidence everywhere of the tremendous effect the mines have through their payrolls, and their requirements and purchases of timber, supplies and equipment, in making the people more prosperous and happy. Mr. Mining Industry remarked that to him it seemed as if only yesterday the Timmins area was practically an unknown section but now there were 20,000 people in the Town of Timmins, and they are beginning to realize that they are not a mere mushroom growth — here today and gone tomorrow, but they will go on to bigger things, because the outlook for mining never was better or more optimistic than at the present time, and from the results of the surveys of men skilled in engineering we look forward to making greater progress in the future. According to that very popular magazine called "Gold," on January 1, 1930, Canada had nineteen commercial gold mines in operation, seven of which were paying dividends. Six years later, January 1, 1936, saw one hundred and twenty-two commercial gold mines in production or completing mills for early production and another eight which contributed an important quota of gold from base metal mining operations. Dividend payers have been slow, but there are now twenty-two, with several young producers to reach this rank during the current year.

Having delivered himself of these interesting figures, which he thought his friends should have, Mr. Mining Industry suggested that the party move on to visit Noranda, a prospect in 1926 and now, ten years later, one of the greatest copper-gold mines of the world. Its record of achievement runs something like this:

Paid out in wages in that ten years an amount in excess of	\$20,848,000.00
Freight and express charges paid in 1935 were	\$987,000.00
Total purchase of supplies during 1935 was over	3,176,000.00

A few of the items purchased in 1935 were:

Coal and Coke	\$389,000.00
Explosives	295,703.00
Lumber and Wood Products	68,000.00
Fire Brick	102,800.00
Rock Drill and Parts	61,884.00
Oil and Grease	168,400.00
Pipes and fittings	42,600.00
Grinding Balls	76,565.00
Steel	71,105.00
Rubber and Supplies	33,900.00

Mr. Mining Industry was satisfied to let this notable record speak for itself, and the party commenced to move on up to see the great power development at Abitibi Canyon, built by men who visioned the power needs of a growing mining industry, for such, eventually, was the demand from the industry that additional generators have been added with an installed capacity of 330,000 horsepower. This electric power has been a veritable Godsend to mining development in the North country. To-day it is a huge success and this power development is made possible by reason of a greater expansion in the nickel-copper industry at Copper Cliff, expansion of the gold mining industry in the Porcupine and Kirkland Lake fields, and even our sister Province of Quebec is today using substantial quantities of power from this same source. It is a matter of pride to Canadians, but particularly to the Province of Ontario, that when the expansion of mining in the areas tributary to the power exacted increased requirements, the power was available so that the mining industry could march enthusiastically forward. Mr. Mining Industry continued his remarks with evident pride. He pointed out that as this power is tributary to sections tapped by the people's T. & N.O. Railway and its branch lines, the strategic importance of this development becomes increasingly evident and Toronto, as a mining headquarters, realizes today the part mining is playing in its prosperity and expansion.

"These visits," said the now-very-much-enthused Mr. Mining Industry, "to Sudbury, Porcupine, Kirkland Lake,

and Noranda, are but some of the outstanding sections. Do not overlook that there are newer and important areas forging their way steadily to the front." He then mentioned to the group of thrilled listeners some names which they hastily committed to memory, as—Red Lake, Pickle Crow areas in Patricia where there are four producers in the Howey, McKenzie Red Lake, Pickle Crow and Central Patricia, with a number of attractive properties getting under way. These are producing \$4,500,000 yearly. To many people it seems but yesterday that the gold rush swept into the Patricia area, but development there was handicapped for there were difficulties in getting power and difficulties in transportation. While power lines have been built in, there is still need for additional power, but the Government is seeing that they will get it. The 1,300 horsepower now being generated in the Pickle Crow section is being increased to 2,900 horsepower and will be available by October, 1936. Red Lake is demanding more power and there, again, more power will be made available.

Another one of the newer sections of which mention is made, in Mr. Mining Industry's ever-increasing discourse, was the Nipigon area, and one must not overlook in passing just what is taking place at Little Long Lac and the great possibilities in that area. My old friend, Mr. Joseph Errington, veteran prospector and promoter, deserves great credit for the drive and energy put into that enterprise. Fortunately power was available at Nipigon and lines were stretched along The Canadian National Railway tracks to carry power into Little Long Lac. This area is producing at the rate of \$2,700,000 per annum, of which one-half comes from the Little Long Lac mine. This general area includes, as doubtless you know, Little Long Lac, Northern Empire, Tashota, St. Anthony, with a promise of great expansion and development in that field.

Then, another new area touched upon, was the Michipicoten section, with its Parkhill, Minto, Smith and Darwin, producing at the rate of \$800,000 yearly.

Also, the Matechewan area, in which are holdings of Hollinger and the Ventures interests, producing at the rate of \$1,800,000.00 per annum. Across the boundary, into

Quebec, is the Beattie, Arntfield, McWatters, O'Brien, Canadian Malartic, Siscoe, Sullivan, Greene Stabelle, Lamaque and Sigma, all producing about \$6,800,000 yearly, while over in Eastern Manitoba is the San Antonio and Central Manitoba and Diana coming in with about \$2,000,000 annually. The developments in these newer areas hold out great promise and in the light of experience already gained, and with groups of capable, determined and aggressive men at the helm, the picture cannot help but expand in a substantial and beneficial way as the years go by. It has been said, from time to time, that no new camps are being found to rival either Porcupine or Kirkland Lake but, if one looks at the production from these newer camps, in the eastern Manitoba section, with San Antonio, Pickle Crow across into Ontario, Little Long Lac, Central Patricia, Red Lake group, Michipicoten group, Matachewan group, Beattie-Arntfield-Noranda group, and the gold mines east of Noranda, they approach a production of \$35,000,000, which rivals the production of either one of the older camp.

A new mining enterprise, of which Mr. Mining Industry did not fail to tell the party, looms up west of Lake Nipigon at Obonga Lake in the chromium deposits now brought into production under Mr. Sandy Globe. The world production of this metal comes from Rhodesia, New Caledonia, India, Cuba, Russia, Turkey, Greece, Jugo-Slavia. The deposits at Obonga Lake are of sufficient importance to warrant the expectation of production on a substantial scale and an ability to compete in world markets.

At this point may I pay my tribute to the great mining pioneers of Ontario and Canada on their courage and enterprise. I have before me a statement of one group—Ventures Limited and associated companies—which from 1929 to the end of 1935 have in their various enterprises expended over \$31,500,000. This has been for exploration, development, mining operations, and labor, in the purchase of machinery and supplies. Other groups have spent large sums as well, but it is the cumulative effects of these spendings, the courage and enterprise of the men behind these prospects in the initial stages, that develop this basic industry and increase Canada's prestige.

Back of our great mining industry stands the prospector, worthy of our assistance and support. On him the industry depends and Canada has in its personnel of prospectors men of outstanding capacity and determination. So great is the Canadian or Pre-Cambrian shield that generations of prospectors will come and go before we wrest from Old Mother Earth the secrets of wealth and riches provided for the present and coming generations. Last year the Dominion Government made provision for a broad survey of Canada's mineral resources and sent 65 geological survey parties into various sections of her great hinterland. 208,000 miles of geological mapping was done. Much good has already come from this work and it will be a great aid to the prospector in his activities.

As we look over Canada's picture, we realize that time and circumstances have brought many changes in the flow of Canadian trade. The days of Canadian wheat, as the mainstay of our export trade, are past. Markets abroad are restricted for our farm produce and our lumber. Industry has suffered. We realize the immense value to Canada of this young lion of a mining industry, with its gold and base metals, going forward in leaps and bounds from year to year by scores of millions of dollars, adding to the trade and commerce of our country and enabling us to weather the storm which has swept the world. Our railway system is in dire straits. It would be in worse difficulty were it not for the mining industry. Today both of our great railway systems get their heaviest traffic from the mines and, even in sections where the tearing up of lines was contemplated, it is now necessary to retain them for, as the mining industry expands, it is necessary that they should be left. It will be necessary, as well, to build new lines. We have seen what railway communication has done for Porcupine, Noranda, in fact the entire mining industry in the various sections, what it has meant to Little Long Lac in transportation, and there are others such as the Pickle Crow, Red Lake, Patricia section, where transportation must be provided to promote the increased production of new wealth for the benefit of the people. These feeders to a railway system, built primarily to carry wheat, will be of tremendous importance in helping the old system to carry its burdens.

Gentlemen, my time is drawing to a close, but I wish before concluding to leave with you a real picture. Let us look across that sweep of Pre-Cambrian Shield from Quebec right through to Northern Alberta and on up to the Arctic. As our imagination carries us across that great area, one can hear the tramp, tramp, tramp of the prospector as he travels the hills and observes the rocks of that shield. One can hear his hammer and pick and hear, as well, the reverberations of high explosives in the blasting out of riches from Old Mother Earth. In her bosom lies treasure in abundance, new wealth, employment, homes, new business. We must get that great and growing national outlook for mining. It is Canada's great hope. There is hope and there is optimism in our increasing production of gold, zinc, copper, nickel, lead. There is hope and optimism in mining for increased traffic for our railways, increased labor, increased demand for power, increased lumber requirements, increased markets for our food products, for coal, coke, factory products and machinery. How fortunate we are in Canada to have these wonderful resources within our boundaries! It gives hope for our railways, tied like a millstone round our necks and pulling us down. Let us have a great "five-year" plan of steady policy for mining and the results will amaze even the optimists. The idea must be deeply ingrained into the minds of men who are responsible for the revenue of the country that the indirect profits from a lightly taxed desirable industry are likely to be many times greater than the direct profits from greedy taxation. Hundreds of millions of dollars have been spent in furthering agriculture as a basic industry. Give mining a fair field. It asks no bonuses. It will create new wealth producers, employ more labor, create new markets, furnish traffic to jaded railways, furnish opportunity for youth. Gentlemen, contrast our position with that of other countries of the world. What would our plight have been without our mining and mineral development? This is the picture I want you to have of the great and growing national outlook for mining in this Dominion.

I commend my friend, the Honorable Mr. Leduc, who is seated at this table, the Minister of Mines for Ontario, on the statement of policy that there will be no change in

mining taxation in Ontario. The Honorable Mr. Perrault has made the same statement in Quebec and the mining industry is hopeful that perhaps the Dominion Government will announce a lessening of restrictions so that we can look forward to a great period of development of this—possibly—Canada's greatest basic industry. As I have said, railways in Canada were built in the main to carry wheat and farm products. The same is true of the line to Hudson's Bay. That source of freight is failing them, but when one looks at the traffic which can come to the T. & N.O. and the Hudson Bay roads from the mines, developed on a sound basis, one realizes that there is hope for them and hope, moreover, that can be built up after we have put our shoulders to the wheel in a great national effort. We must not fetter or clog this great industry, during this period of expansion, by high taxation. The present expansion and light taxation will result in immense benefits to the country. The indirect benefits which will come along the lines I have indicated, to farmers, lumbermen, and business men, will be so great that Canada will realize the tremendous part that mining can play in the life of the country.

I leave you with that thought. No nation can look forward with so much hope as Canada. There is a vast field for development in our mineral areas and our men are ready and willing to undertake that development. There is scope for everyone. Men are training in our schools and universities as engineers and metallurgists to help in that march forward and there will be places for all of them, so who shall say us "nay" in any endeavor we may make along these lines?

I thank you sincerely for the kindly interest you have taken in my remarks and hope that what I have told you may have been of some benefit.

MR. COURTICE:—Mr. McCrea, we are very much indebted to you for your able presentation of this most interesting and informative address. I am sure that many of us know a great deal more about mining matters, their present importance and future prospects, than we did three quarters of an hour ago. I am confident that I voice the views of all here when I say that we thank you most heartily for your address.