

WHAT MINING HAS DONE FOR BRITISH COLUMBIA*

Man's quest for gold and other precious metals has ever played an important part in the establishment and development of the various countries of the world, but it is questionable whether history records a more striking example of the remarkable part the search for, and mining of, these highly desirable metals has played than is recorded in the founding and subsequent development of the Province of British Columbia.

There is no questioning the fact that it was the magic lure of gold that gave the fundamental impetus for the establishment of this Province. It is also equally evident that the mining of this gold, along with its sister metal, silver, and the none less important base-metals—copper, lead and zinc—and also the Province's valuable deposits of coal has continually been and now is one of the greatest factors in the life and prosperity of this commonwealth.

As one turns over the pages of British Columbia history, evidence to substantiate these statements is outstanding, and, as the present mining industry is viewed and statistics of it are collected and analysed, this evidence builds up and proves the case. It is my purpose to develop this theme by following the industry from the first discovery of placer gold, through the pioneer days of that type of mining; thence to touch briefly the development of lode mining, first in the silver days and then through the base metals periods, up to the present. Along with this, the discovery and opening up of coal deposits will be touched—because this department of mining is of major importance. These are the foundation stones on which the Province was built, and it is fitting that due recognition should be given to such a mighty industry as this.

Although British Columbia was discovered by the Spaniard, Perez, in 1774, it was not until 1790 that there was any attempt made to hold the land by actual occupation and possession.. From 1790 to 1795, Spain had a small garrison at Nootka. With Cook's voyage up the coast in 1778, the first real geographic knowledge of this Province was obtained; but with Vancouver's work of surveying and mapping, in the name of England, from 1792 to 1794, the actual extent of the coastline first became known.

*This paper was read before a recent meeting of the Canadian Institute of Mining and Metallurgy at Vancouver, B.C. The author, Mr. Dale L. Pitt, is Manager of the Premier Gold Mining Company Limited at Premier, B.C. A copy of the paper was secured for publication in this *Quarterly* by Captain James Griffiths of Seattle.—EDITOR.

About this same time, McKenzie and the hardy North West Company traders, filled with the pioneer spirit, which has ever dominated this continent, and anxious to extend the trapping and trading domain of their Company, pushed their way boldly westward from the frontiers of the then known British North America and entered the interior of what is now British Columbia. They were a hardy few—but explorers rather than settlers.

The Hudson's Bay Company, feeling that its erstwhile undisputed domain was being invaded, also pushed westward into this country with new vigor, and, in order to maintain its hold, established a few more scattered posts in strategic places—usually on the natural routes of travel, at the junctions of rivers. At best these were only small forts where a very few men were congregated, and no effort was made to establish a real settlement or to people the land. The very nature of the Hudson's Bay Company's enterprise did not favor settlement of the country.

Even with the amalgamation of the North West Company and the Hudson's Bay Company in 1821, there was no change in the policy and every effort seemed directed against the entry of people and the establishment of settlements. For another twenty-eight years after the amalgamation, the Hudson's Bay Company ruled this country with a beneficent despotism. It was not until 1843 that the Hudson's Bay Company, through Sir James Douglas, founded a real settlement at Victoria on Vancouver Island, and established the first British colony on the Pacific Ocean. This was only a small trading post, and by their policy to seemingly discourage expansion, and also due to the difficulty of attracting settlers, it had in fifteen years grown only to a place of two hundred or three hundred people. Thus in some eighty-four years—from the time of its discovery until 1858, in spite of all its natural wealth—its forest, its fish, its furs and its then unknown dormant mineral wealth—this vast domain had stood still and boasted only a few hundred souls.

Then came "Aladdin" with his wonderful lamp—"Gold"—to light the way and to open the treasure box that provided the material for the foundation of our present Province.

In 1851 it is reported a nugget of gold was found by an Indian woman on the beach at Gold Harbor on the west coast of Queen Charlotte Islands, which is reputed to have weighed five ounces. When this nugget was sent to Victoria, it immediately created great excitement and the Hudson's Bay Company sent a boat with thirty

miners—working on shares—to the scene of the discovery. Three month's work early in 1852 resulted in a small shipment of gold quartz being sent to England, from which comparatively little gold was recovered. Meanwhile news spread to San Francisco, growing as it traveled, and several boats with miners made their way to the scene of the discovery. The vein, however, proved very small and the net results of the several efforts at mining it are reported as about \$20,000.00 worth of gold. There was a far greater result, however, than the actual money value of this gold, for it called to the attention of the world the fact that gold did exist in this new country, and focusing attention on this section paved the way for England's serious consideration of its value and for later migrations here.

In 1852 the Hudson's Bay agent at Kamloops reported the purchase of small amounts of gold from Indians in that section, but no definite movements to follow this gold to its source were made at that time.

In 1855 a Hudson's Bay servant discovered placer gold near Fort Colville, which was in Washington, a short distance south of the International Boundary and near the junction of the Pend Oreille and Columbia Rivers. The news of this discovery and the exhibition of the gold itself in Walla Walla, farther down the Columbia, focused attention on this section, and people started immediately to head for the new field. While this was in Washington, nevertheless, as subsequent events show, it played a very important part in the development and settlement of British Columbia.

In 1856 Indians from the Thompson River, visiting a woman of their tribe in Walla Walla, reported that gold like the Colville gold was also found in their country. The news was accepted with considerable doubt at first, but nevertheless four or five Canadians and halfbreeds formed an expedition, and in the summer of 1857 went into the Thompson. Prospecting the bars of this river they found considerable deposits of placer gold near the junction of the Thompson with the Fraser, just about where Lytton now stands. Returning to the south, they reported their discovery and exhibited the gold itself. Simultaneously the Indians, apparently inspired by the sight of gold, commenced to search for it and before long began bringing in a considerable quantity. The Hudson's Bay Company reported three hundred ounces between October 6th and the end of the year from this vicinity. Though Sir James Douglas, head of the Hudson's Bay Company, attempted to keep the news of these

discoveries quiet, the magic of gold was at work, and the news could not be suppressed. By the numerous and mysterious lines of communication, which exist even in the most impenetrable wildernesses, the news of the finds spread. All of Washington and Oregon soon knew and a grand overland move started towards the Fraser and Thompson. It is estimated that by the end of 1858 some 8,000 persons entered British Columbia by this route alone. These, however, were but a small portion of the whole number who came.

California, to which ten years before an unprecedented rush had taken place, was teeming with thousands who had failed in their first attempts to make their fortunes. As the news of gold in the new country to the north penetrated to San Francisco, the fire of adventure was again fanned into a conflagration and the lust for gold again was rampant. Every boat that could be fitted out was put into service, and the wild migration towards Victoria and the new gold fields started. Between March and June, 1858, some twenty to twenty-three thousand people arrived in Victoria. Little did they know of the country or of the hardships ahead of these attempting to reach Thompson or even the Fraser, but they came as an immense and gold-mad wave of humanity. Many returned south disappointed, but the hardy spirit of the pioneer, and the power and urge of gold mining asserted itself, and even nature, with her formidable barriers and her toll of suffering and death, could not stop the tide. The lower Fraser, being most accessible, drew the horde, and Fort Langley, Hope, Yale, Boston Bar and Lytton sprang into existence and began to pour forth their golden treasure in response to mining's call. What did it matter to these men if the country had no trails or roads; what did a few hundred miles of ocean mean to those men; what terrors did rapids and whirlpools of forbidding canyons hold for that horde; what cared they if the country had no crops or supplies to feed them. Their indomitable spirit and the lust for gold urged them on, and even the wilderness, which for generations had held back all but a few trappers and explorers, gave way before this force. By the end of October, 1858, there were 10,000 miners working from Fort Langley to Lytton and \$550,000.00 worth of gold had been won from this stream alone.

Now, what did all this mean to the future of British Columbia and to the Dominion of Canada? Let us pause for a moment in our following of this rush and analyse the situation a little more fully, because an event of great importance was about to take place.

At this time the charter of the Hudson's Bay Company was about to expire and the question of renewing it was being vigorously contested in the British Parliament. Under its charter the Hudson's Bay Company was given exclusive rights to trade with the Indians of the Mainland. Sir James Douglas, then Governor of the Colony of Vancouver Island and also head of the Hudson's Bay Company, took it upon himself to make laws for this new land and dictate the regulations governing the entry of miners or settlers into the newly discovered gold country. He attempted to keep out all who were not British subjects; he levied a license against every miner entering the country; he attempted to have them all trade with the Hudson's Bay Company exclusively; and he attempted to take tribute from all in the form of a percentage of their gold. Sir E. B. Lytton, who was then Secretary of State for the Colonies, disapproved absolutely of this policy and vigorously reprimanded Douglas for it. He was also opposed to the renewal of the Hudson's Bay Company's charter. Real British statesmanship was at work, and here, mark you, took place the series of events which played one of the greatest parts in British and Canadian history. The Dominion of Canada was conceived.

England was without colonies on the whole Pacific Ocean, save for the weak attempt on Vancouver Island. Ontario and Quebec and the colonies on the Atlantic were the nucleus for a mighty nation, but the vast domain beyond the Rocky Mountains on the Pacific must be linked up with them. A strong colony must be established here, guarded by free institutions, and all welded by one direct line of railway communication uniting the Atlantic and Pacific. This was Lytton's vision and aim, and for its conception he guided and shaped the policy of the English Parliament.

Gold mining had suddenly brought about the proper conditions to make this a realization. Colonizing was at work. Picks and shovels digging for gold were succeeding, first in breaking the Hudson's Bay Company monopoly, which statesmanship had failed for many years to do, and second, in bringing into existence the new colony of British Columbia. And so on November 19th, 1858, at New Fort Langley, Sir James Douglas formally took the oath of office as Governor, and the mainland became the new English Colony of British Columbia.

This was only a beginning. As the fame of the new country spread, people from all parts of the world began to pour in. England,

Australia, New Zealand, United States, all sent their quotas by water. Later companies even came overland from Eastern Canada and the United States.

Miners on the lower Fraser, following instinct, were led to try and discover the source of the gold being dug there, and so they pushed farther and farther up the streams. By the end of 1858, in spite of almost insurmountable natural difficulties and hostile Indians, some of the most adventurous spirits had made their way up the Fraser as far as Lillooet, and up the Thompson as far as Kamloops. Gold lured them on and on, and in 1859, Quesnel was beginning to produce. By this time the lower stretches of the Fraser began to ease up from heavy production, and it looked for a time if another gold bubble had been punctured. In 1860, however, 600 whites were at Quesnel, and when in 1861 Williams and Lightning Creeks were discovered, Cariboo came into her own. The production was unbelievable and the 1500 whites who had made this place by the end of 1861 took out over \$2,000,000.00. The effect of this was to start another rush into what proved to be the richest placer deposits of all British Columbia.

To reach this country was practically impossible by water and it was apparent that some means of transportation had to be provided if the country was to go ahead. The first effort to improve the trails leading to the interior was the building of the Dewdney Trail, which roughly paralleled the International Boundary and penetrated eventually to the Kootenay and Big Bend country. This was built primarily to provide a route entirely in British Columbia over which gold could be brought to Victoria. Some used part of this trail to go by way of Similkameen, Nicola and Kamloops on into the Cariboo, but it was not suitable for traffic of any proportion.

Water transportation to Yale was satisfactory, so it was a question of a suitable route from there. Two routes were finally used; first, by way of Harrison Lake, Douglas and Lillooet, and later by the famous Yale-Cariboo route up the Fraser via Spences Bridge and Lillooet. Time does not permit the detailing of the construction and early uses of these roads or of their extensions as new cities grew up around the many mining operations, but suffice it to say that these became the main arteries of travel and are today the backbone of our Provincial highway system.

So, at this juncture we can credit to mining another very important, far reaching and decidedly beneficial role—namely, the

beginning of the road system of British Columbia—and it is quite conservative, I believe, to here state that the mines and mining have ever since been the fundamental and most important factor in this road building programme. Around the mines have been built the majority of the cities of this Province, and to reach these cities the roads have to be built.

If we could dwell further on the placer mining of this country, we would follow the hardy bands into the Similkameen in 1860; to the Kootenay with its Wild Horse Creek rush in 1863; thence into the Big Bend country in 1866. We would go far north into Omineca with Manson Creek in 1871, and into the Dease in 1873. All of them have played their part because they have opened up the country, built up communities and created wealth. Up to the present, from placer alone, as shown by the Provincial Mineralogist, there has been created now wealth to the amazing total of \$78,588,-949.00

Though we cannot follow each rush, it is essential that we give more than passing attention to the Kootenay discoveries because these were primarily responsible for the opening up of the eastern part of the Province. Spokane, Lewiston and the Boise Basin were quite well populated at this time with many miners attracted by gold in Idaho. When rumors of gold north of the International Boundary reached them and when the gold was actually exhibited, along about 1863 in Spokane, a wild rush was immediately started. The natural means of access to this new country north of the 49th Parallel was from Lewiston, Idaho, up through Spokane along the valley of the Kootenays up to where Cranbrook is now located, and thence on up the Kootenay to Wild Horse Creek. By 1864, over 1,000 people were congregated here and a real little city started. Practically all supplies came from the United States, with Lewiston, WallaWalla and Umatilla furnishing the bulk, and even distant Salt Lake City sending in cattle.

The young Province could not see all of its trade going into the United States, and so royal engineers set out to find a route from Victoria to the new country. The route up the Fraser to Lytton, thence up the Thompson to Kamloops, up the South Thompson, Shuswap Lake, and over the divide to the Columbia was followed and proposed as feasible. It was too expensive, however, for the struggling province. It is significant nevertheless that this route

became practically the route of the Canadian Pacific when it was built.

The Dewdney Trail, which had stopped in 1860 at Princeton, was extended past Keremeos up Kettle River to Midway, up Boundary Creek to Grand Forks, across the Columbia near Trail, and so by way of Moyie and Cranbrook to Wild Horse Creek. It is well to note that this trail went through these places which afterwards played such an important part as mining centers. By the middle of September 1865, pack trains could travel from Hope to Kootenay entirely in British Columbia territory.

Wild Horse Creek was rich, and the 100 rockers working on the creek in 1864 averaged from two to six ounces of gold daily, and some claims were producing up to \$1,000.00 per day. Its life was short, however, and fickle fortune took away most of its miners up to the Big Bend Country. The stories of this country were spread far and wide, and a rush of even bigger proportion than Cariboo was on. Men swarmed in from all sections of British Columbia and from all the country to the south. Their faith and hopes were unbelievable in spite of many efforts to make the real facts known. Mining was again opening up and populating the Province. The bubble soon burst, however, and the inevitable big exodus started. This was a terrible blow to British Columbia, and for many years the bad effects of it were felt. There was, however, a great deal of good to come from this immigration. Men, finding no gold on the Big Bend, swarmed over other creeks and commenced scouring the hills in search of gold in place, and out of this came the discovery and development of a far greater wealth—that of lode mining.

We have said earlier in this recital that in 1858, when British Columbia became a colony, the Dominion of Canada was conceived. Now it was about to be born. Sir Edward Lytton's views were beginning to take definite shape in Eastern Canada and were shared by Sir John A. McDonald. He, too, realized how British Columbia was necessary to round out the picture, and he strongly urged the new mining Province to join the proposed Dominion. As a preliminary step in strengthening this western section, Britain had favored the uniting of the colonies of Vancouver Island and the mainland as one colony—which was done in 1866. The new colony was, however, heavily in debt and there were many who favored its joining the United States. It would have been very disastrous to lose this British hold on the Pacific and so strong efforts were made to have British Columbia enter Confederation in 1867 along with Ontario,

Quebec, New Brunswick and Nova Scotia. This colony knew its own advantages, however, and though it had been one of the strongest reasons for Confederation, it did not join up until 1871, when it had secured financial aid and promises from the Dominion and the guarantee of the railroad from the eastern provinces to the coast. This was a great victory, both for the Dominion and for the Province of British Columbia. Mining had again shown its marvelous powers because in the final analysis it had been the cause of all this.

The recovery after the placer era was slow, but eventually men began to realize that other metals besides gold occurred in this Province and that they too offered fortunes to those who found and mined them. The day of the pick and shovel, the pan and the rocker began to fade, and in its place came the hammer and steel, the drill and powder, the mill and the smelter. More money was required to open up and equip properties for this lode mining, but more permanent operations resulted. Longer life could be seen ahead of such properties and man built accordingly.

We cannot take the time to follow the many prospectors on their arduous expeditions or to trace the development of the many mines and camps which came into existence during the next two or three decades, but we can mention the most prominent; those that have produced the most wealth and wielded the greatest influence in the development and prosperity of the Province. We can stop long enough to point out how, in the same manner that placer mining had years before given the impetus which started the Province, lode mining now enthused new life into it and built up the struggling commonwealth.

The first lode mine, the famous old Blue Bell, was discovered in 1882 by prospectors from Bonners Ferry who made their way down the Kootenay and along the east side of Kootenay Lake. Litigation, over trying to apply placer mining law which did not permit more than seventy-two hours absence from a claim, and finally murder, marked the early history of this property. The complex nature of the ore and the limited development of the art of ore dressing in that early day was responsible for many years of delay and much disappointment at this property.

Then came the Silver King on the West Arm of Kootenay Lake from which the first forty ton shipment made in 1889 gave three hundred ounces of silver per ton. This brought at least 250 prospectors into the district immediately, and Nelson soon sprang up as a result.

By 1892, the Columbia and Kootenay Railroad, connecting Nelson and Robson, was built, and in 1895, the Nelson and Fort Sheppard Railroad gave this country connections to the entire American railway system. In Nelson, within a short time a smelter was built to treat up to 280 tons of copper ore and 100 tons of lead ore per day. Construction of a lead smelter soon followed at Revelstoke, and another at Pilot Bay on Kootenay Lake, both to serve this district. With smelters constructed, another milestone in the building of the Province and its industry was passed.

Next came Rossland. As miners, drawn by the Nelson successes, swarmed into the hills, the old Dewdney Trail again became of utmost importance. Following this route near Trail Creek, Joseph Bordeau and J. Morris located the Center Star, War Eagle, Virginia and Idaho. They also located the Le Roi, which became the most famous of them all, but as the law forbade them holding more than one claim on the same lead, E. S. Topping became its owner for the mere cost of recording. The rise of the Le Roi, War Eagle, Center Star and others famous in this district; their richness and fame is familiar to all. They were great producers of wealth, but in addition were also responsible for the building of many roads and trails—for the coming of railroads—for the starting of farms from which to feed the population, and for the building of cities themselves. Ross Thompson's old log cabin on Red Mountain, which became ironically known as Ross' Land, in time became Rossland—a mecca for miners and capitalists alike, a proud name on British Columbia's map—a city by 1901 of over 7,000 people.

Mining was again on her feet in British Columbia, and the full force of its power was being felt. Mr. F. Augustus Heintze, of Butte, Mont., was attracted to the district, and having secured a contract to treat some 75,000 tons of ore from Red Mountain, built the first smelter at Trail and connected it with the mines by a narrow gauge railway. Thus was laid the foundation, not only of the City of Trail, but also of what has now developed into the largest mining and smelting enterprise of the whole Province—The Consolidated Mining & Smelting Company. The growth of this enterprise from its humble beginning has been remarkable. With the acquisition of its Sullivan Mine and the perfecting by the Company's technical staff of the metallurgical treatment of the erstwhile refractory ore, there has been built the largest concentrating mill in the Province—one surpassed in excellence of design and metallurgical results by

no other. The smelter itself has grown to a remarkable diversified plant, where many of the precious and base metals are recovered and made ready for marketing. Great power schemes have been developed by the company, and the energy which for so many years ran unused in the streams has been harnessed for man's benefit. And, finally, nature herself is being assisted by the fertilizing of its soil from the products turned out at the new fertilizing plant.

Cities, second to none, have sprung up, roads for the use of automobiles by thousands have been built, railways connecting mines, mills and smelters have developed into important carriers of all kinds of freight and immense wealth has been produced.

In 1885, the Canadian Pacific, after its many setbacks and tribulations, was completed across the whole continent. This formed an epic in itself and it was a proud day when the crews working from the east and west met and drove the last spike about midway between Revelstoke and Sicamous. The vision of British and Canadian statesmen, who picturing the little mining colony on the Pacific as one of the necessary parts of the Dominion and a requisite to Britian's prestige on the Pacific, was now being fulfilled, and Canada itself was being welded together by this band of steel. Its completion opened much of the mining country that previously was unable to profitably work, and great volumes of freight were made available for the railroad. In the early nineties, the whole eastern part of the Province was alive with prospectors. In 1891, Andrew Jardine returned to Ainsworth with high grade lead silver from the Blue Ridge Mountains, and the wildest rush of all commenced to the Slocan. Such towns as Three Forks, Kaso, Slocan, New Denver soon sprang into existence. The Slocan Star, the Payne, the Rambler, Cariboo and others began adding their wealth to the country and building it up.

Then came the North Star near Fort Steele, the St. Eugene at Moyie, and the now famous Sullivan near Cranbrook. Each had its day and did its part. Even the Sullivan seemed to pass after a short shipping programme. Few realized then what modern developments held in store for the Sullivan. Its complex ores were useless, and it looked like they would never be mined and separated into sellable and profitable metals. But we find the scientific methods of treating these ores and the modern art of smelting them rapidly opening the way to their recovery. The ingenuity and industry of man, coupled with the magic of capital, unlocked vast storehouses of wealth. The

science of mining and metallurgy build mighty plants, employ thousands of men and become the backbone of industry.

Simultaneously with the development of this district, prospectors went farther afield and in 1891 the Mother Lode near Greenwood and the Granby near Phoenix were located. These were immense low grade deposits with copper and gold. They could not be worked, however, owing to poor transportation and high costs. Men of the mining profession were not slow to recognize the potential wealth here, however, and soon set about to capitalize it. Trails, roads, and finally railroads, were built and soon smelters at Boundary Falls, Greenwood and Grand Forks were in operation. By 1900, Granby began to ship to its smelter and in two years its output reached some 600,000 tons. Greenwood's population reached 1,500 and Grand Forks, 3,000 people.

So we find the gradual development of lode mining bringing such mines as the Nickle Plate, at Hedley, which has only now come to the end of its profitable producing career, and the Van Anda and Marble Bay Mines on Texada Island, where a smelter was also built. Then on Vancouver Island, Mount Sicker, with the Lenora, Tyee and Richard III, came into prominence in 1898. The former was responsible for the erection of the Crofton Smelter on Osborne Bay, and The Tyee accounts primarily for the building of the Lady-smith Smelter, although Britannia shipped to both of them during its early history. The cities that grew up around each operation have given homes to many people, and the actual wealth created has been the source of much improvement in this Province's welfare.

As far back as 1888 copper was reported on Howe Sound, but it was not until ten years later that any capital became interested. Rapidly the enterprise shaped up when capital got behind it. They acquired the Crofton Smelter and ran it until 1913, when it was closed owing principally to the fact that new methods of concentration made it more profitable to discontinue smelting crude ore and put it all through the mill. The enterprise has grown year by year until now the mill can handle 6,000 tons daily and produces the largest amount of copper of any mine in the Province. One but has to make a visit to Britannia to realize the magnitude of this operation and to appreciate the excellent little community that has grown up there.

The Granby Company, ever on the lookout for new properties, sent its engineers far afield, and in 1910, long before its Grand

Forks property was worked out, acquired and started to develop its Anyox property. This was the farthest north mine of any importance in the Province, and opened up a new area to lode mining. The smelter built there smelted the ore direct for years, but developments have shown the wisdom of concentrating as well. The result is a modern mill of over 3,000 tons daily capacity. Here also mining has built another town with over 3,000 people.

As late as 1925 still another of Granby's operations was brought up to production when Allenby, about five miles south of Princeton, opened. Here again we find prosperity hand in hand with production of new wealth. As the operation proceeds and the city resulting from this mine is established, we have another example of mining's benefits to mankind.

Granby is also in the coal mining industry and has established a model community at its Cassidy mines on Vancouver Island. Many tons of coal are shipped yearly from here to make coke at the Anyox plant.

Mining knows no frontiers, but ever pushes into the wilderness to conquer nature's barriers and advance civilization farther and farther from the established centers. So, in 1918 the hardy prospectors of the north brought to the attention of capitalists a new and promising find of high grade gold-silver ore some fifteen miles back from the head of Portland Canal right on the Alaska Boundary. Almost overnight, when concentrated effort was directed to the development of this occurrence, another treasure box was unlocked and the Premier became a producer of large amounts of gold and silver.

New life was given to this far north country as the realization of this development spread. Shipping lines were established to serve the country, roads were built through forests and mountain, and three prosperous communities have resulted from the mining of this wealth.

Many more properties in all sections of the country are being opened and all are upholding mining's prestige as the foremost industry of the Province. Time will not permit the detailing of them.

Now we must turn momentarily to coal mining and point out what wealth it has produced and what influence it has exerted on the industry and development of this country. Coal was first discovered on Vancouver Island, probably at Suquash, and was brought to Dr. W. F. Tolmie for testing in 1835, some twenty years before

the discovery of gold. These deposits did not turn out profitably and were never extensively worked. In 1850 coal had been discovered at Nanaimo. Immediately it found a market, and before 1853 closed, some 2,000 tons were shipped. This brought \$11.00 per ton at the mines. Then came the Wellington Mines in 1871 and Comox in 1875. The coal was of excellent grade and commanded a market all down the coast of the United States, in China, Japan, Hawaii and even Australia. Soon ships from all parts of the world began to coal at Vancouver Island ports, and as years passed an immense industry grew up. A railroad was built from Victoria to these mines, and prosperous cities grew around these various producers. In 1888, over 2,000 miners were employed in the coal mines of the Island alone. By 1929 this number had grown, for the whole Province, to over 5,000. In 1910, the year of greatest tonnage, there were mined 2,800,046 long tons, while in 1919, with a production of 2,595,125 tons, the year's value had attained \$12,975,625.00.

But the Vancouver Island area is not the only coal producing district of the Province. Coal was known to exist in the Kootenay as far back as 1845, when Father DeSmet reported its occurrence. With the opening of lode mines and smelters in the Kootenay region, the value, extent and economic importance of the coal fields of the Crows Nest Pass became better known. The B. C. Southern Rly. was projected to open this country and provide coal and coke for its mines and smelters. By 1898, some 9,000 tons had been produced and by 1901, over 400,000 tons was the yearly rate of production. Coke ovens were also built and this part of the industry became a profitable venture. Some idea of the importance of Kootenay's production and also the coast mines output can be obtained when it is realized that by 1910 the yearly production on the coast was 1,774,000 tons and East Kootenay 1,365,000 tons. The growth of cities and the opening of the country closely follows in the wake of an industry of this sort, and Fernie, Michel, Nanaimo, Comox and many others testify to this fact.

Nor can we overlook the building up of districts and the creation of wealth in the Nicola Valley, which has taken its place as an important producer; or, likewise, any of the sections of the entire Province where coal is mined.

Though less spectacular than gold or silver mines and not so much sought after as the base metals, nevertheless coal has played

a large part in the development of this Province. It, too, has been the cause for building many roads and railroads for the founding of cities and for giving employment to thousands of men, and so must be recognized as a tremendous force in our welfare.

I have thus endeavored to follow the mining industry from its inception in British Columbia, touching some of the romance and pointing to the remarkable influence it has exercised not only on the Province but also on the Dominion. From the nugget found by the Indian woman on Queen Charlotte Islands, and the few colors in the prospectors' pans on the Thompson River, the industry rose through the placer era with all its romance, its wealth and its disappointments; thence on to the development of lode mining, with its building of mills and smelters and railroads. Next came the more recent days when science and skill manifest themselves in the development of modern ore dressing, smelting and refining so that man could take from the earth nature's immense deposits of low grade base and precious metals, and by his ingenuity, coupled with capital's power to build huge plants, give to us wealth never before dreamed of.

Year by year mining has grown until today it ranks first in the industries of the Province. From 1852 to the end of 1930, British Columbia has produced from its mines the astonishing total of \$1,237,847,847.00. Of this coal mined has produced \$330,298,688.00. From the six prospectors who went to the Thompson in 1857 and started mining, the industry has grown until it now employs some 14,000 men, with a total payroll of approximately \$25,000,000.00 annually. This represents 17 per cent of the total number employed in the Province, and 15 per cent of the total payroll.

In the last ten years alone, Britannia, Crows Nest Pass Coal Co., Consolidated, Granby, Hedley and Premier have employed an average of 8,010 men yearly; have disbursed in salaries and wages the total of \$132,400,990.00, and spent for supplies and equipment alone \$111,336,072.00 Truly a marvelous record.

This is the story of mining in this Province. And when you are asked, "What has mining done for British Columbia," I am sure you can all say with me—Mining founded the Province; Mining built the roads; Mining brought not only the Canadian Pacific but practically every other railroad; and Mining was one of the greatest factors responsible for Confederation. And transcending all of

these, Mining founded the majority of our cities, built many of our churches, schools and homes, established our families and brought the happiness and contentment, wealth and prosperity which is British Columbia.

DALE L. PITT.