

**CIHM
Microfiche
Series
(Monographs)**

**ICMH
Collection de
microfiches
(monographies)**



Canadian Institute for Historical Microreproductions / Institut canadien de microreproductions historiques

© 1994

Technical and Bibliographic Notes / Notes techniques et bibliographiques

The Institute has attempted to obtain the best original copy available for filming. Features of this copy which may be bibliographically unique, which may alter any of the images in the reproduction, or which may significantly change the usual method of filming, are checked below.

☒ Coloured covers/
Couverture de couleur

☐ Covers damaged/
Couverture endommagée

☐ Covers restored and/or laminated/
Couverture restaurée et/ou pelliculée

☐ Cover title missing/
Le titre de couverture manque

☐ Coloured maps/
Cartes géographiques en couleur

☒ Coloured ink (i.e. other than blue or black)/
Encre de couleur (i.e. autre que bleue ou noire)

☐ Coloured plates and/or illustrations/
Planches et/ou illustrations en couleur

☐ Bound with other material/
Relié avec d'autres documents

☐ Tight binding may cause shadows or distortion
along interior margin/
La reliure serrée peut causer de l'ombre ou de la
distorsion le long de la marge intérieure

☐ Blank leaves added during restoration may appear
within the text. Whenever possible, these have
been omitted from filming/
Il se peut que certaines pages blanches ajoutées
lors d'une restauration apparaissent dans le texte,
mais, lorsque cela était possible, ces pages n'ont
pas été filmées.

☐ Additional comments: /
Commentaires supplémentaires:

L'Institut a microfilmé le meilleur exemplaire qu'il
lui a été possible de se procurer. Les détails de cet
exemplaire qui sont peut-être uniques du point de vue
bibliographique, qui peuvent modifier une image
reproduite, ou qui peuvent exiger une modification
dans la méthode normale de filmage sont indiqués
ci-dessous.

☐ Coloured pages/
Pages de couleur

☐ Pages damaged/
Pages endommagées

☐ Pages restored and/or laminated/
Pages restaurées et/ou pelliculées

☒ Pages discoloured, stained or foxed/
Pages décolorées, tachetées ou piquées

☐ Pages detached/
Pages détachées

☒ Showthrough/
Transparence

☐ Quality of print varies/
Qualité inégale de l'impression

☐ Continuous pagination/
Pagination continue

☐ Includes index(es)/
Comprend un (des) index

Title on header taken from: /
Le titre de l'en-tête provient:

☐ Title page of issue/
Page de titre de la livraison

☐ Caption of issue/
Titre de départ de la livraison

☐ Masthead/
Générique (périodiques) de la livraison

This item is filmed at the reduction ratio checked below/
Ce document est filmé au taux de réduction indiqué ci-dessous.

10X	14X	18X	22X	26X	30X
☐	☐	☐	☐	☐	☐
12X	16X	20X	24X	28X	32X
☐	☐	☐	☐	☐	☒

The copy filmed here has been reproduced thanks to the generosity of:

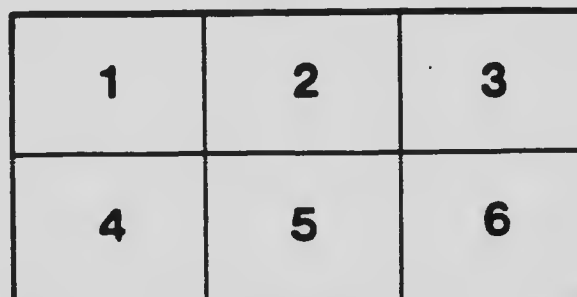
Library of the National
Archives of Canada

The images appearing here are the best quality possible considering the condition and legibility of the original copy and in keeping with the filming contract specifications.

Original copies in printed paper covers are filmed beginning with the front cover and ending on the last page with a printed or illustrated impression, or the back cover when appropriate. All other original copies are filmed beginning on the first page with a printed or illustrated impression, and ending on the last page with a printed or illustrated impression.

The last recorded frame on each microfiche shall contain the symbol ➡ (meaning "CONTINUED"), or the symbol ▼ (meaning "END"), whichever applies.

Maps, plates, charts, etc., may be filmed at different reduction ratios. Those too large to be entirely included in one exposure are filmed beginning in the upper left hand corner, left to right and top to bottom, as many frames as required. The following diagrams illustrate the method:



L'exemplaire filmé fut reproduit grâce à la générosité de:

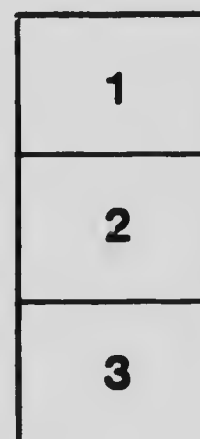
La bibliothèque des Archives
nationales du Canada

Les images suivantes ont été reproduites avec le plus grand soin, compte tenu de la condition et de la netteté de l'exemplaire filmé, et en conformité avec les conditions du contrat de filmage.

Les exemplaires originaux dont la couverture en papier est imprimée sont filmés en commençant par le premier plat et en terminant soit par la dernière page qui comporte une empreinte d'impression ou d'illustration, soit par le second plat, selon le cas. Tous les autres exemplaires originaux sont filmés en commençant par la première page qui comporte une empreinte d'impression ou d'illustration et en terminant par la dernière page qui comporte une telle empreinte.

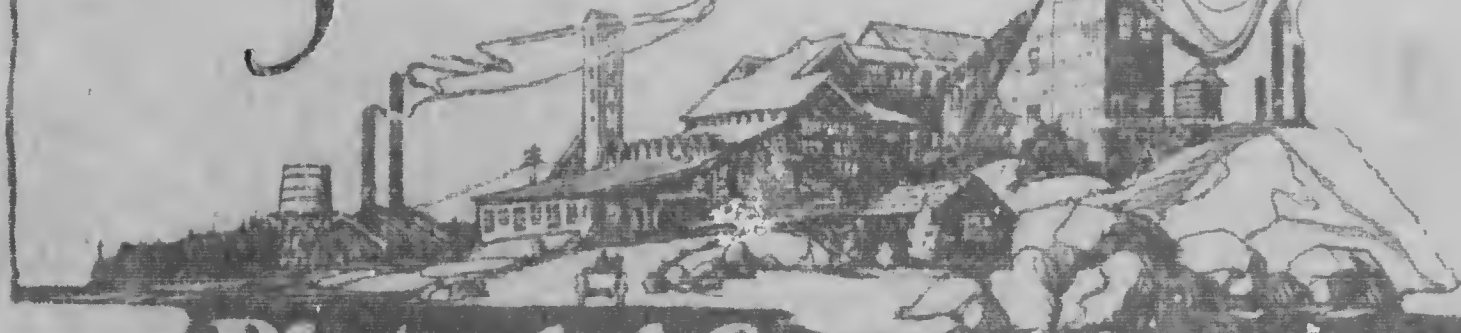
Un des symboles suivants apparaîtra sur la dernière image de chaque microfiche, selon le cas: le symbole ➡ signifie "A SUIVRE", le symbole ▼ signifie "FIN".

Les cartes, planches, tableaux, etc., peuvent être filmés à des taux de réduction différents. Lorsque le document est trop grand pour être reproduit en un seul cliché, il est filmé à partir de l'angle supérieur gauche, de gauche à droite, et de haut en bas, en prenant le nombre d'images nécessaire. Les diagrammes suivants illustrent la méthode.





Silver & Gold



Pictorial Souvenir of the
Mines of Northern Ontario

1915

1915
1916
1917
1918
1919

SILVER AND GOLD

A PICTORIAL SOUVENIR OF THE
MINES OF NORTHERN ONTARIO



Published by
THE COBALT DAILY NUGGET, LIMITED
COBALT, ONTARIO

*Photos in this booklet by the McGraw Studio,
A. J. May, and McLean Studio.*

Copyright
The Cobalt Daily Nugget, Limited
1910

Northern Ontario's Record of Gold and Silver Production



THE purpose of this booklet is to show by the aid of the camera the wonderful state of development of the Northern Ontario Mining District gold and silver. In order, however, to give an additional conception of the immense industry which has been built up in a few years' time, a short summary of the mineral production is submitted.

Statistics show that 87 per cent. of Canada's silver is produced in Cobalt, and the camp is responsible for one-seventh of the world's aggregate production. 44 per cent. of the Dominion's gold comes out of Porcupine.

During the year 1915 thirteen mines in Northern Ontario produced gold, and many of these are now making alterations and additions to their plants which will enable them to largely increase their output. In addition to Porcupine, there are gold properties being developed at Kirkland Lake, Munro Township, Boston Creek and other centres, which are now, or soon will be, in the producing stage. These are shown in this booklet, and there are numerous other claims which are being prospected and developed, which in the years to come may be numbered among the steady producers.

The following table shows the steady advance of the Porcupine gold camp since its discovery in 1910.

Year	Value of Production
1910	\$ 43,549
1911	17,187
1912	170,628
1913	1281,928
1914	5,261,729
1915	7,880,766
Total	\$18,852,277

The Cobalt silver camp is several years older than the gold camp, white metal having been discovered in the year 1903, during the construction of the Temiskaming and Northern Ontario Railway through the district. Since that time the camp has produced silver

worth over \$130,000,000. The various companies have paid to their shareholders dividends aggregating over \$60,000,000, twenty-four mines contributing to this total. One company, the Nipissing, has distributed among its shareholders in dividends nearly \$15,000,000 to date.

Although Cobalt has seen twelve years of plenty there are many years of productivity still ahead of it. Original prophecies by engineers that Cobalt was only a surface deposit and would peter out in a short time have been disproven, and the camp still continues in a healthy state of production.

While the war adversely affected the market for silver during the early months of the conflict, an increased demand during the fall of 1915 and since that time, has been responsible for a marked upward trend in the price, so that whereas in the fall of 1914 silver was selling at 46 $\frac{1}{4}$ cents per ounce, it has brought during the present year as high as 77 $\frac{1}{4}$ cents. The demand for coinage purposes in the European countries, and better buying in the far East will, it is predicted, keep the price of silver well above its present level, ensuring a remunerative market for Cobalt's output for many years to come.

Following is a tabulated statement of the production of the Cobalt camp from 1903 to 1915 inclusive.

Year	Ounces	Value
1903	206,875	\$ 111,897
1904	2,151,156	1,360,503
1905	5,101,766	3,667,551
1906	10,021,311	6,155,391
1907	19,137,875	9,131,178
1908	25,897,825	12,461,556
1909	30,645,181	15,178,037
1910	31,507,791	15,953,837
1911	30,241,859	17,408,935
1912	29,681,975	16,553,981
1913	25,162,841	12,765,461
1914	23,653,711	11,703,966
Totals	210,114,768	\$122,754,523

Silver and Gold



Town of Cobalt 1905



Town of Cobalt 1906

Town of Cobalt in Year 1905. The little cabin at the left of the picture is the first building in Cobalt erected by the railway contractor afterwards used as a boarding house.

Town of Cobalt in 1906. Like most mining camps Cobalt had a spectacular growth and the silver town is here shown with most of the hush cleared away and business blocks which seem to have grown up in the night.

Silver and Gold



Cobalt in 1916. Central Portion



Cobalt in 1916. Looking North

Cobalt in 1916. Central portion of the town which has grown up as a result of the establishment of the silver mining industry. View shows the bed of the pumped out Cobalt Lake.

Cobalt in 1916. Taken from the hill back of the Mc Kenley-Darragh plant looking northward.

Silver and Gold



LaRose Consolidated Mines, Limited. Main property of the Company, where Fred LaRose, the railway blacksmith, found silver during the construction of the T & N. O. railway. The LaRose Company also controls the Lawson, University, Princess, Fisher-Epelt and Violet properties. Total production of the LaRose properties to the end of 1915 has been 22,891,037 ounces, valued at \$11,514,043.70. Dividends paid to January 20, 1916, including profits to original owners, \$6,907,409.56.

Silver and Gold



TEMISKAMING AND HUDSON BAY MINE, HUDSON BAY MINES, LIMITED.—The original Company has paid in dividends a total of 25,000 per cent. on its issued capital of \$7,761. This called for a disbursement of \$1,940,250.00. The mine has produced 5,604,168 ounces of silver, valued at \$2,965,523.00.

Silver and Gold



FAIRVIEW MINING CO. LIMITED. The property of this company is situated in the Town of Cobalt, and was one of the first claims staked in the district. The Company has paid in dividends \$1,061,998.50, or 108 per cent. on its capital.

Silver and Gold



FIG. Treadway Mill. The mill has a capacity of 100 tons of ore per day. The plant was closed during the year 1913, but has since reopened. In 1914 a total of 35,215.5 tons of ore was milled. The average content of the ore was 18.9 ounces.

Silver and Gold



Tin O'Brien Mine. Owned by Mr. M. J. O'Brien, contractor, of Renfrew. This property has been a steady producer since the early days of the Cobalt Camp.

Silver and Gold



Mill of the O'Brien Mine. Equipped with 20 stamps, having a capacity of 200 tons per day. During 1915 the mill treated 52,883 tons, recovering therefrom 526,272 ounces of silver. The process at the O'Brien mine is cyanide treatment, the plant being the first cyanide mill in Cobalt. The sodium sulphide method of precipitation was originated here.

Silver and Gold



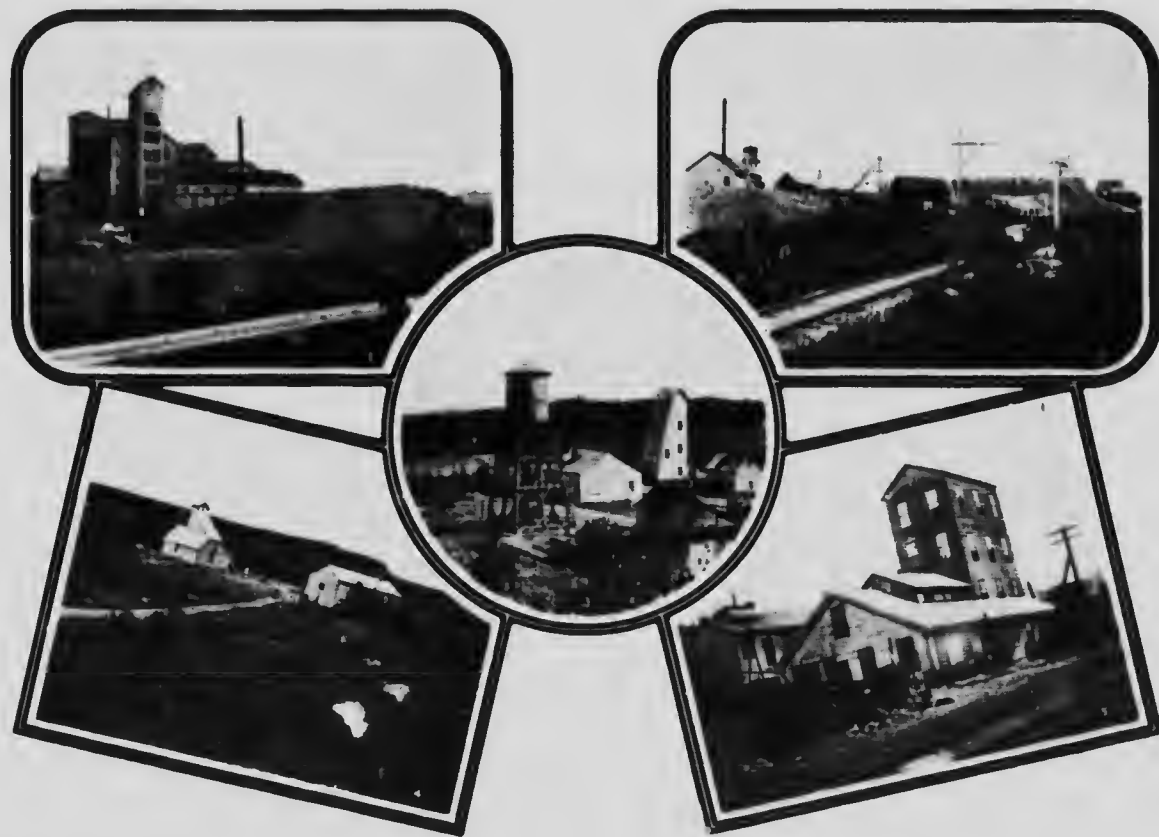
NORTHERN ONTARIO LIGHT AND POWER CO., LIMITED. Big power plants which supply electric energy and compressed air to Cobalt mines. 1. Hound Chutes, showing outgoing lines. 2. Matabetchoun, showing power house and penstocks. 3. Main 20-inch air line from Ragged Chutes. 4. Cobalt sub-station. 5. Ragged Chutes, main dam, intake gates and house over head pipes.

Silver and Gold



THE LUMSDEN MINING COMPANY, LIMITED. Property at Brady Lake, southeast Coleman. Situated one lot from the Beaver and Temiskaming. The main shaft is down 400 feet, and has long drifts and crosscuts from four levels. One car of high-grade ore has been shipped from the property. John Lumsden, of Ottawa, is president; A. E. Stitt, Ottawa, secretary-treasurer, Freeman I. Daniels, Cobalt, superintendent.

Silver and Gold



1—PETERSON LAKE MINING COMPANY, LOUTHER. This Company has followed a policy of leasing its mining property to other companies on a basis of percentage of profits. At present the Peterson Lake Company is operating on its own account the old Nova Scotia lease from the shaft shown above. The Company has paid in dividends to the end of 1913, \$252,191.10.
 2—THE FOSTER MINE, one of the early discoveries of the Cobalt camp. 3—THE SHAMROCK MINE. 4—THE GENESSEE MINE. 5—CAMPBELL & DEVELLE'S ASSAY AND ORE SAMPLING PLANT.

Silver and Gold



THE BEAVER MINE.—One of the most picturesque properties in the Cobalt district. The Beaver and Temiskaming are side by side, the buildings of the latter appearing in the above picture on the right. The Beaver has the distinction of having the deepest shaft in the camp, its workings having been continued to 1,635 feet. While the Beaver has not been a large producer it has paid to the end of 1913, \$590,000 in dividends. Production here, as elsewhere, was curtailed in 1914-1915 on account of the low price of silver. The Company's mill, seen in the left centre of picture, has a capacity of 140 tons daily.

Silver and Gold



General view of the mill, new steel head frame and mine buildings. On this property the largest hoist in the camp has been installed. The Company in 1915 started sinking to the lower contact under the diabase sill, a depth of approximately 1,650 feet. The Company has paid in dividends to the end of 1915 an amount equal to 39 per cent. of the capital stock, or \$1,459,156.

Silver and Gold



FIG. TEMISKAMING MILL. A 30-stamp, water concentrating mill with a daily capacity of 100 tons of ore. During the year 1913 the mill treated 40,947 tons.

Silver and Gold



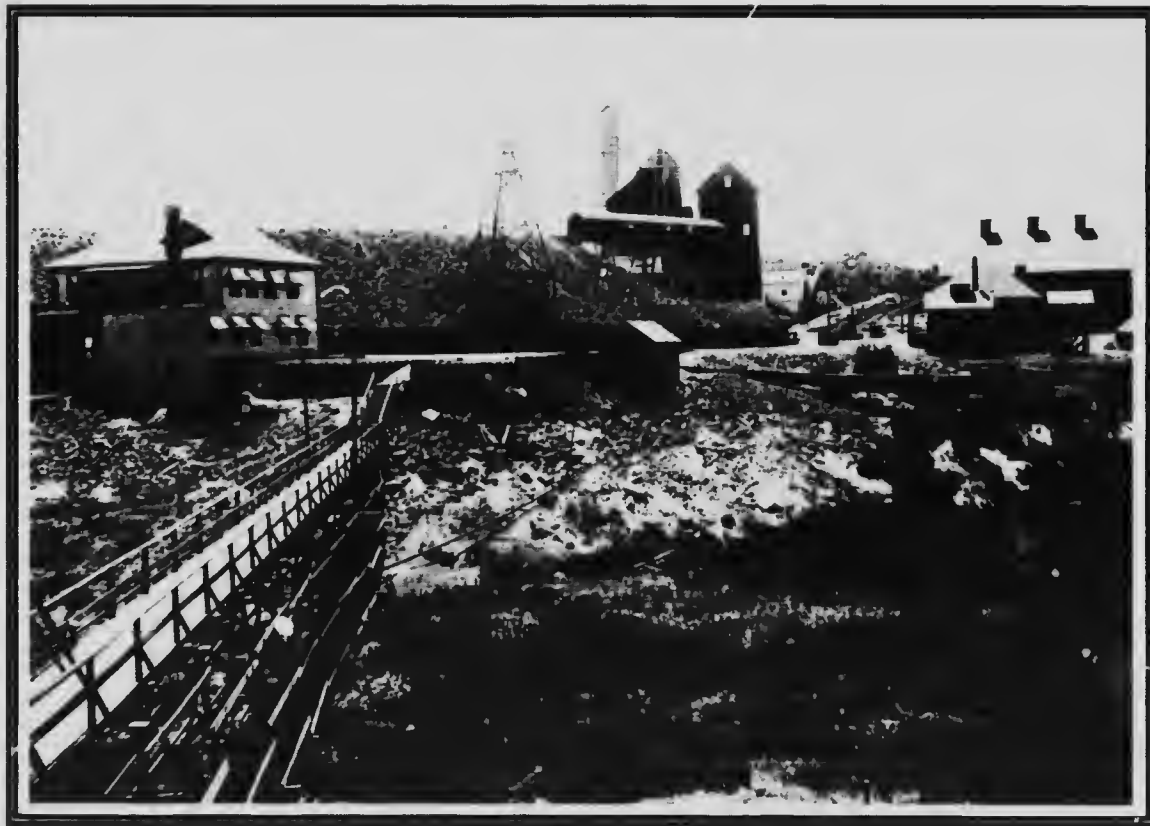
KERR LAKE MINING COMPANY LIMITED. One of the most consistent producers of the Cobalt camp. This Company has paid to the end of 1913 in dividends \$6,120,000, or 20% on its capital of \$3,000,000. The mine has shipped to December 31, 1913, 12,178 27 tons of ore. Low grade ore is milled by the Dominion Reduction Company, and the high grade is shipped direct to the smelters. The Dominion Reduction plant treated 28,091 tons of Kerr Lake ore during 1913. Production of the mine for last year was 4,109,355 ounces, rating the property as third highest in the matter of output in the camp.

Silver and Gold



THE COURVILLE COVER, formerly the DRUMMOND MINE. Now owned by the Caribou Cobalt Company. Since being taken over by the Caribou Company, it has paid in dividends \$445,000. The house in which Dr. Drummond, one of the original owners of the property and author of "The Bald Tent," died, is shown on the top of the hill.

Silver and Gold



CROWN RESERVE MINE.—This property is located at Kerr Lake, and has produced from its stops some of the richest ore in the Cobalt camp. The Company has paid in dividends to the end of 1915, \$6,102,399.30, representing 345 per cent. on its issued capital, and has paid a royalty of \$880,315.78. Crown Reserve ore is milled by The Dominion Reduction Company, 27,201 tons being treated by this plant during 1915. The Company operates the Silver Leaf property under lease, and in conjunction with the Kerr Lake Mining Company operates the Drummond Fraction. Crown Reserve also owns 60 per cent. of the stock of the Porcupine Crown Mines at Porcupine, and 90 per cent. stock of the Reward Mines, California.

Silver and Gold



Copyright by A. A. Cole

A RICH SILVER VEIN. Cobalt camp is noted for its high-grade veins. The above picture represents a 14" vein at 100-foot level, assaying 9000 ounces to the ton. This stope has produced 4,500,000 ounces of silver.

Silver and Gold



PENACOOK MINES. In the early days, this property was known as the Cobalt Central, and subsequently, went into liquidation, being taken over by Philadelphia interests. Total shipments from the property to the end of 1915 have been 2,516.71 tons. The mine is picturesquely situated on Glen Lake. There is a 100-ton mill on the property, which last year treated 28,515 tons of ore. The Company is practically a close corporation, there being no stock on the market.

Silver and Gold



THE DOMINION REDUCTION COMPANY, LIMITED: Operating the mining property formerly known as the Nova Scotia. The mill on the property is equipped with 40 stamps and has a rated capacity of 200 tons per day. The Company treats ore in its mill for the Crown Reserve Mine, the Comet, Drummond Fraction and the Kerr Lake Mines. During 1915 the mill treated approximately 78,300 tons, from which 1,500,000 ounces of silver were recovered.

Silver and Gold



RIGHT OF WAY MINING COMPANY, LIMITED—Head frame and mine buildings. The Company was formed for the purpose of taking over and operating the group under the T. and N. O. Railway right of way through the Town of Cobalt. The original Company was capitalized at \$500,000, but this was afterwards raised to \$2,000,000 and an amalgamation made with the Cobalt Merger, Limited. The Right of Way to the end of 1915 paid out \$343,753.93 in dividends.

Silver and Gold



CHAMBERS-FERLAND MINING CO., LIMITED—New head frame and rock house on west section of the property. In these workings the best veins of the mine were found early in 1916. Exploration has been carried on almost continuously since the early days of the camp. The Aladdin Mining Company of London, England, owns controlling interest.

Silver and Gold



NIPissing Mining Company, Limited. General view of the main buildings on the east side of Cobalt Lake. This Company owns 840 acres in the Cobalt camp. To the end of 1915 the shareholders had received \$13,740,000 in dividends, and \$400,000 had been paid to the original syndicate in 1905-6. From 1904 to December 31st, 1915, the Nipissing has produced 41,209,238.07 ounces of silver, valued at \$22,158,065.16.

Silver and Gold



NIPISSING HIGH-GRADE MILL. -The first high-grade plant to be constructed in the Cobalt camp. Total shipments of bullion from this mill during the year 1915 amounted to 6,164,239.03 ounces. The mill treats custom ore as well as Nipissing product, and during last year handled 921 tons of Nipissing ore averaging 2,474 ounces per ton, in addition to 553 tons of custom ore, with an average assay of 2,917 ounces per ton. The refinery also treated the product of the low-grade mill containing over 2,000,000 ounces.

Silver and Gold



OVER QUARTER OF A MILLION DOLLARS IN SILVER. A billion shipment from the Nipissing mine, made 25th February, 1914, 381 bars containing 453,413 ounces troy, or 15½ tons avoirdupois. Value, \$260,681.16. At the present market price of silver, September 11th, the shipment would bring the sum of \$308,181.84, or nearly \$40,000 more than it did in 1914.

Silver and Gold



NIPISSING LOW-GRADE MILL.—The big low-grade mill of the Nipissing Mining Company, Limited, erected at a cost of \$375,000. This plant is equipped with 40 stamps, and has a daily milling capacity of 300 tons. During the year 1915 the mill treated 77,183 dry tons, and the bullion recovered from this tonnage totalled 2,127,372 ounces, an extraction of 87.52 per cent. The cost per ton, including transportation of ore and picking plant, was \$3.913. The system of concentration used is cyanide. Ore from the 4th of July shaft, a mile away, is transported by aerial tramway to the mill.

Silver and Gold



NIPISING MINING COMPANY, LIMITED. Shaft No. 73, one of the best producers of the mine, and the terminal of the aerial tramway.

Silver and Gold



General view of the McKinnon Damaged Silver Mining Company's Mill and Mine Buildings. The mill has a capacity of 400 tons a day and in the spring of 1916 the first of flotation plant to be installed in Northern Ontario was put in operation. The latter plant is used to treat the tailings and thus obtain a higher recovery. The Company to the end of 1915 had paid 20 1/2% in dividends on the capital stock of \$2,500,000, or a total of \$5,000,751.

Silver and Gold



FOX CREEK MINE—One of the oldest mines in Cobalt camp. One of the biggest producers, total shipments of silver aggregating over \$2,000,000 in value. Dividends paid to end of 1915, \$7,840,000. Mill on property has daily capacity of 400 tons.

Silver and Gold



BORDEN MINES, LIMITED. Property is situated within the Townsite of Cobalt and has been a good producer. During the year 1913, 840,730 ounces of bullion were shipped, valued at \$416,842. Dividends paid by the Company to the end of 1913 aggregate \$275,000.

Silver and Gold



BUFFALO MINES, LIMITED—Big dump of mill tailings on the property. The mountain of sand from the low-grade mill shown above contains between 300,000 and 400,000 tons, and it will be treated by the new oil flotation process, recently installed, with a capacity of 500 tons daily. The tailings are estimated to contain from 4 to 7 ounces of silver per ton.

Silver and Gold



TOWNSITE MINE. Owned and operated by the Mining Corporation of Canada, Limited, in conjunction with the City of Cobalt Mine and the Cobalt Lake Mine. The Townsite has always been a steady producer for the Company.

Silver and Gold



MILL OF THE COBALT REDUCTION CO. MINING CORPORATION OF CANADA, LIMITED, showing new cyanide addition to the left. This mill was built in 1907, under the name of the Muggley Concentrator. Later it was taken over by the Northern Ontario Concentrators, Limited, and by them sold to the Mining Corporation of Canada, Limited, who have made extensions and improvements to the plant. The mill treats ore from the City of Cobalt mine, the Townsite Extension, and the Cobalt Lake mines, all of which properties are being operated by the Mining Corporation. The mill has a capacity of 300 tons daily, of which 175 tons are treated in the low-grade cyanide plant and not concentrated.

Silver and Gold



CITY OF COBALT MINE, MINING CORPORATION OF CANADA, LIMITED. Showing head frame over main shaft. This mine was formerly operated by the City of Cobalt Mining Company, and was thought to have been nearly worked out at the time it was taken over by the present owners. Exploration and development work has made it a steady producer.

Silver and Gold



COBALT LAKE MINE, MINING CORPORATION OF CANADA LIMITED. Showing mill, head frame and other buildings on the property. The original company was formed to mine under the bed of Cobalt Lake, for which ground \$1,085,000 was paid to the Ontario Government. The mine was later taken into the Mining Corporation consolidation. The bed of the pumped-out Cobalt Lake can be seen in the foreground.

Silver and Gold



THE FINE NEW MILL OF THE NORTHERN CUSTOMS CONCENTRATORS, LIMITED.—This plant contains 80 stamps, and has a rated capacity of 200 tons per day. The mill treats concentrates, and carries the process further than concentration, returning the concentrates to the mines or shipping them to the smelter on the latter's account. The Company at present handles ore from the Chambers-Ferland, LaRose and Right of Way mines. The mill originally owned by this Company was sold to the Mining Corporation of Canada, and the new plant shown above constructed in 1913-14. An oil flotation plant is to be installed.

Silver and Gold



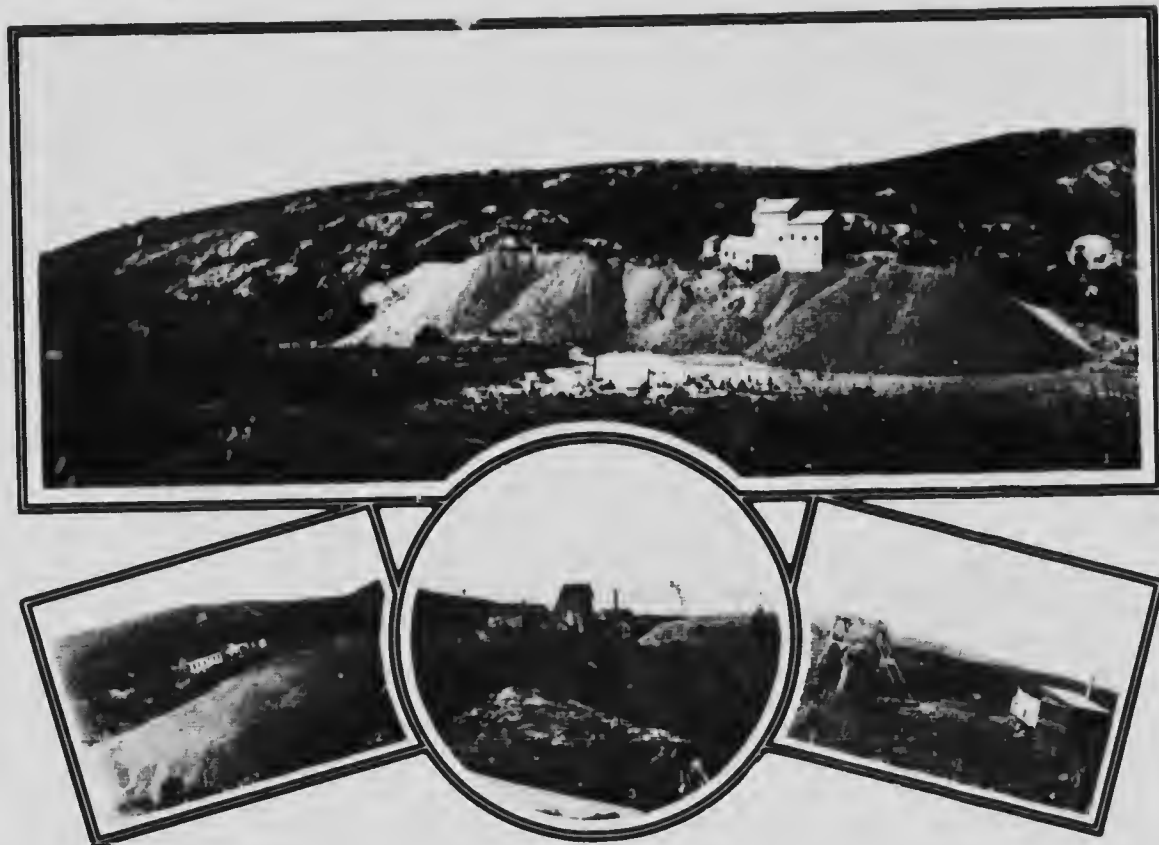
(1) THE ADAMANT. 2—THE NATIONAL MINES, LIMITED, formerly the King Edward. 3—THE CALUMET and MONTANA, formerly the Airgood property. 4—THE DEER MINES. 5—JOHN BLACK MINE, being operated by the People's Mining Company.

Silver and Gold



CASEY COBALT MINING CO., LIMITED—Property in Lot 3, in the 1st Concession of Casey Township, nine miles from New Liskeard. The mine is outside the Cobalt area, but has been a good producer. Dividends paid by the Company to the end of 1913 total \$203,249.33. The buildings shown above were destroyed by fire August 22nd.

Silver and Gold



SOUTH LORRAIN MINING DISTRICT. 1—THE WETTLAUFER.
2—THE CURRIE MINE. 3—THE BELL ELEN. 4—THE
LORRAIN CONSOLIDATED. All these properties have been re-
cently re-opened and are now being operated.

Silver and Gold



MILLER LAKE O'BRIEN, GOWGANDA



TWP. MILLERETT, GOWGANDA

MILLER LAKE O'BRIEN, MINN., ST. GOWGANDA. Owned by Mr. M. J. O'Brien, of Renfrew. Shipments continue regularly from this property, although transportation facilities are a drawback. The Gowganda camp in 1913 produced 242,220 ounces, valued at \$116,836.

TWP. MILLERETT, GOWGANDA. Property is operated in conjunction with the Miller Lake O'Brien, and is owned by Mr. M. J. O'Brien. Both properties named obtain their power from the Gowganda Power Company, on the Montreal River, also owned by Mr. O'Brien.

Silver and Gold



R. A. P. SYNDICATE



MILLER INDEPENDENCE MINES, LIMITED

R. A. P. SYNDICATE. General view of the plant of the Richardson, Albright and Engstroms Syndicate, who own a large area of mining lands in the Boston Creek camp. The shaft through which present operations are being carried on is approximately one-half mile from Boston Creek station on the T. and N. O. Railway. In July, 1916, the shaft was down a depth of 300 feet and a large tonnage of ore was developed on the two upper levels. The ore is very rich in places, some picked samples assaying as high as \$2,000 to the ton.

MILLER INDEPENDENCE MINES, LIMITED, BOSTON CREEK. The Company has a Nisson 10-stamp mill, erected for testing purposes, and the first gold brick was shipped in July, 1916. Some spectacular gold showings have been found on the property, approximately \$90,000 in high-grade being taken from the main vein, on the surface.

Silver and Gold



Page Forty-five

1. KIRKLAND LAKE GOLD MINES, LIMITED, the McKim property. Controlled by the Beaver Mine interests, Cobalt, under agreement to spend \$2,000 per month in development.

2. LAKE SHORE MINE, KIRKLAND LAKE. Showing new head frame and ore dump. Shaft has been sunk on good ore, and development is proceeding at three levels, 100, 200 and 300 feet.

3. LAUREL, KIRKLAND LAKE GOLD MINES, LIMITED, at Good Fish Lake. General view of plant and buildings. The shaft is sunk on an incline of 60 degrees. Power is generated from two 63-h.p. boilers.

Silver and Gold



TOUGH DAKES GOLD MINES, LIMITED, KIRKLAND LAKE.
Showing the "A" shaft and power plant. The power used to operate mill and mine is obtained from the hydroelectric plant at Charlton. A new power line is now under construction by the Northern Ontario Light and Power Co., from Cobalt to Kirkland Lake. The Tough Dakes was the first producer in the Kirkland Lake Camp, and has paid in dividends to date \$263,750.

Silver and Gold



Page Forty-seven

SILVERADO MILL OF THE TOLSON OAKS GOLD MINES LIMITED. The mill has a capacity of 125 tons daily, and the grinding is done in a 6' x 10' Hardinge Ball Mill operating in closed circuit with two 3' x 20' tube mills. There are four agitators and five thickeners, all of the Barr type. The ore is delivered from the main shaft along an inclined trestle. During 1913 the mill treated 26,193 tons, containing 26,635.44 ounces of gold and 8,944 ounces of silver, having a value of \$535,339.14. The grade of the ore milled is the highest in Ontario.

Silver and Gold



TECK-HUGHES MINING COMPANY, LIMITED, KIRKLAND LAKE.
General view of the mill and plant. The mill has a capacity of 500 tons daily and the cyanidation system is used, counter current decantation. During the present summer a new 12-drill compressor was installed. Controlling interest in the Company is owned by Mr. C. L. Demson and associates of the Buffalo Mines, Cobalt, and the property is under the same management.

Silver and Gold



THE CROESUS MINE. Privately owned by Messrs. Davis, Steindler, and associates. The Croesus is a remarkable property because of the richness of the ore found in its workings, some of which runs from 50 to 70 per cent. gold. The property in Munro Township was formerly known as the Dolois-Leyson, and was turned down several times as having no prospects before being taken up by the present owners. Two tons of ore were shipped which realized \$83,500. Unfortunately the surface plant was destroyed by fire at the end of July, but new buildings are being erected.

DAVIDSON GOLD MINES, PORCUPINE. Since resuming operations some good ore has been encountered on this property at the 200-foot level. Development work is proceeding and the shaft is now down over 300 feet. The plant consists of a 4-drill compressor, three boilers and hoist.

Silver and Gold



TOWN OF TIMMINS



TOWN OF SOUTH PORCUPINE

TOWN OF TIMMINS. — Named after the Timmins Brothers, of the Hollinger Consolidated Mines. A steadily growing town, and one enjoying a big mercantile trade.

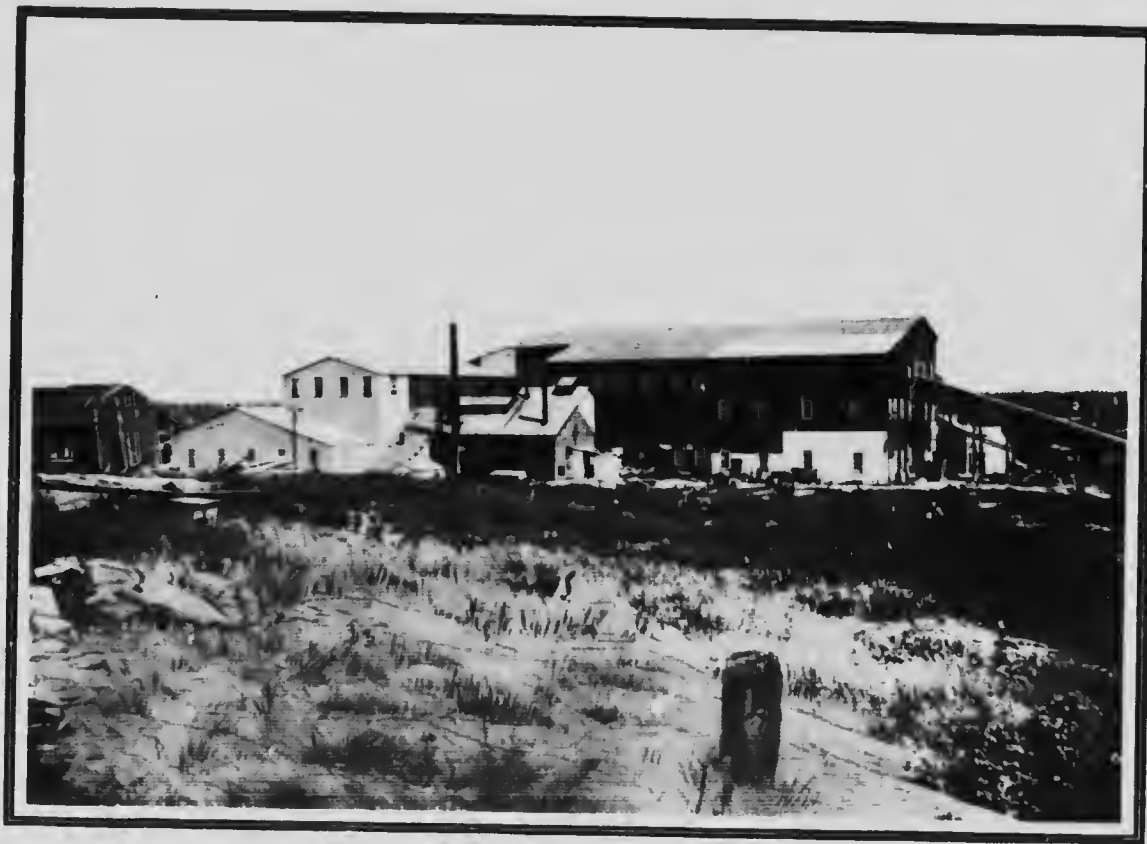
TOWN OF SOUTH PORCUPINE. — At the south end of Porcupine Lake. The town, like all mining towns, had a rapid growth and its close proximity to the Dome, Dome Extension and other mines, insures a steady trade.

Silver and Gold



THE DOME MINES, LIMITED — General view of the property. The big steel headframe shown is 149 feet high, built over a six-compartment shaft. The total production of the Dome for the year 1915 was \$1,530,286.23, and the average value of ore per ton was \$4.81. The Company is paying dividends at the rate of 3 per cent. quarterly on its issued capital of \$4,000,000.

Silver and Gold



Tim Dorr Mill. Capacity of the mill is second largest in the Porcupine camp. In 1916 changes were made in order to raise the capacity from 1,000 tons a day to 1,300 tons a day. To make this change the following additions were made to the mill: two 8' x 30" Hardinge Ball Mills, two 5' x 22" Tube Mills, two 90-frace Merril Presses, three 10' x 30" Dorr Thickeners, two 8' x 45' Pachua Tanks, and two 12' x 40' Sand Leaching Tanks. The above cut shows the mill as viewed from the south side.

Silver and Gold



THE DOME "Grory Hole". From this immense pit the Dome Mines Company have taken several hundred thousand tons of mill rock. Originally there was a great large dome of mineralized rock where this great pit now is and on this dome the first discovery was made. From the peculiar shape of this outcrop the mine derived its name. As soon as the first mill was built same was destroyed in the big fire of 1911, the first ore was taken from here and this great deposit has been drawn on for ore each year since.

Silver and Gold



DOMES EXTENSION MINES

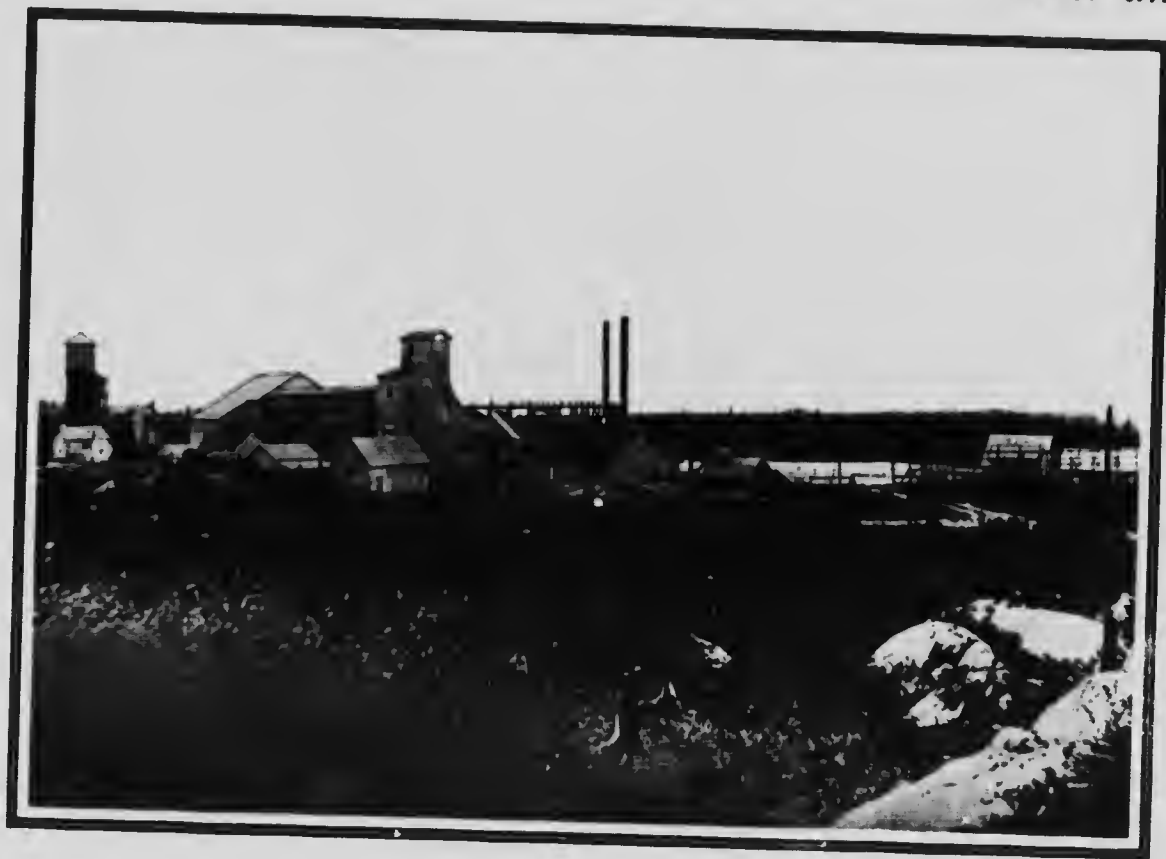


NEWRAY MINES

GENERAL VIEW OF THE DOME EXTENSION PROPERTY AND BUILDINGS.—This year the shareholders of the Company voted to option the property to the Dome Mines Company. During the early part of 1916 the latter did some exploration work from the shaft shown here as well as a considerable amount of diamond drilling in order to prospect for ore bodies at depth.

THE NEWRAY MINES COMPANY OF PORCUPINE, formerly the R. C. This property has just been reopened, and exploration work has been resumed energetically, with good results.

Silver and Gold



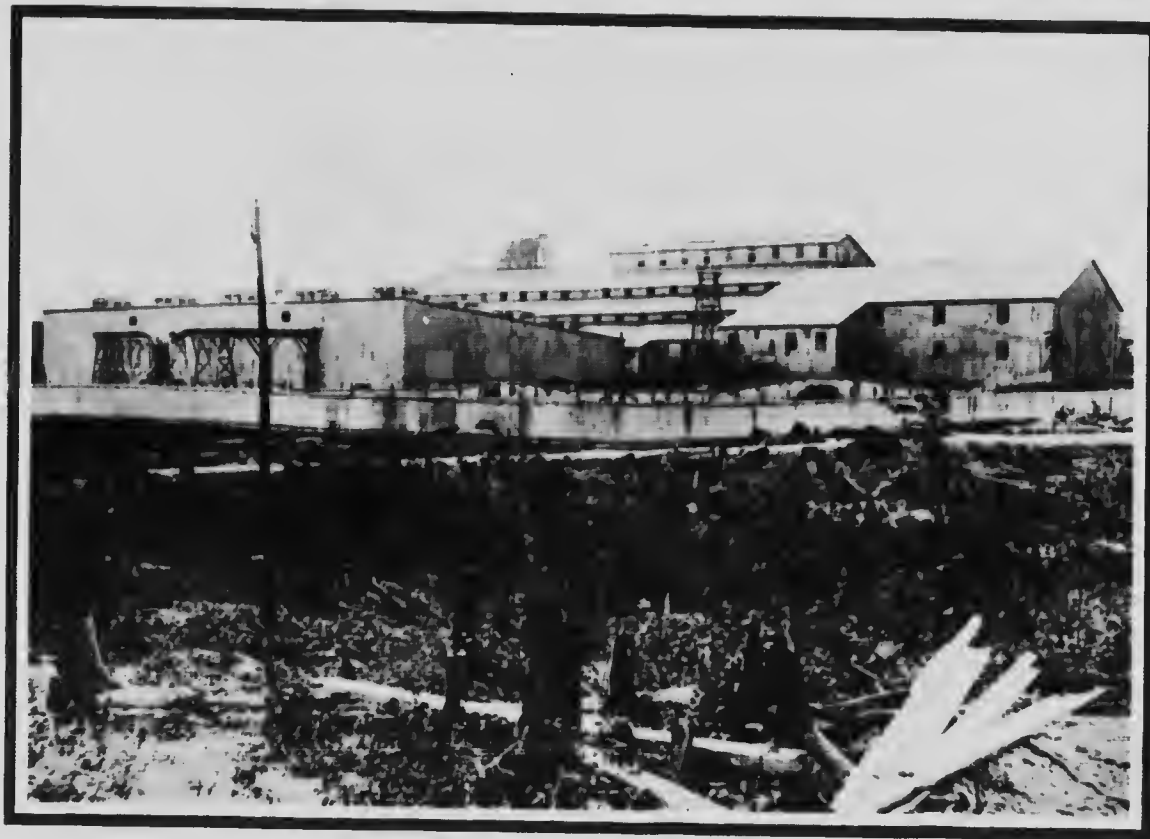
PORCUPINE CROWN MINES—View taken from the south side, showing mill and other buildings. Net value of production for 1915, after deducting mint charges, was \$613,565. The mill was originally designed for 100 tons per day, but recent changes were made which increased the capacity. The mine is paying 8 per cent dividend quarterly, and the control of the Company is owned by the Crown Reserve Mines of Cobalt.

Silver and Gold



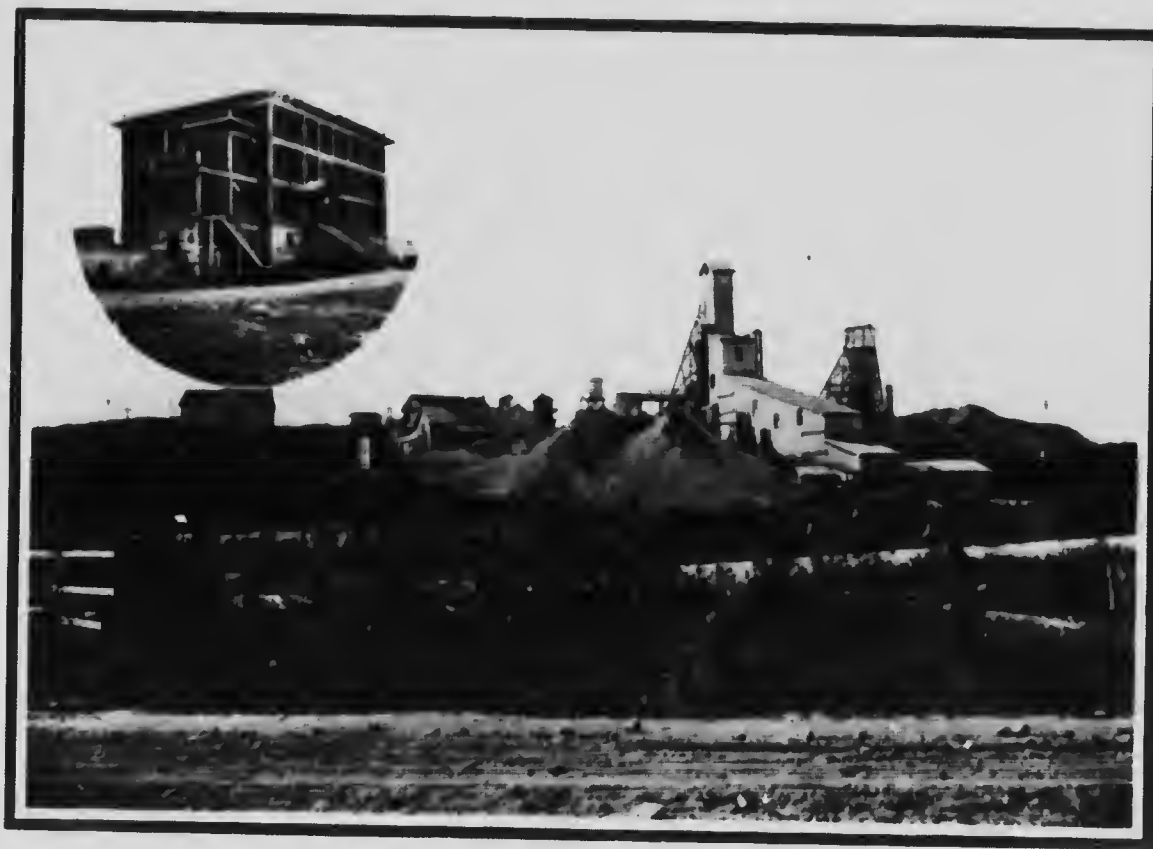
HOLLINGER CONSOLIDATED GOLD MINES LIMITED. General view of the property and buildings. The largest producer of gold in the Dominion, the gross output of the consolidated properties is now running over \$100,000 per week, which will be augmented as soon as the addition to the present mill is completed. Dividends to the end of 1915 aggregated \$4,170,000, and at the present time 13 per cent per year is being paid on the Company's issued capital of \$24,000,000.

Silver and Gold



THE HOLLINGER MILL.—In 1915 the capacity of this mill was increased to 1,000 tons daily, and additions are now under construction which will give the mill a capacity of 1,500 tons per diem. One hundred stamps are contained in the present mill. Taking the average value of the Hollinger ore as indicated by regular reports, at approximately \$9.00 per ton, one can easily appreciate the enormous revenue possible from the treatment of 3,500 tons daily when the new mill which is under construction is completed, which should be next summer.

Silver and Gold



NEW GOLD MINES, now included in the HOLLINGER CONSOLIDATED MINES, LIMITED. This valuable property was owned by the Canadian Mining and Finance Co., and has been taken into the consolidation with the Hollinger and Millerton properties. Ore from the shaft shown above is trammed direct to the Hollinger mill.

(Inset) THE ADMINISTRATION BUILDING OF THE HOLLINGER CONSOLIDATED MINES.

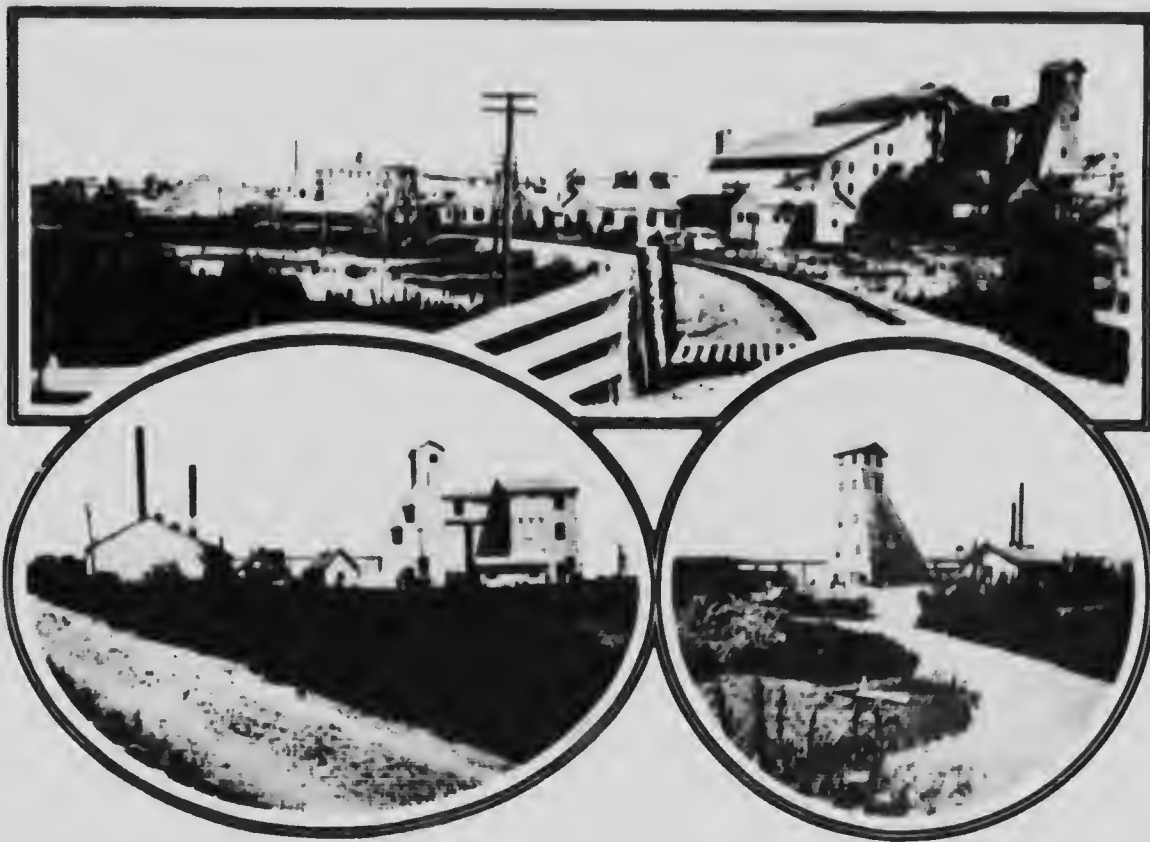
Silver and Gold



Copyright by A. A. Cole

WHAT A GOLD MINE UNDERGROUND LOOKS LIKE—Mixed quartz and schist at the 900-foot level of the Hollinger Consolidated Mines.

Silver and Gold

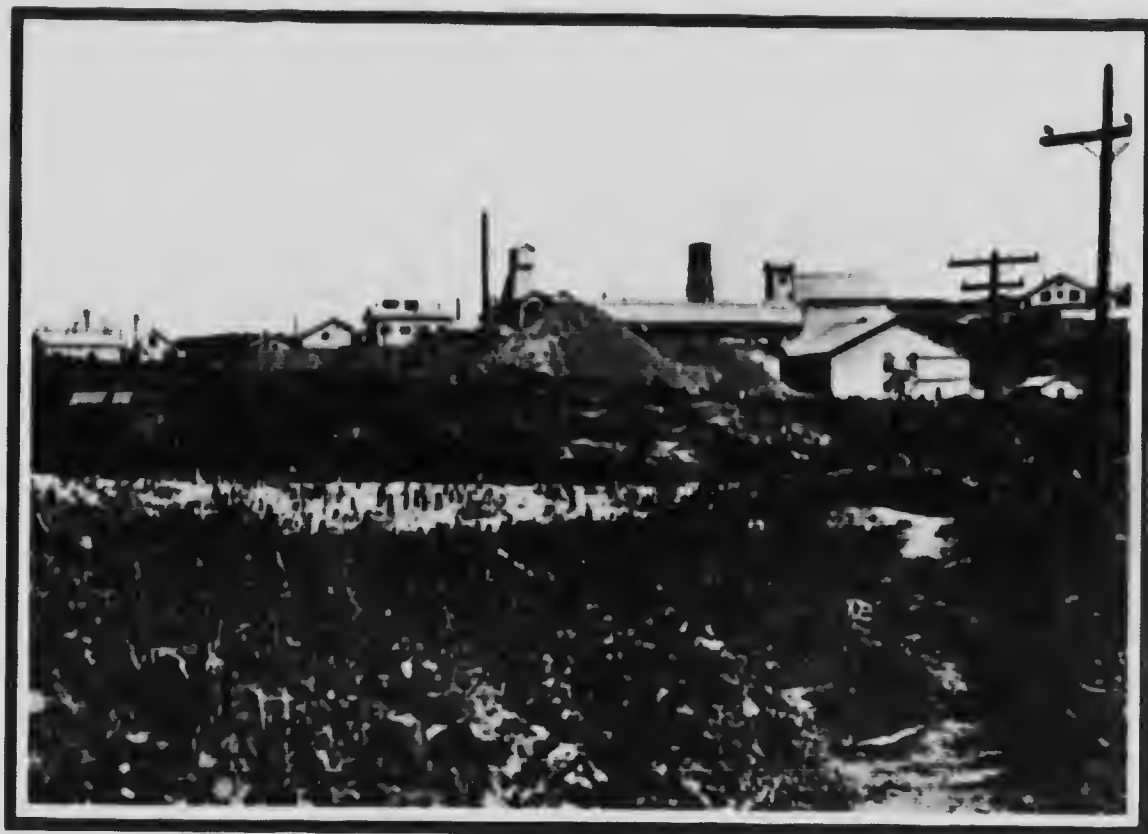


(1) McINTYRE PORCUPINE MINES LIMITED. General view of mill and mine buildings. The third largest mine in the Porcupine camp. The mill has a capacity of 450 tons daily. Development and exploration work during the present year has been very successful, and at 1st March there were 402,000 tons of ore in the reserves, more than double the previous year, without including the new ore body encountered at the 1,000-foot level.

(2) THE JUPITER MINE. Now being operated by the McIntyre Mines. About 60 tons of ore per day is coming from this property and being treated at the McIntyre Mill.

(3) McINTYRE EXTENSION MINE. Showing head frame and hoist room. This property was formerly owned by the Pearl Lake Mining Company, and is now being operated by the McIntyre.

Silver and Gold



Pioneros Atomic Mines. In the foreground are the mill, mine house and mine buildings. The mill on the property is equipped to handle from 3,500 to 4,000 tons monthly. During the year 1913, the Vipond produced 11,278 fine ounces of gold worth \$247,504.50. Ore reserves, at the end of the year, were estimated at 90,000 tons, worth \$387,480.00.

Silver and Gold



WEST DOME CONSOLIDATED MINES, LIMITED. After being closed some time, this property is now being developed on an extensive scale. Diamond drilling was carried on during the year and a number of valuable ore bodies located. A large four-compartment shaft is to be sunk about 1,500 feet from the shaft house shown above.

Silver and Gold



DOMELAKE MINING AND MILLING COMPANY. General view of mill and plant looking from the north. In the year 1915 the mill treated 11,727 tons of ore of an average value of \$9.14 a ton, containing a total of \$106,941.40 of gold, at a cost of \$2.36 per ton. The net amount received for concentrates and bullion was \$80,639.47. Over \$21,000 in gold went out in the tails and early in 1916 a Koering cyanide system was installed, and certain alterations made, so that a much better extraction is now being made. An extension to the mill is being planned, following favorable developments underground.

Silver and Gold



SCHUMACHER GOLD MINES, LIMITED.



NORTH THOMPSON ASSOCIATED GOLD MINES, LIMITED.

SCHUMACHER GOLD MINES, LIMITED. The mill on the property is of 150 tons daily capacity, and cost \$57,800. It was put in operation in October, 1915, and is considered one of the most efficient in camp. In the first period ending June 30th, 1916, the mill treated 30,120 tons, from which \$161,949.01 in gold was recovered.

NORTH THOMPSON ASSOCIATED GOLD MINES, LIMITED. This property is privately owned by English capitalists. The plant consists of a steam-driven compressor and a hoist of sufficient capacity for all present needs. The ore in the North Thompson is of a grade above the average.

