KIRKLAND LAKE HAS "GOLDEN MILE"

Producing and Near Producing Properties in Alignment on Lode.

SECOND TO PORCUPINE

Development at One Property Benefits Others Because of Similarity.

From World Special Correspondent.
Kirkland Lake, July 4.— Tellurium, in combination with gold, sliver, lead, bismuth or antimony, occurs, the very sparingly, in various parts of Ontario. Away back in 1880 sylvanite, a telluride of gold and silver, and nagyagite, a telluride of lead and antimony, were found at the Huronian Mine in the Township of Moss, about 125 miles west of Port Arthur. At a later period, hessite, a sliver telluride, was discovered at Pine Portage Bay, in the Lake of the Woods, and tetradymite, a telluride of bismuth, occurs at the Mikado Mine, about 40 miles southwest of Kenora, Ont.

about 40 miles southwest of Kenora, Ont.

There is only one known occurrence of tellurides at Porcupine. Hessite, carrying also some gold, has been identified at the Powell claim, in the Township of Deloro.

Tho tellurides form the only stable sait of gold, none of the occurrences mentioned are of any economic importance, nor have we productive telluride gold fields in any part of the world, except Cripple Creek, Colorado, and Kalgoorie, in Western Australia, the latter with an output of about \$200,000,000, and the former \$800,000,000.

Apart from Kirkland Lake, the tellurides found in Ontario do not seem to have in any way influenced the deposition of gold, nor have they added to its volume, nor given any distinctive character to auriferous deposits. At Kirkland Lake, however, we find very different conditions.

posits. At Kirkland Lake, however, we find very different conditions. Here several tellurides occur, altaite, a teiluride of lead, and calaverite, a teiluride of gold, as well as hessite and tetradymite, and this camp has many of the geological features of other productive telluride fields.

At Cripple Creek the bulk of the gold is found in the country rock and not in quartz veins, while at Kalgoorlie the matrix of the gold is schistose, highly silicified country, which is impregnated with prylite tellurides of gold and free gold. So at Kirkland Lake much of the value is in the feldsspar porphyry. There is little or no vein structure or shearing or outcrops of quartz and the so-called veins usually betray their presence veins usually betray their presence by a mere crack on the surface gen-erally not half-an-inch wide.

erally not half-an-inch wide.

Dumps of Ore.

A novice at these mines would never suspect that the dumps contained ore. They are largely composed of the prevailing rock of the country. But Kirkland Lake has the goods and the counterpart of Kalgoorlie's "golden mile." On the principal lode in the Australian field there is the Great Roulder Ivanhoe Golden Horseshee. Boulder, Ivanhoe, Golden Horseshoe, Perseverance, Oroya-Brown Hill, asso-ciated and Lakeview consols, all mines well and favorably known in the min-ing world. So Kirkland Lake has the Tough-Oakes, Wright-Hargraves, Sylvanite, Lakeshore, Teck-Hughes, Kirkland Lake, Elliot-Kirkland and

the western end of the chain. And there is a sound geological reason for this alignment of the working mines for this "golden mile" of the golden north. There is here a well defined synclinal fold and at its base there is a contact between the Timisthere is a contact between the Timiskaming or sedimentary series and the igneous rocks of the district and this is a zone of special enrichment. It is clearly defined on the geological map issued by the Ontario Bureau of Mines. Anywhere along this contact there is an excellent chance for a mine. The formation thruout is the same and the development of one mine goes far to prove the value of the adjoining ground on the same lode.

The Golden Mile.

These stretches of clearly marked quirements demand.

auriferous ground seem to be characteristic of telluride gold fields. They gave Kalgoorlie its "golden mile," but in the Canadian camp the main lode is longer than that at Kalgoorlie and in a few years more it will probably carry a string of mines six miles in length. More than half of this ground is now covered, and it is a busy scene that meets the eye of the visitor coming from the railway station, while at night the many electric lights at the various plants add a touch of

beauty to the entire prospect.

Telluride cold fields have usually high grade ore. The Tough-Oakes, the principal producer so far, shipped 101 tons, averaging over \$400 per ton. The run of the mine is now about \$20. This mine and the Teck-Hughes are now producing and it is expected that the Lakeshore and the Kirkland Lake will be brought in before the end of the year. The latter is owned by the Beaver consolidated in Cobalt and its progress is very satisfactory.

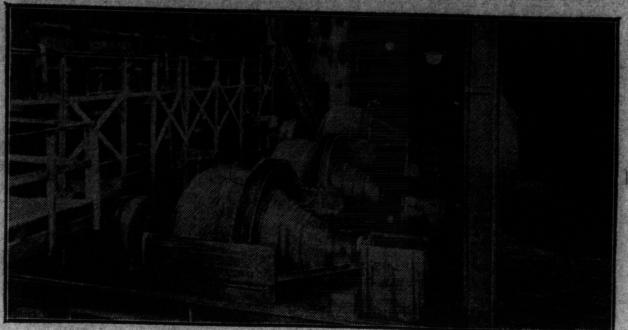
Second in Production.

The mines of this district are not as large as those of Porcupine but in point of production Kirkland Lake ranks next to Porcupine and several properties in addition to those mentioned are now starting work in the Probably the most important of these, because of its position on the main lode is the United Kirkland gold mine. It adjoins the Elliot-Kirkland on west and is near the centre of the great lode. In this position it has an excellent chance. In fact the work already done in the same formation by adjoining mines goes far to prove the value of this ground. It is reported that the Lakeshore has lately opened out an exceptionally large body of high grade under the lake.

The T. & N. O. Railway have surveyed a spur line from the station at Swastika to the townsite, a distance of five miles. When completed this will bring the Tough-Oakes within one mile of the steel while the other mines on the lode will have adequate transportation right at their doors.
S. R. Clarke.

APPARENTLY.

A drunken man threw his arms around a telegraph pole, and then began to feel the pole with his hands. Round and round he went. Finally he gave it up and muttered:



Ball mills recently installed at the Dome Mines,

HARGRAVES ORE **MAKES GOOD RETURN**

velopment of Ore

committees of producers. Of the tota United Kirkland, all disposed over 75 per cent. represents the purchase of 60,000,000 pounds of copper named, along the principal lode of the camp. The Tough-Oakes is at the eastern and the United Kirkland at the western end of the chain. And the western end of the chain. And there is a sound geological reason pounds of high grade spelter. Details of these purchases follow:

Lead16,000,000 \$1,280,000

Totals . 99,000,000 \$19,385,000
These three metals constitute the base for making ammunition, the copper and spelter being melted into brass and the lead forming the destructive agent. These quantities must be largely augmented, and producers will doubtless be called upon to fur-nish the government's needs as re-

A WORD OF APPRECIATION.

S. R. Clarke, c-o Toronto World. Dear Sir: Your contributions to the mining page of The World recently have been of great interest to me. In a recent number you refer to the fact of quartz porphyry dykes cutting schist to be favorable to the deposi-tion of gold. It may be of interest to you to know that I ran across a similar statement in a government report of 1901 in referring to a district about half way between Fort William and Winnipeg, in which I became interested several years ago and where I have continued to "stand pat" for that very reason. This report says, in part: "The formation of country rock in the vicinity of the mines is principally felsite, but trap also exists, and the contact between this and the granite lies between three or four miles of the track. The felsite schist is intersected by numerous dykes of quartz porphyry, and it has been found in the case of the developed mines that the quartz veins occur in this felsite and side by side with the porphyry."

I saw four machines working abreast

in \$12.00 ore at one mine there, that was typical of the above condition— and yet it has been shut down for The granite cuts off one corner of my location and from a small vein in

close proximity to one of these dykes have had assays of 15-oz. gold per Such articles as yours should have tendency to broaden the field. I sometimes think that the prospector of today would rather stake a musker

in a popular township than look for

geological conditions farther afield There are comparatively few trailbreakers among them. I brought up the rearguard from this district I refer to, and incidentally came out on the hog-train, but because of the geological conditions I still hold on. You may readily understand, therefore, how your letter appealed to me. I am.

Yours truly, D. C. Petrie.

LACK OF TRANSPORTATION FACILITIES RETARDED PROGRESS AT SHINING TREE

Satisfactory Results From De- Fifty Miles of Bush Presented Almost Impassable Barrier to Capital---Some Improvement Lately.

a more decisive effect if they had not come in the middle of the great war. The deepest shaft at West Shining Tree is barely 100 feet. It was sunk by four prospectors on a property which they jointly owned. Hoisting the broken rock from shallow depths is usually by windlass and man-power. or else with a whim worked by a horse.

equines were scarce in the camp dogs were used instead in hoist-from the bottom of the shaft. The whim is now one of the novelties the district.

Spectacular Samples. But equines were scarce in the camp and dogs were used instead in hoist-ing from the bottom of the shaft. The of the district. Ever since its discovery West Shin-ing Tree has been sending to the out-

side world very spectacular specimens of free gold. It is even said that many of the prospectors have met their liv-ing expenses from the sale of these specimens. They have, however, for the most part come from narrow veins which are not likely to be extensively worked until the larger properties ar producing. The commercial possibili ties of every property must be first considered. Gold in limited amount sufficient only to meet the expenses of mining has practically little or no value. Big capital always looks for an ample margin over and above all outlay for development and equipment, and during the present strain on the world's financial resources, only the best properties, those capable of returning the largest profits, will be opened up. Besides, many of the small veins show very little shearing: The country is generally what the properties of the country is generally what the countr country is generally what the prospectors call "tight." The ore chan-nels have not been adequate and sunk in various sections of the mine,

But Shining Tree is not by any

Velopment of Ore

Bodies.

The Regress content of Laboratory is admitted to the Capital—Some Improvement Lately.

The Regress content of the year in the Capital Content of the Year in t

In point of transportation Shining Tree is now in a better position than Larder Lake. It is in a measure comparable with the Township of Munro, where the Croesus, Burton-Munro and other mines are now working. The improvements at Shining Tree, however, would have had a more immediate and a more decisive effect if they had not a values.

It is generally believed that the extraordinary tenors of the Croesus ore are due to a fault or throw which shattered the country, and thus facilishattered the country, and thus facili-tated the ascension and infiltration of the gold laden solutions, and the diabase dikes of West Shining Tree seem to have a similar effect. They have the same function as the quartz

ed, and there are probably more valuable properties in other portions of the camp. It is to be hoped that large capital will soon enter the region, and if properly handled it is certain of a rich reward.

S. R. Clarke. VIGOROUS EXPLORATION AT DAVIDSON MINE

During the past two months the pavidson Gold Mines management Davidson have been carrying forward vigorous exploration work on their Porcupine property. Out of five drill holes sunk during that period three have cut ore bodies, evidently of high value and of considerable extent. One of these, cut near the 500-foot level, was 32 feet in width and showed spectacular ore, with free gold in the core.
The other holes were shorter, sunk from the 200-foot level in order to explore new ground. Two of the four, values as a rule are high only in pierced promising ore bodies. The cores from all drill holes are now in the hands of the company's assayers. neans a region with only narrow are awaited with interest by those in-

Has Bottom Been Reached?

For upwards of six months the market for mining stocks has had one continuous downward trend. The first thing to cause selling, especially of the gold stocks, was the greatly increased costs of milling due cially of the gold stocks, was the greatly increased costs of mining due to the rise in the price of machinery, cyanide and other incidentals that enter into the production of the yellow metal. The silvers were not affected to such an extent and moved more in market sympathy. Following this came the increase in cost of labor, and concurrent with it the danger of a general strike. Between bear pressure and frightened liquidation the prices of many mining stocks have been cut in half and even more. There is a point in all markets at which a bottom is reached, and this seems to have been accomplished in this case; in fact, the rebound appears to have already started. Market critics are in unis in their belief that at some stage conditions will bring about a boom in the silver and gold stocks hitherto unprecedented in Canadian mining history. The beginning of the end of the war will attract attention to the world's demand for both silver and gold, and more particularly to the world's demand for both silver and gold, and more particularly the latter. Financial men who give their undivided attention to the stock markets are already preparing plans for the first signs of peace, and any accumulation of the money metal shares will be made accordingly. The local market and New York have been cleaned up of all margined accounts, and it would be well if they were never allowed to become again extended, being as they are a direct invitation to traders become again extended, being as they are a direct invitation to traders to prey on the market for the money of the outside speculator. There are many gold and silver stocks whose present known intrinsic values are higher than their present market prices, and such should prove excellent investments for those with money to buy them outright.

DOLLAR SILVER

Buoyancy of White Metal Gives Rise to Further Talk of Big Advance.

The abnormal demand for silver for binage purposes in the countries in thich gold has disappeared from cir-niation has caused the steady appre-

Newray mill is running smoothly two shifts a day, and the results are squaring up with those of the best The Newray mill is one of the best amalgamation plants in the whole north. This was shown when by amalgamation alone the mill in the past recovered an average of \$7 per cant. of the gold and the ore. The mill is running on stuff from dump and tailings, and is getting a very fair profit.

The management expects to have the first gold brick ready in a few days. It is expected that a number of the directors will visit the mines around that time, and consideration be given that the matter of enlarging the mill, the that time, and consideration be given to the matter of enlarging the mill, the next unit being not less than 250 tons, with either stamps or ball crushers. The manager of the drill operations says that borings in the western territory of the estate will undoubtedly establish the uniformity of the formation with that of the Hollinger and McIntyre Consolidated to the south

GOING AHEAD WITH MILL AT SCHUMACHER

Construction of the Schumacher mill addition is a duplication of the present plant, which will give a combined caof about 280 tons per day. If labor can be secured it is pro-posed to start work at once on the number four, or east shaft. This shaft is now down to a depth of 200 feet, and it is proposed to continue it to the 300-foot level, where diamond drilling indicated a good body of \$14 ore. The resumption of work on the No. shaft, which is about 1400 feet east o the main shaft, is part of a program to prepare for the increased milling capacity. Development work is also being carried on in and near the old working, largely following up indica-tions of the big diamond drilling campaign carried on several months ago and during which quite a number new veins and extensions of others

rested in the property. During the past fourteen months the Davidson management have completed extensive development work on the ore bodies previously located, which are of great extent. Over half which are of great extent. Over half a mile of drifting and cross-cutting has placed in sight approximately \$1,-000,000 worth of ore, averaging good milling grade. Moreover, developments to date have only opened up a small portion of the indicated ore bodies. The Davidson mine is in the stage preparatory to a production



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Sample on request.

BEING PREDICTED SBELL-PLAN MINING TALK

RE CANADA

As the result of the Dominion's golden wedding-her jubilee-we

We have been told how Canada's area in her first 50 years of I has increased from 540,000 to 3,729,665 square miles, or 590%.

pares with \$175,000,000 at the present time, an increase of 383%. Car has from 500.000,000 to 600,000,000 acres under forest.

In the mineral industry the expansion has been marked, but n markable as it bids fair to be in the next 50 years. In 1867 our an eral production stood at \$10,000,000-about that of Porcupine in 1916it stands at \$137,000,000-probably much more—an increase of 1,2709 years ago Canada was but slightly regarded as a country with m sibilities. Today its mineral potentialities constitute one of the great of its destiny.

And in smelting. Fifty years ago our ores were shipped to Wales, then a world smelting centre, drawing shipments from all Western Hemisphere and from Europe. In 1867 our local smeltin treated only \$298,000, while today they treat \$52,700,000, an amazing of 17,584%—far and away the largest advance made in any gainful mentioned by Canadian statistics.

These figures—for which we acknowledge indebtedness to the Press, of Toronto-are heartening ones. They are inspiring. They a retrospect of 50 years past progress, but an earnest of 50 years of to come. It gives us pleasure to be able to publish these figures epochal time in space which is paid for as advertising matter, pl statistics with brief comment in compact form for filing and preser

We have consistently predicted that there would be no labor str north country mining camps. Today we are glad to point out that is are propitious for fulfilment of that prophecy. Labor and capital are together in the camps of the north, and we seem about to enter newed era of activity in Porcupine, Kirkland Lake, Boston Creek, Cob Lorrain, Gowganda, West Shiningtree and a score of other camps and to-be. Aliens and agitators are being quelled. Labor is looking better pay and more normal conditions of living. The prospector is couraged to pursue his calling. Nearly a score of inactive mines opened in the past six months in Cobalt. Silver is at its highest in m a quarter of a century, and at its best altogether since it was der 1873. The tide is turning. When the war stops this speeding-up I will be further accelerated.

We are interested in some of the leading precious metals dev propositions in the north-Newray in Porcupine; the Hargrave silver in Cobalt, which has produced ore rivaling the most spectacular disthe Carson vein and the Lawson "silver sidewalk" in Cobalt's early day Belle-Ellen and Lorrain Consolidated in South Lorrain, an extension diabase section of Cobalt; Boston Creek, one of the bonanza wonders

Such a skimming of the cream of gold-silver investment-specul these selections in their physical and market condition offer to tra have never seen, and we invite the correspondence of those who are for profitable opportunities to buy mining shares representing either silver, and representing moreover any and all the stages of developme make such purchases most desirable and attractive for the biggest profits and net incomes. Send to us for any new maps of northern Ontario mining camps you

and for the weekly issues of the CANADIAN MINING NEWS-all ms

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