The Institute has attempted to obtain the best original sopy 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.

$\square$Coloured covers/ Couverture de couleurCovers damaged/
Couverture endommagéeCovers restored and/or laminated/
Couverture restaurée et/ou pelliculce


Cover title missing/
Le titre de couverture manqueColoured maps/
Cartes géographiques en couleurColoured 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/ II se peut que certaines pages blanches ajouties lors d'une restauration apparaissent dens le texte, mais, lorsque cela étair possible, ces pages n'ont pas êté filmóes.

L'Institut a microfilme ie meilleur exemplaire qu'il lui a âte possible de se procurer. Les détails de cet exemplaire qui sont peut-ttre 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 restaurfes et/ou pelliculbes


Pages discoloured, stained or foxed/
Pages décolories, tacheties ou piquées


Pages detached/
Pages dítachees


Showthrough/
Transparence


Quality of print varies/
Qualité inigale de l'impression


Continuous pagination/
Pagination continue


Includes index(ess)/
Comprend un (des) index
Titie on header taken from:/
Le titre da l'en-thte provient:


Titie page of issue/
Page de titre de fa livraison


Caption of issue/
Titre de départ de la livraison


Masthead/
Gënërique (périodiques) de la livraison

## This item is filmed at the reduction ratio checked below/

Ce document est filmé au taux de reduction indique ci-dessous.

| $10 x$ |  |
| ---: | :--- |

# British Columbia Wining Gritio. 

"I am Nothing, if Not Critical."--Shakesifaree.

# British. Columbia Mining Critic.  <br> Devoled to the interests of Mining and the Protection of Investurs. 

## S.JTURDAY, MOV. ©, 1s:\%.

Letters from practical men on topics compected "ilk mininy. minina mathm"ry, midiang lurss, ard matlers reftiming to the mineialoyicai der:lopmeal uf Canada, are always velcome.
Mranufarfurers and dealers in "mpliances used in and atou! mines arc invited th send illustrations ant ileseriptions of uew articles.

Vievs umd descrintious of mines and mining locnliuns soliciled.
Suhacription. Tho Vollara a year payable in ailrance. Ihcmittences shoultil be mule by Express, Poxtal Onder or Butuk Drajt, payalle to the "British Ciolumbia Nining C'ritic."
Advertistig raters juted un appliation.

## British Columbia Mining Critic Co., Hablisthers.

frank s. tagoart, hanagina editok.

## Business and Editorial Offices:

319 Camble Street, Vancouver. L. C. P.O. Box 225.

## THEY "MEAN BUSINESS."

There secms to be no doubt that. as already widely noted, leading men of the C. P. In. directorate himend actively to promote the smeltiug industry at a point or points on the Kuotenay branch of their great transcontinental system. Mr. J. H. Sussman is how ir. West Kootenay, investigating close1s for this purpose local and general conditions, as the advisory mining expert of the C. P. R. capitalists. He is naturally and properly not-committal as to possible points of location, but amongst other places the clalms or Nelson, Slocan Crossing and Robson are not betng overlonked in his survey of possibilltes. The proposed smelting industry will be run in the closest and friendicst association with the great rallroad. though probably not. as an integral part of its transport system. The smelter or smelters for there may even be two-will run or. supplies of customs ores, as the men of the C.P. R. do not intend to go in to mining. They. however, rightly telleve, that smelting is, when effectively conducted in such a precious metal country as West Kooteriay, not only very prontable per se, but certaln also to add abiudantiy to the freisht
bunsiness and eambings of their. rucest rallroad.

Weidently british finvestoss are mom beginning to reatise the biz future before the C. $1^{1}$. J.. Jn -omnection with the gratin of the Pratries and the enol. shlser, comper, lron, leat, coitl, lambu: and tish of libitish Cohmmbis. for the vatue of the Company's stock in ste:ably rising and maty likc:y (nough. at ath carly perad reach fas: after falling no long thene since, mader temporary pressure of adverve cifcumstances, to pints in the "forties."
The Commany has a very big opportunity before it, and we hope that those who control it will mot forget their indebtedness to $B$. C., as alsn in some of the tumbler abdes in their survice and by adopting a broad and libcral policy; not merely add to the Company's none too large present stock of popularlty, but al:so to its carnings. There is rood money and will be better in improved local facilitios and cheapened fares, as regards increasingly populous districts of British Colambla. The New Denver "Ledge" by the bye complains that "the coast papers are full of compliments to the C. P. R.. "their patrons." The "Icedge" is in this respect unjust to some at least amongst us. who cannot right$1 ;$ be accused of dattery to the C. $1 ?$. R. or indulging in a macsycophant bulley of "bowing"' towards the directors of the great ralirons. But we are vers reluctantly comptiled to recognise thas Whilst athers here mean charter mongering. the C. 12. 12. means and does business. other than selling to the bighest bidder Provincial and other charter ughts. We on the Coast have -many of us-licen faifly maseated by platform clap-tian crics of "rafltoads for the people" ending in charter mongering deals with $C . P$. IF. or other coniractors. Detter fir if the great rallrond has ultimately to gain statutors concess!ons of value, that it should acquite them at first hand and not at profit values. passed into the hands of charter brokins intennedjarice. posing as advocates of people's rallroad ownership. The latter is good linder honest and capable conditions of business management. divorced from jolitics. but it is clear as the day that Canaria's politicians. Whatever they eay, rave no intent to extend the couniry's limited state ownership of rallways and it is equally clear that the Dominion electorates as a rule know ilt.te of and that unfavoriable, and care less at present for such a system. As a Coast paper ne irankly face thls
fict and admit liat as between Mr. fleiner and Sir Wm. Van Horne we have mo reason to weter the tormer as : :ailiand ma:xhate. The latler has
 (la) efors bis. ly a da mote for 1: C.
 than the former.

## TraE GAMEXA MMLIS rMASCO.


 the commaisoratian called for by the trying justian, in whirh he wis re-
 oral meetins: $\ln$ landon of the shate-
 Columbi, Gemeral Dxplotation Company. limited. He thon had. unlike Cambing's ".Nedy kulfe-grimber." quhte $\therefore$ "stary zo tell, sits." atud he told it in fust :as querulons a tone as the beribatetie yazor sharpener of the chassie sutire. It mostiy concerned the Cathan larm, which was to have been ath immensely mrolitable gatena mine. as assuredly it needed to be. to justify even in part the conditions of orel-canitalisation and extortionate umberuritise and menerat pronoting mofit. umber which the conce. $n$ first sall the light. But instead of moving vory prontahhe the Gatenat Form, so $3: 3 \mathrm{~s}$ for Dir. Ccmiskey, isn't develobibst satisiactorily at all. The lode Is, wo father from his faltering words: somehow hroken or twisted. and a dence and all of a lot of zinc: is found to he intermingled with the salon:, which is by to means so yich as it at first seemed or war stated to lie in it prosnectus cholieful of piazing assurances and ckabgerations finto veritable mountains of moilest molehills of satisfectory frst indications. There is now no doitbt. says Mr. Comiskes, and In this we quite arree with him, that reports were in the first instance much exasterated in regard to the amount of ore in sight. thoush for what purpose he in his simplicity could not say. Then, too. those glowing reports said rothing of the presence of a big body of zine, rendering the ore most dimcuit and cosily to treat. But there wats, he said, hope still. Somebods fnew-so he was told-of a new secret process for treating such zinc-bearing falena ores with equal emciency and cheapness and there was a gentleman In the room who thought he could do something effective with the Galena Farm ore. And if the denosit proved rich enoush even the zinc dinculty
would not be insu:nowible.
Meanwhble deselopment work was frocecding ard better results might yet acerue wat the Company had, noreover. ampons:t its outlying proberties yot another chatm-the Tersderfoot - sumiestive appellation - of which much was exisected. Ant if the Company had "goros wrong" dunt let Its shareholders lua:ne the drecto:s, for had they not, wod Ar: Comiskey. followed the opinid.. : of matuy ats to the value of the ( $;$. ata Farm property and had not יven Ift Canlyle. the l'rovincial minoralo... spoken some words of fator as " the mithe.

It is tue. that $\cdot$ t.an ats the "Mining Ciplice is aw. no trustuorthy expert advised that $\cdot$. bis attempted capitalisation of the :s.dertating $\cdots$ as justifed by the min: resources. but as to this Mr. Comms ir and his entleagues had naturally . Mhing to say. The result of the ala's procee lings was naturally depressices, all round, a feeling of which a shareh lder, named most appropriately rifeve, roieed plaintively-certainly more in sorrow than in anger. He thought Mr. Comiskey's statement "ibala." as to whieh the "AIning Critic" :horoughly agrees with Mir. Gricve and trusts that there may be few-very few-lomion hotations of B. C. mining enterprises like vinto that of the Calena Farm. 'Twas about as bad as a roor sumple of a London klondyke company: Yet with a difference, for as a rul $\quad$ appily for the investing publir. th. west sam1. les of Klondyke canf.... : falled to float, and didn't even, bere to bo early regarded as likely s.i.licts.

## VANCOUVER'S SMELTEK CONTROVERSY.

Mir. Philip Fewstir has written a reply, quoted in another column, to our olservations of last week concerning his attempted censur, of the Vancou. ver ore smelter and : iners project. He is again very inaccurate. for he writes about the City's "inc:...in; unlimited responsibilities ior whatever debts the smelter mana:- :rnt may contract." Mr. Fewster seims to be guite unaware that no liabibity can attach to the City beyond the amount of the stock taken by it and tho :ononey value thereof, in the case of $n$ timited liability company, organised as the Vancouver concern will be, as an Enslish joint stock association. is cin will. after giving full cash vuius du. stock taken, incur no further liability.

Mr. Fevister urges also that the City will have no share in the smelter's management, though it is quite possible for the City Councll to be empon-cd-as it should be-under the articles of association of the Company : : ! "minate a director of the concenn and thus take a full pro rata share in its
mannsement, in return for contrliuting $\$ 6,0,000$ of a total caplial. of about $\$ 1,240,000$ :n . $2: 20,00 \mathrm{~L}$ stering. Mr. Fewster:s further suggestion that the City should "lenn land" to the smaller compans ls of con a utterts fmpractheable far mo hody $n$ firectors woula lorrow a site iow ex.e日lace works, thoush thry mighi, webo their capltal bather limited. buy a s.o. amal afte:
 and smoltor. fluts !s, perhaps. what Mr. Fewstar meant; by his qualnt nolion that the City should "boun at site." Lat the City municipality, as he ourbt tc lamow owns no suitable site for a smolter. Inded no suitable land is seemingly to be found within Vancouvers Cits limits.

A would-be fondon momoter of a kilundyle exploration company which filled to float, is now in still worse trouble accused of obtaining a bieycle and a small sum of money by intse pretenies and likely to be charlied also a: it would appear, with desertion from the Rritish army. The lilon-a-ke ratze has produced on the Pacitic Coast some of the loudest lying un recosd and in London brought forth comyany promoters who could. had they lived, have given points at their own game, to South Sea lubble blowers.

Experts representing leading contalists of the Rothschild type, are apt to take very different Views of klondyke pussibilities from those of blatherskite boom correspondents of the Joaquin Mlller type. Thus Mr. A. Bratnober. well known in connection sith the 130 othschilds. says that in $1 S 9 S \$ 5,000.000$ "ill probathy be got out of the Yukon -a modest but in all probabillty accurate estimate of results. Fet in face of this 50,000 to 100,000 deluded goldseckers n can in Spring to malic for the liukon. If they do this-as seems certain-ihese will le an inflnity of suffering. though arr. Bratnober thinks that of the host of would-be prospectors, not one in ten win get in. As tc rukun minlag by expensive machiners; Mr. Bratnober corroborates th. view of well-informed men that hydraulicing will be round impossible in the frozen land of the Yukon and ree also inclines to a bellef that the ical available gold wealth win be found only in the placers. T.e quartz deposits will, he thinks, be found excessively hard to reach and by reason of low grade of denosits not as a rule mortable to work. As for Dawson City Alr. Bratnober deenis it certain to become and remain a nest for tyyhold fever germs. Yet one sapiont English newspaper opines that it may well the that through the early and rapld growth of wealth and population in the Yukon, the capital of the Ter-
ritorles may in a year or two te removed from Jealma to some town of the klomblie. The (G) ritories are in tuth about as bikely to nut thele futwre capltai in ifades.

## FORT STEELE incorporation.

The Fort Strete joard of riable has a equested Attorneg-reneral Ehert: to sutroxiuce a Jish to incorporate Fort Steote as a city canty mext vear. If this is cione, there will be incorporated the first municlpality in Fiast Footcmay, a totion in which long since, the district noumd Domald and Golden misht wedt have enjoyed at least local seli-goromment under a rural muntcimalits. luut lezal obstacles in connection with properiy owning. mevented thisat Donatd and Colden people secmed little melined to incorborate, many prefering to be "spoon fed" by the Province, Fort Stecie now shows the way to greater local independence.

## AT AlbERNS.

Here on the Alberni-Consolldrted prospects are stated to have impored sreatly, a new lead having been struck and followed 25 feet as jet. Twelve men are engaged at work. Mcanwhile the ores of the Smith camp are being irvestisated and developed under the advice of an English expert and a French mining agent is about Alberni and elsewhere on the west coast of Vancouver Island examining propert!es in the interests of possible Eastern Canadian investors. Meanwhile it is stated that a Tacoma syndicate has niade an offer of $\$ 0.000$ for the Black Imes claim. From all which it would appear. that though p: agress is not startlingly rapld. there is development in and about Albern!.

## TIR. FEWSTER'S LETTER.

Mr. P. Fewster has written to the Vancouver "World" as follows on this subject:
Editor World: The Mining Critic of Saturday last commonts on my letter of the 2.rrd ult., in the world. It is fiom courtesy ilat I a reply thereto do make: whien example was anhtly set by Critic. ama bity 'tis, his wards are not in unison. The faulty calculation is heartily forgiven. Figures eprrectly set tell their own truthful tale. The city is agrecing to hand over $\$ 65$,Coo to the Smelter Company, becumes a partner to that exient in the cash capltal op the smelter company. bestdes incurring unllmited responsibility in whatever debts they may incur. Whether the 805.000 becomes a total lass or not, the clity is also responsible for 4 per cent interest on it. The clty is in the position of taking unlimited responsibllity, without possessing any power of restraint on the company's expenditure. No mercantlle individual would take a nosition, in common with other men, and in favor of as many smelters as the trade requires, but I object to the city taking shares in any such company. the unrestraint management of which is vested in other hands. If this city owns suitable land within its limits, it mifht be wise to joan that land to the Smelter Company for a certain term of years, free of charge or tax.

PHILIP WEWSTER Vancouver, Nov, 1st, 1897,

## COLUMBIA \＆NESTERN RY，CO．

Time ©isble No． 6 ．to tinte effect Suly 3.1897. に．
 M，小． 101011

1．$-\cdots$－li，－－：and

，$\cdots \cdots$








．．．．12： $1^{\prime}$ ！！m．
Nи．今，рания，





0：：1．Supt．

## FOK PUEET SOUSU POINTS

## SS．ROSALE




 d：aiy foxcope sumiay


 Ir Voterrit．


$21--9018$


## Jrion Steansisiin Co．，of B．C．，Itd．

## FIead Onseane Whar 

Fortiner：Fot：Flements－SS Cumus soils








 いevelis．
Rivers Inlet aud ainats 矛iver－Sc．（roflut－



Hoodrvalle ant Tijutil Vancouver Ferry－．


 ciceptimg 1 lic tuoultip．
Fraight Stezine－g－＇c（＇q；ilnht，ind S．S．

Tugs and Gcoves aiwasavilathle for towhag



## EI．DAESENG，

fu：lopheat at．

## RAND BROS． STock and wilivg brokers

Real Fistato Agents

## PLATINUM．

SOITICRES OF SMMDLA．ILHENTHFI CATION AND SBPAlRATION OF THE URE．FAC＇IS OF INTEIESTV TO PIROS FPCTOLS AND MINEISS．

Compinal by
B．ARER \＆COMiANy． Patinum Refiners． Nervark，N．J．．li．S．A．
The cosstantiy fincreasiag demand for plat＇num：in the orts and manuiac－ tures of the woth and the present limited sumeces of supply．hare in re． cont vars groatly enhanced the price of the motal．Because of the peculiar and valuable quantities of platinum it is betieved that the eonsumption of the metal would be greatly increased it the supply was sunticient to mater－ fally loncer the cost．
rhis chrentar is lssued for the pur－ buce of calling the gttention of pros－ pectors ant mirers to the increasin：－ domand fol the metal，even at pe－ sent prices，and to the wide distribu－ tion of the ole，with the hope that hy thelr afi nell and rien deposits of tha sume may be located．

Contrary in upular impression． blathum and associated metals are bidely distributed．nllhough they have thus far been found in paying quan－ teties in but few locations．This con－ clition is perhaps bargely due to th． hisher intrinsic value of gold and $t \cdot 5$ the limited acquaintance of mospectors and mincres With the means of ldenti－ fyinti platinum ote and of its ceonomic beparation．Vy to the present the the phatham of commerce has been oltained entirely from alluvial denos－ its，although it has been reported in itmited quantities in situ．About eights pror eent．of the present supply is：derived from the nlluvial deposits of the l＇ral alountains．but there are tent．If any：of tase gold－hearing gravel beds of the wortd that have failed to Hicld mitinum，and it is more than likely that large quantities of plati－ umm one have been thrown away with the black sand washings from gold blacer deposits．The distribution of the ore diay in fact be regarded as practically coextstent with gold placer deprosits，as is evidenced by the fol－ Ic．uing Ifs：of tocallites，excepting Rus－ sia，tha have yielded the ore in valying．quantities．In Callfornia in nearly：if not all of the gold－bearing gravel and sands：in Oregon，Gcorgla． North Carolins，Nlaskia on the Yu－ lion River．Canada．British Columbia． Mexicn．Colambia and Brazll，South America．and Australia．
The genesis of native platinum is not well understood．In two cases it has been reparted as found in guartz veins．hut thrse reports have never l，een verified，and the theory of depost－ tion from solution based upon them is rendered extremely doubtful，by the linown insolubbilty of the metal．The undoubted occurrences of platinum in situ are in Russia．Brazil，New South tirales．Canada and Colombia．

Flatinum orc is usually found in the ferm of rounded or flattened grains or ＂sa：י：occasionally in irregular lump；of the slze of peas；large nug－ sets are very rare－the largest as yet found weighing twenty－one pounds．
The ore has a metalic lustre and is cisilngulshed by its steel grey color， shining light gray streak when rubbed cn a hard white surface．high specific gravity（16 to 19）infusibility in the hotest blast furnaces and ！nisolubility

In any single acld．it is not affected by borax or salt of milisphorus before the blownipe，exceft in the finely divid－ ed state，when rearifins for lton and cowner may be obtatio．i．It is soluble only in hot nitio－1，$\because 1$ ，chloric acla （Aqua IRegia）．
llatimum ore is a ca！：fex body con－ sisting of the met：$i$ combination Wht varying uropurt．．bss of the other n：embers of the platinum group，such as tridium，rhodium，palladium，ruth－ cnilum and osmium，together with from tour to twenty per cent．of iron．In allurial deposits the ore is generally sssiciated with Iridosmine（a natlve allos ot iridlum and osmium posses－ sithy a degree of hardness supertor to that of hard－tempered steel）magnetic Iron sand，chromite，garnet，epidote and often with zircon，serpentine，Il－ nernite，peridot，quartz，dlamond and chrysolite．Russia is the only coun－ try，excepting possibly New South Wales，that at the present time mines rlatinum ore for ttsr＂alone．
In the former country the platinum－ beitints sand is fount at depths of be－ twern six and forty fwet，the＂pay streak，＂averaging less thatn a font in cepth，resting directly on serpentine ned－rock．In New South Wales the bay streak＂is from stxity to one hun－ dred and fifty feet wide and under－ lies a loam bed sixty to seventy feet deep．the ore occurring in the crevices of the bed－rack and in the gravel rest－ ing theren．
The method generally adopted for cotracting the ore is to pass the sand ond gravel with water through pud－ dilnis machines or ervoivong sonical screens：the phatinum ia：d flne sand juss through into slui：．boxes be－ weath，white the coars．i materials are discharged at one side．Tise ontents wi the sluice boxes ar．wished in the lisual manner，and when gold is pre－ sent in paying quantities it is re－ moved by amalgamation with mer－ curs：the platinum remaining wehind． Expertence shows that it is seldom prontahle to work mines yielding less than three grams of piatinum ore to the ton of gravel．The average yleld of the richest Russian mines is about six wrams per ton．
The reflning of crude platinum is a diflicult operation to perform and re－ quires apparatus and experience not Eenerally available．
A：；we are extensive buyors and re－ finers of platinum and manufacturers of the metal in all forms，we are most andious to emonurare the suarch for and the development of new sources of supply of the ore．
We have the best facilities for the correct assaying and refining of plati－ num ore and are purchasers at the highest market prices of the crude ore ir elther small or lage quantities．We shall be pleased，therefore，to give ad－ ditional and detalled information bear－ ing upon this subject to such persons as are practically interested in this matter and to make tests for platinum， free of charge，on samples dellvered F．O．B．at our works．

SPECIAL OFFER
SUB RIBRS．
Read Advertisement on page 9

## THE GRLAT WESMBRス，OF

 SLOCAN．feturns from the twelth eatr of ore lately shipped from the deat Wostorn． of Slucan．owned by the Cwo Friends Company：of Vancouver，have le 1 recelved．This war consigerd of cath－ centrates，and weighm is tome． $1.01 t$ Bres．It wemt 103.5 mumes ar sitror and 50.1 prerent ．lead to the sent，the net siolue heling $\$ 9$ ？．t．t3．whih iuts amomat－ lug to sexient was atso patd．

The thatemath ear ls now on the was：

## THE SLOCAN STAR

Dic．Hruce white，othe of the mbinct－ pal wivner．of the Slocan Siar．in an Intorvien at N゙elson l：ist weor，said： ＂The 1 ．st divflend declared was on seppember 15th．Which beoumit the tolal un to $\$ 300,000$ ．We have tapped the ore lat the fifth or lower tumnel and are down 60 feet．The last ledae is stronger than the others，but the values are about the same．We ex－ ject to put in new rolls at the com－ ectitrator soon，to fucrease the cama－ city by abont five toms daity．The canacity of the comentrano at mesent is between 25 amid 80 tons．＂

## IYTENNATIONT：

HAMGATIUR \＆TRDDIHG co．

## 

Etenmers＂untennert arf：＂\＆＂ats：bTA＂ Cn the Kcote：ly Lise and Biver．















New Servien on ricatesay Lake．




Tues．．Werl．Thara．．Pri．．．．．．．．．．．s：stan．m． Arrive A！laim． G．ALEXANDEIR，Gencrai Mmanger．

## linine aill Prospetis．

## W．Thos．Newman

Aluthor＂ullidurn Minas，＂as•：latu ca：ablacer in chatrar for tho liritish（：arat－ dian Gold atnd Silver Manes Co．．Lituiard．

## WILL EXAMIME

 with sprecifin valtation where de imable， Also buab，［stimare abs］sulpruvier de－ velopmant．Sisedad．Tr－The apmraisi－ ment．of frosinecis ami

NEW CANES．
KAMLOOPS，B．C．

## SIOCK QUOTATIONS．

Corrected Weekly by Percy W．Charleson，Min－ Ing lirukn r，tit Hastings St ，Vancouver，
 <br> \section*{1} <br> \section*{1}




## 

33111 bita
Bruce．
$1314: 10$
Pah．onmiun 0 ．．．．
＂il．furnla


Cot以

Mrer Pat！
petarcolla．
FA，





liclen＂．．．．．．．．．．．．
$16=1$ ．

Jdaho．．．

Iron liolva．．


（1） $14011 .$. dambu andy ไisvis ，wir．．．．．．．．．．．．．．．．．




（）．fi．．．．


hivi honntilio View Jipi fonis1．．．．．．．．．．．







## Free Milling Giold：

## Also Gold，Copper，Gal－ ena and Copper Pro－ positions to sell or bond

Agencies in the principle fin ancial centres．

Call or write for particulars to Secretary．

## Mo Zock kad Good sumatric． <br> HIGKS＋BROS． <br> hacks，carriages \＆eẋpressès

Hacks or stayp pay arp ginghx：
．．Corncr of Cordova and Abioti streeti

## FIRE MOUNTAIN.

At a meeting of the difectors of the FIre Mountain Gold Mining Company. Limited Llablity, held at the company's office in this Clty, on Nov: ist, Mr. J. M. Mackinnon was elected a director and Vice-President in place of Mr. J. W. Girvin, resigned.

Under continued and steady develonment this mine is looking so well that It was decided to withdraw all the shares from the market for the present, and it is not at all probable that tho shares will be again offered to the publle uhder par.
The following report has been recelved from Mr. J. R. Brown, Managhg Director of the Company:

Fire Mountain, B. C.
October ist, 1897.
To the Presldent and Directors of the Fire Mountain Gold Mining Company, Limited Liability, Vancouver, B. C.
Gentlomen,-In s.ccordance with your request, I beg to submit a short description of the Money Splnner croup of mines and $\mathbf{i n}$ other assets. the pioperty of the Fire Mountain Gold Mining Compan:, Limiled Liavillts.

The mining claims of the company consist of the Money Spinner, Neptune, Free Gold, Midas, Princess and Star, and the fractions known as Neptune, Midas, Wonderful, Princess, King and Mill fractions, on whlch latter the mill of the company is located. The total area is about 350 acres. The surveys are now completed, and the recessary steps for securing a Crown Grant of the majorlty of these properties will be taken.

With the exception of the Star mineral claim, the mineral property of the company is in a solld block, and the surface indications polnt to the existence of several strong lodes, most of which, from the surface showing, will eventually make good paying properties.
On the Noney Spinner, the surface showing of the very strong ledgewhich is from 6 to 10 feet in width-is remarkable, and carries high values in an essentially irce milling condition. The development of this property has so lar justified the expectations of the company, and has continued with depth to glve good results, retaining its free mllling character with greater width, and has s. very even value. The development so far is an adit level lunning on the vein, which is now in over 140 feet, whlle a chamber has been cut at 75 feet and winze started. Whlein is now down 35 feet, and running on the vein, which is at this point $\bar{j}$ feet wide. The work is progressing by night and day shift, and every foot so far shows a strong true fissure vein, with constant increase in strength and value. Previous to the starting of this development work, and before ally great expenditure had becn made hy the company: great pains were taken to strip the vein on the suriface, and with-success. as can be secti by the exposure of the veln in the many onen cuts aloing its surface; in places, as already mentioned, the vein so exposed is never less than 6 and more of:cis 10 reet in width: again, in many of these cuts ifree goja can plainly be scen; sometimes there is a capping of guartaite ovep the vein, which however, is edolify removed; exposing the same freh chicrater of guart beneath:

tance. Sumiclent of this work. however, has been done to Justify us in the crection of the mint. a desertathon of which I give below.

At the polat at "hich the adic ince? rubs in on the vein, the monmtan has an natile of about 50 degtecs: the dip wi the vefn (whith hats a mothont toursel. is about 60 degrees. The peln hat: a strontr chay gonse un each liath, and In places shows considerable dia; turbance, but so far mo sreat deblatemont. whlle the are is remarkably clean. Constime tests of the drollone: never fat to :now colots, and often in conshlerable quantlig:

As I mentioned before the surface showings or the rematning properties of the company are ench ats to justify the expectations that ereathally development will poove up other mines Guthe pronety of inud value. but showlare in many cases that the high gold valuss are carred in the copimer. and are not entirely free milling. A foperty of this tizn, however, cammot bie thmough!e peosrected in the short time we have hat at our dieposal; we have concentrated our offorts on the Money sin:nece cha:m and the mill for handinic its matmat. It menst. however, he borne in mind that, unaided ly tho Lrovincial forrlament, wo hate heen ohilfired to buita a whate for hetulang our freimht: and to conseruct if mis s of a mek :mad. on which we had in buili a mumber of brtages, opening un a very extensive miniag country. This band is mow beiar used by many at herrs whon have lorated ecte momisins preperlies, both free milling and ofton velns calrying amarite and burnite ores, inrlading a rary gond grade oi copper nud le:d suphurets, whirh hove liteiy lienn disnovered; in fact the whoie dif:thict seems to be a net worls of inthusive serpentine dywes carry:ng hich told values, either facio or in combination with rapres: princli:ally. In the midale lifit of the nommotaln, however. where is situmed the Mones Srimber froun, tachyte, pot bhyry and phonotite have intruled the:nst lues through the original sedimesatare country rocles, concealing the latter or altering it almost beyoml rerosnition by met:morbhic artion. I thint the reolengist will ind this e!nitr an intoresting fella.

The mill of the Fire simuntain Goits Mining Company, now mader conatruction. vill be nnisibed this Fith. It is siturime iat an air line ons half mile from the tumnel of the Xoney Spinner. and will be connected witi it by an serial tramway now on the sround. The plant of the mill consists of one 5 -foot improved Ifuntiniton mill: two large True vanners: one boller and engine. 20 -horse power: one lelton wheel. with $i 00$ feet fall. capacity sohorse nower, whtch can he increased to double that rapacity 15 the addition of another wheel below: one saw mill, capacity 30,000 feet jer diom; one liulllon and retort furnace: the neressary coprer platere ore crushers. ore bins. terminals, tracles, etr., and is capinble of handling 30 tons per das of Spinner rock. The mill is so constructed that it c: n casily be irereased in capacity by stamps or additional Huntingtons ai a very small extra cost, the power belng avaliable. The usual men's quarters. omees, etc., are crected. and nearly 30 nack horses are steadily working in the transportation of the machinery from the townsite to the mill. The management has evers expectation that berore Winter falrly sets in; the mill will be rünving day and night in -order to keep up with the output of the mine, which, by development lone,
has ahreads put 600 toms of good milling rre on the dump and several thousand tons: in sifht.
"The star mineral claim (the only one bohnying to the company not :Hobund with the others) is sttuated at the east end of Fire table at Its outlet, and has n very strong vein of gold e;u:ut\% neposed in places. but so far cmareeloped. This claim is located at is point where lire lake constantly cischarges into Fire Creek at all seasins some 10.000 flehes of water with matimited head. 1robality. In the near tuture. this water on the Star mineral claim may, as the many promising irnspects of the distriet are developed l.tio mines, rurnish power to work them all, and, apart from its very fomising mineral value, be of value tor this and as a future townsite.
The real estate of the Flre Mountain Cohl Minins: Company, Linited Liability. consists of the townslte of "Tipalla" and nujoining lands (about 400 a(cres), situated at the head of Hart:son I ake, and connected by a good frack tanll with the company's mines, sime if miles inland. The townstte of Tipella has great na'ural advantages. rot only; from its position at the head of navigable waters, but also from the fact of its being the cinly all-the-yearround point for boats, and will eventually command all the trade. not only of the Fire atountain district, but of all the very promising minins country 1.fin:: southeast of the Lillovet counis s, and from the town of Lillooet, and is about 150 miles shorter to the coant than by other routes.
The importance of Tipella as a townsite was ap;rechated as early a:3 1859. when the jeoyal Encinecrs, in a map made for the War Onfice, marked this yoint or their man as a desirable site for a town. Considerable clearing and grading has been done by the company: and a larde wharl has been consiructed. So for the company have not cousidered it advisable to push the sale of lots. deeming it better to let the town have a natural growth. A gencm store, livery stable, boarding l:ouse. store houses and a few small houses comprise the present buitding improvements. The townsite is yrovid(al ly mature with the hest of water in Emlimited quanthies. Woth for power amd domestic purposes, and is well situated for araining. belng very high and dry. The company's steamer, the City of Tinulla, makes dally trips, carrying the maits between the Fiarr:son liot Springs and Tipella, the distance being 10 miles.
Trustinf that this renort will be satisfactory in the intormation given.

I remain, yours truly,
JOHN R. BRONTN,
Manazing Director,
Fire Mountain Gold Mining Company, Limited , Liabillts:

## AN EXPERT'S VIEWS.

Continuing his remarks on upper couniry mine centres, in part publlshcal in last week's issue, Mr. T. H. Fraser speaks of

HALCON HOT SPRINGS.
on the western slde of Arrow Lake, where a trall of six miles has been made, Pringston creek being half way. Zhree miles from Pringston creek a valuable mineral bolt was discovered some time since, consisting of a huge outcrop, sheavlly minerallped; trete
and showing a whith from twonty to one hundred rect. This benty of owe is pyritle, catrying viluns in crinlt.
 The ore resembles that ath the le Inol and othor Jusslami mhara. The clscoverers of this finjutant mberme belt have malntalned shilet sileme as: to fts probabiltites and wiobilititios, hence it has remaimed an ismatrad camb, maknown to cituti, list: ur mintues men unll within the diti, fill dis: when Are Isyruce a 1 H:lomical is myself, visited the di:aint allid thanoughly examined the hal. Fur two or thace chilms on the tuand the vatcrop shows out in mitces thourh the moss, but after the timber f.s ghased. the lode has lieen exposed by mature nnd is bave as at billiard table fun mile Ihe whole width of the vein matter i: composed of pritite thatat: and solld gatena in seams carsinas vallas in gold, silver and comper, the gatend giv.
 per cent. No woik of impurtance has so far been done, a shat: behif zwak which is now down le fect in sulut orn that is indiative of linforoviment in values. Transportation whille casy to deep water ly aedall thath, which can be constructed at a nondiate cost. Timber is plentiful and the fachitie; are excellent for all puthers. The ore can be won and shipped fiom the very surface and all work dine will be in pay ore. No dead wu:k nead be a:atlclpated, excepling only making tram for transit. With this cumbiete, ore can be shipped from the mane at a co't not excecoling ten cents pr ion. An ennmons quantity of ofe can be worl at little cost and ore shitind combinaously. This proposition has at shewinc. on the surface, unequilled in mas mining investlgations thenembert Jsitish Columbia. How this distr.et hats so ione escaped attention is luyor commehension. Several of these morerties heve been taken over by Mr. Syrne on behatf of Londint and $\mathbf{J}$ han nesulurg mining men and more whll bu fieatd of them in the ne: 1 inture One important factor is that the ore budy is devold of the freviolor, bon capping and conserfurnty ats vatle is more eashy determined wilh hut hitle exploration.

## LARDEAU.

Ten miles from Armothad is Thinmpson's Landing. reached $h y$ this $C$ I' R. bonts, this being the rin ko st ante to Trout Ialie Clty. This ie one of the latest camps but at the some lime one of the most promising. Alt!nugh but littic of the disidet has bon moppocted, sumbient has been dower to prove the existence of very rich leats of egold, silver, copper and lead. From Thompsirn's Landing to. Tiont T, olin anord wagon rond has bein made a distance of twelve milles. The cmaniry int .sed is one very favorable to the disisance of mineral inpocitc, heine a splendid shate formation, solth ind in place, although vothing so far has been diseovered of any intrinesie valur between the two places. On arrivin: at Trout Lake Clty, one is surprised at the rapid advance made in building a substantial town. There are several good hotels and others in course of erection. The town has the appearance of being full of insinces. Trains arrive continuously with supplles and bullding ganterials. Several good stores with jarge supplies meet the eye of a traveller, much surprised when he notices how rapldiy this town must have gone ahead.
layan syadicate has bullt a wagon fasd themigh the town of Ferguson, a Netetne af four miles nul thence on to lin well known Silver Cup Mining Co.'- monnerts on in all elght miles with Howl bridzes where necessary. Ferfousan is a town with severn hotels $\because m$ stures, so, ton, mivate residences. dhks town has also sprung up within the fisht frow months. The Hornelisule Co. have erected a saw mill. atiogs and other bulldings and been bushings dovelomment work on the SilWor ('ul) ledtr. Which is carrying high values in silver: The vein matter is larfely momernated with grey copper. lat allhotigh much money has been exjemided results are not so encouragin: ats they mif;ht hate been under more efiectse: management. Claims in the immediate vieinlty liave been bond(al hig lats co:npany, but some of these liave been abandoned.
Four miles out of lerguson, a trail frgm:; whare the wagon road ends. 'hhis talses you to tinc ten mile up ('asnor Croel: a turther distance of :"ur inlles. where snine fare showings oreur, a ledge showing galena going b:wh in silvar and lead and traceable thro:ighont several claims. Very little work has been done on any of these, lut assessment shows the lodes un as very momising. Further on two whes a discovery hats been made by the Livic Inros. consisting of a mixtwe of iron and quartz. Two tons of this wele shipped as a test and resultcd in thr phenomenal return of $\$ 1,100$ tr. the ton in gold. The work done so fa: amples only to the two tons taken cut. 'Ihe result when known was a very ingreable surprise. The gold occur:: in several stringers, but notwithtab, ding this, bold is visible all over the stunc. Negntintions for the purinase of this moperty are under conold ration, the owners wanting \$100ond. Without further test the value of the minarty canizot, however, be accuratety estimated. Several other loca!fon: flate been made on this line hut as yet the lolle has not been met.

From the ren alile in another directicn a thall has been made for 19 infins th the Albott group. consisting of tive claims, viz., IIecla, Abbott, ling Willian. Union, Kamloons. This trail was lullt at a cost of $\$ 300$ to enable the retting in of supplies and is injuacticalile for transportation. Few Ciscovilic: bave been made for the 19 ilos lut su far no prospecting has loen a rec. Jlowcver a good road can abde shmilid he made to the foot of Trout Jake, un Haliny criek, where a fradual sise can be insured for a distante if 12 miles. Which would comwete the road to the head of. Filley Creck at the foot of Abhott hill. This inh be constructed at a cost not excedints from $\$ 12,000$ to $\$ 15,000$ and vould open up much unexplored but valuable country, A nother feasible :nute could be made, traversing the I all Creck to the Duncan River, a distaince of four miles, thence down the numcan. where steamer transportation can he sceured at the Blg Jam.
fire dbhott mine has a very fine -howinf: on the Aborit claim. it an C? vation of $6 . E 00$ rect a tunnes has been driven 328 fect, to intersect at a (l) p) $\mathrm{i}_{\mathrm{i}}$ of 400 feet the main lode, which is: being exposed higher up and in ňidth from 12 to 15 leet trending N. W. ind $S$. E., with four feet of clean galena carrying carionntes and grey copper, the remainder of the lodge being concentrating. Results give over $\$ 100$ In silver and up to 75 per cent in lead:
This ledge tis traceablo throush the

Hecla, Abbott, King Willam and Union. The vein occurs in a contact of lime und slate. The genernl formation of the country is a fine, soft brown slate. A belt of Ilmestone a mile In width intrudes through the s!ate and is contlluous right along the culuntry for iniles. This intrusion is the foundation of the country. On the Klig William, on a direct line with the Abloott, the lode which outcrops thirty feet high and 20 fect wille is quartz. carrying grey copper and galena. The country being bare of undergrowth and thmber, the outcrop is so distinct that it can be seen for miles with the naked eye, running as true and ns stralght as a Me. Four hundred teet lower down on the King William an outcrop of quartz, thrce fcet wide. Is exposed and cut by a creck. About one foot of this is polid galena carrying high values. A. tunnel has been driven cutting this veir at 30 feet. This is a true fissure vein cutting the slate at right angles N. TS. and S. W. When this junctions with the main lcdo the possibllities are great. On the $\Lambda$ bbott clalm, 400 lect higher up. another parallel vein is exposed In the lime belt which is regular and well defined right through the country ten feet wide, half of which is solld galena. Another 100 fect higher another vein is exposed from six inches to a foot in width of galena, impregnated with grdy ore. These lodes are all strong, passing through the four claims of the Abbott group into the Wagner group, Viz. Luclle, Francls Jewel, Emma Fraction, Queen Mary. Princess Marie, Lardeau Fraction. rardeau-McCartney Fraction, Duncan 8: Ella. All these claims are on the same line. A tunnel has been driven or: the Francis Jewel, cutting the lode at 40 feet. On the Queen Mary and Princess Marie open cuts expose the continuation of the ledge carrying identical values. On the Lardeau the solld galena is exposed on the surface and traceable rlght through from the Hecla Into the Duncan, in all fourteen clalms on the maln line. The outcrop on the Duncan is composed of Iron rose quartz and seams of solid galena standing out of the ground 50 feet and being 50 feet wide. A tunnel has been driven 100 reet and a cross-cut towards the dip has been finished. Forty-five feet deep cutting the same continuous lody of ore sixty feet from the mouth of the tunnel, a good working winze has been sunk, following down the veln at an angle of 55 degrees. At this depth a cross-cut has been driven ten feet towards the hanging wall. A fine body of ore has been met with carrying the same mineral of solid.galena and grey copper:
Another property running parallel with the Duncan and known as the Mrerry has a very fine showing of galena, going 70 per cent in lead and 180 oz. In sllver. This occuring in the lime belt is lour leet wide and con: tinuous through the claim into another Incation known at the Bannockburn, also carrying identical values in a lode exposed on the surface and cut away hy the elements. For permanency and vast bodies of valuable-ore the Lardeau will be a large shipper as soon as railway, or other means of transit are cpen which offers very. few difficulties when consldering the enormous values of its ore deposits.

The surveyors of the C P. R. are busy planning the route of the great rallroad's extension to Rossland. Chiler Rngineer:- Peryy, is thuskopt, opecially

## THE BRIDUE RIVER DISTRICT.

The Bend Or groun of claims, recently nequirci by Messrs. MrEinnon, llobertson and Noel, from the locators, two young half-brecds, named Burns and Cargill, conslats of two claims known ns the Little Joe and White Crow. This group is situnted nbout 66 milles from Lillooet, lying in a south westerly direction on Cadwallater Creek, whleh is a tributary of Bridge River. I,eaving Lillnoet for the claims the traveller must follow the wagon rond for two miles to Seaton Lake and thence cross the lake by canoe to Mission Landing, or if he prefers it, iravel around the lake by trail. The water route is twelve miles distance mind the trall route fourteen miles. J.caving the lake one must continue in it westerly alrection, nass over the summit of Mission mountain, a distance of sive miles, descending to Jack's Landing. Brldse River, then follow Bridge River for a distance of 3: miles in a south-westerly direction, nest up the south fork of Bridge Iflver, a distance of about seven miles to Cadwallader Creck. The Provincial Govurnment has bullt a trall to the camp and it is stated that a wagon road will be compicted early next spring from Seaton Lake to Cadwallader Creck. It tokes three days to travel this route un horseback from Lillooet.
Evidance of the importance of these tiscoverics can be noted by the fact that three different locations are now rccorded for townsites. two on the south fork of Bridge River and one below the bend Or group on Cadwallader Creek.
The clatms of known value are the Biena Or group of claims, the Ida May. a group of two claims, owned by the Alpha Rell Co., and one eractional claim, between the Bend Or and lia May. As to the district in general, Mr. F. Soues, Gold Commissioner. writes as follows in his annual report: "Bridge River-Referring to the very imperfect Provinclal map, a line drawn from the junction of Blig River with Fraser Inver, to the head waters of Jervis Inlet, would form the centre of the locality to which my remarks will refer. From a personal reslaence of 34 years in the district of Pemberton. Lllooet and Cllition and during the whole of that time with exceptional cpportunities to learn the amount of gold obtained and the localities, I may be supposed qualined to deal with the matter intelligently and correctly. In the decade ending 1869 offclal public renorts with regard to mines and mining in this district are conspicuous only by their absence. The early miners Into this Province, 1859-60, worked their way up the Fraser River; testing all the tributaries for gold. Bridge River in those years was located and worked and from that time on to the present by white, Indlan and Chinese miners. year by year, with varying success. The richest finds and richest nugsets were obtained in the decade jeferred to. For the decade ending 1879 we have official mining statistics commencing in 1874, in some of which nnnual reports, place has been found for Lillooet district and the estimated returns. In others. the district has been entirely' isnored.
From 1860 to the alscovery of Cayoosh Creek, Bridge River has been the princlpal source of the gold obtained. In the ols miercintile books of Mr. Smith, Mr. Foster añ the other traders dolng business in Llllooet in the sixtles and the records of the now almont forgotten Dietiz: nna Nelson ex:
press line for carrying express amd treasure between Vletorja and Illlovet. courd be exnmfised, the result woult be a very striking array of figures of the amount of gold ohtrined from Eribge River and the Fraser henves rend liats in the fmmediato neighborhood of ifllooct. In the early sis:ties; the princlpal workinges wete fiom the montly to the head of Deep Consent, from which pohit the livor thes through a long marshy sectlon some fifty miles. The river bed hate is a smooth: sandy, with fluc gaivi. In Which onty tine colons have been fabmd. Above this streteh Trautrhton Critk has produced conslderable coatse suht. Young Creek so far has produced only. fine gold in a limited quantity. Ci..us.a gola is here found on Calwalld.r. Creek anil the sinuth Fork. :Ir: A. W. Smith showed the samples of $i$ a\%. of very conrse poll. which he boughi from an Indian last wecls, whose clatm is locnted at a point nbove Gim Creci:. The valley of the Bridte liver for a considerable distance is paralleled by the valley in whtch ale sltuated s... ton Lake and Anderson Salte and at one point on Seaton lake the aldatince to Bridge Ifiver at Jack's Landing is caly about 6 miles. The diviaion between these tro valleys is a high and much broxen up rage of mountains with numerous streams (not shown on the Provinclal map) falling into the nbove named lakes.
"It will be noted from the foresoins orler and imperiect remarks that Erluge Rlver and its tilimbaries hav been in places highly auriferous with a possible barren zone above the deep canyon and further that it has a wide spread surrounding or mineralied tocks. The gold found in the river is unmistakeably difrerent to that found on the Fraser lliver bars and benches and in form and size of the pleces bears a strong resemblance to the Fold found in the placer worlings in Bendigo, Victoria. In the early fifties. with this difference that Bridec River gold shows much more recel. relense trom its rocky matrix, in fact at least one-third of the pleces still hold im. bedded pleces of quartz.

In other lands placer mining has with tew exceptions, whether in wide areas of alluvial deposits, in anclent or modern river beds, led up to the discfovery of the rocky matrix from which the alluvial gold was obtained. Placer deposits in a few years led to the discovery of the famous Comstoris lode. Placer deposit; located the Treadvell mine on Douslas Isiand. The fabulously rich placer mines of Ballarat and Bendigo, discovered in 1501. in two years located the reefs. come of which Bendigo have "llved down" over 5,000 feet and have continued working for over forty years. The experience on Cayoosh Creck shows that in llttle more than one year the matrix of at least $n$ portion of the gold tound in the creck will be located.

In the above report Mir. Soucs has given a sketch of propertics on Bridge River, which have added to the golden wealth of the district and mrovince for parently the past 36 years nnd now the recent discoveries of the Bend Or and Ida Maty groups of claims have apparently demonstrated whence mucla © the supply comes. It is a morcover noted fact that for every dollar obtained from the bed of Cayoosh Creck twenty dollars have been taken from Bridge River and the rich quarti ledges recently discovered have undoubtedis furnished the supply that has been gathered from Its. earliest hintory.

## lHE ATHABASCA.

Thin f. 1 , ing is a shmmary of the remit. jut issunh, al the Alhabasear thald Mintng Co.:

Neison. 13. C.. Oet. 20̄, 1s37.

rientlemia, -. Thire are at present
 sharfs, and almut sod fect of stripplaf
 thir hatmes braty in the mature of



Jhe whs hat thselosied several


 (H.ally in jus wo.d.iads.
lema the man holge is a that
 lell ma ur whall is a drift 10 lu:, tilis whze and defft behge in ore - $t$, is mabes wide, assays of which. it at deth of 6s teet, gave $\$ 101.60$ per tur in sodd. Uperations on the drift hato liecn suspended, owlng to bad itr and swemet of water, and before itsumiag, alatastanents will have to la: mads fur lusting, efther by steam ot houbs bustr. There are also two whatses fana the tunnel to the surface and considetable stoping has leen done :tad ote mined from this ledge. Seuth of his 180 feet, a great deal of Wonk has been duate, consisting of 1416 fret of thumels, 3 : feet of drifts, etc. Vaty fich ote has been found here. scecral shipments having averaged \$lu0 per ton. Seventy-five feet east of the main ledge, anuthe: ledge has been staibued about 160 feet, showing six to 12 inches of quarta. One hundred feet west of the math ledge, a stripping of alsuat in fect has been made on about 10 inches of quartz. About $30 n$ feet west of the maln ledse, a discovery hats been made this month of a very fine looking ledge, about 16 inches Wide where openct, which is now being stripmed. We intend to do some work unon this showing at once, as it is very promising, and may, with a lltth. work, develop into as valuable a producer an the ledges now worked. wonted.

All the above work has been done vibun the Athabasca claim.

Unom the A!goma claim there has been about to icet of stripping on the ledge, whleh ruas in slze from 6 to 30 liches, but as this ore (as also that on the Alhabasca Jedges stripped as above) is of $a$ millins charatier, mose cxtended work has been defurced until millirg facillties are provided.

No woll has been done on elther the Alturta or Manitoba claims, but thenc are on these clalims, and on the Alhobasea and the Algoma, several Eiluational enivosures of quartz that have not yet been investigated. All the cx!usu: es mentioned carry free gold, more or less.
The bl:cinmanary worle of bullding cabins. trail, cte.. was mentioned in my report in July last. Since then the survey of the property has becon completed, and a Crown grant is now being advertised for. The number of men employed has ranged irom 10 10.27.

Our shipments to the Hall Mines smelter have given returns (gross) as folluws: 16 1-2 tons. $\$ 76.20$ per ton; 17 tons. $\$ 75.56$ per ton: 18 tons, $\$ 26.56$ per ton; 18 3-4 tons, \$26.45 per ton; 22 tcins, $\$ 74.36$ per ton; 19 tom, \$41.81 per
ton: 28 tons, \$107.62 per tont: :00 tons: $\$ 10 T .2 s$ yer ton.

We ure now sacklitg 30 to 30 tonss af ore for ehlmment ths week. We have niso accumblated unom the vartoms dumps about 450 tons of millins ore.

Owlag to the state of the inall catused lig heavy rabms, it will be fmussible to make further shifmarnt: u:atll w.0 have good slelbllug, ibul then we cathnot ship untll we make our tmal info a geod ateish road. I would, thereforn. recommesd the Combpany in milethaiis suspend shipments for the present. sand contlate simply develobument worl pllme uy the ore upon the duants t.at mblling amt concentrathos tscathemt ond the groumt, and atso to have far view dhe finstallation oi at stamp mill at ath eatly date, whish would enath. the to handle the ore fur more cheably than at prosent.

Tours truly.
C. A. W1N゙G.

## THE NOBLEE FIVE.

This noted Siocan mine has tempo:atily closed down, pendinst it is umlerstocd, the roising of a large atmotut of further caphal for mine wotkine athd extension purboses. 'Hhe atrectors are for a time at the ent of theld mones resources and a large overdraft of \$50.ONO due to the Banls of B. N. A. has. sunongst other things, to be met. Mens wages are also in arrears. it is lelleved that reconstanction arrangements will be made, as the property is generally understood to be very valughle hat $\$ 1 E 0.000$ are required to put the mine's finances on a thoroughis satisfactory basis. There are on the sther hand, reports that the ore body in the mine has given out. lint this is strongly dented and it would seem -though an authorised report is not at the moment to hand-that further working capltal is the main requislte. The mine has till recently been at resular shipper and prodised since $A$ us. 1st 512 tons of ore. is here is naturally a big fall in the mine stock which, iately quoted at 50 cents, is now de 'vn it: Spokane to 17.

THE CROW'S NEST COAL LANDS.
The East Kootenay bureau of Information nakes the followine statement at. to these. which is undoulitedly in the main, an accurate representallon of facts and possibillties:
"On both Bull River and bik River there are large denosits of hematite. Whleh, with the proximity of the finest coking coal in the world. should make thls part of Fort stecle alstrict the home of multitudes of people. The Crow's Nest Conl Company is already putting its property in shape for production, so that by the time the Crow's; Nest Railway is runsing to IVootenas Lake, coal and coke will be ready for shipping. The coal lands owned by this company are of enormous extent. and as the seams ansregate over 100 feet of first quality coal. lying above water level, one bed being 30 feet in thickness, the avilable guantity is unllmited, and the marketing of it wis! have a beneficial effect on the mining industry in both East and West IVootenay. The Canadian Government has bound the rallway and coal companics with ironclad contracts to certain charges, hoth for coal at the pits and freight rates on the same, so that, even though the coal business be a monopoly, it cannot become an onpresaiva une."

## SHOAL BAY





 rary de eription of goods for mining.

HBARMEDED STEE! SMOFS Man MES

S ikoint:rauncoreos


Ole Batter Up

Send for Minatrated, circulars.

Foracrly. the Calfornia.
G5O. WF. FIBHMIRGMON \& SONS, Manufacturers,

$\qquad$

## TII, IREN THD GRANITE WLARE.


Black and Galvavized Shèet Iroạ Wọrk Houso. Faraishing Goodg.
24 CORDOVA STREET, VANCOUVER; B.C.

## Terinnon, DeBeck \& Co. Laud, Wineral and Timber Brokers

## PLEASE DO IT NOW!

## \$1.00 will sand The Wining Gritif fir hriee mouths to ton Subscribibris.

We Want TWENTY THOUSAND SUBSCRIBERS Before the Find of the Year.

We are willing to send The Mining Critic for three months at less than cost in order to secure them.

We shall certainly get them if every reader will spare us one of two things :

## A Dollar Or an Hour.

Can You Spare A Dollar'? Then send it to us and enclose this list with the names and addresses of ten people who ought to read The Mininc Critic. If they do not subscribe after three months, that will be our fault-not yours.

Can Yon Spare an Elour? Then go out and find four people who will pay 25 cents each for The Mining Critic for three months, and send their names and money with the names of yourself and five friends, to whom we will send the paper free for three months.

## 

$\qquad$

## THE STUMP IN VANCOUVER SYN. Dicates:

The . British. Columition Review at
 heaulng. as followis, "eoncerning the Galena mine finsico., on whieh we esmment ealtorially elsewhere:
While extending our confiatulallons to the Boart of the Vablewior and Brttesh Columbin' Gencered Exploration Company, Limited, on ine declston to meet the heavy slamp in the market pitee of thele shares by callIng a mecting of the promiletors and lutting the facts before them in all their naked truth, we are yet sery that we cannot equally congratulate the shareholders on the postition disclosed. numors of na ndverse character to the Company and all its works lave been lloating about the clty for some weeks, and jrobatily inside selling of Gatenas at merely rubblsh prices. indleated that in some quarters it was reallsed that the Vancouver Syndicate, as it is known in the city, Liad been the unintentional instrument for tolating a worthless silver-lead uroperty upon the British public. But we do not think that the shareholders of etther the Vancouver Syndicate or the: Galena, Mines, Limited. had any Idea thit the state of affalrs was so lamen'ably alsquiteting.
Mr. Comiskey 'might' have peen a lttle mote partlëulat and less general ir. his remarks, pëthaps. For instance, he passed över' Mr. Callahan's connectlon with the Company by saying that Mr. Callahian "was supposed to be a first-class miner." and. that is all that he asid about this sentieman's. connection - unfortunate connection with the Galena Company. To a shareholder who tried to draw him regarding Mr. Callahan's management of the property he vouchsafed no clear explanation but passed on to discums the present position and outlook before the Syndicate. A great deal was made about Mr. Carlyle's reports. Mr. Carlyle, however, simply drew up -his reports for the guidance of the Government, and it behoved the directors betore launching this ll-fated concern to have very carefully checked the reports made about it by absolutely imipartial experts before accepting them, and making them the bases of an appllcation to the British pubilc for a large sum of money to explote the propertg. Surely the presence of zinc should have been discovered by exiperts at the very outset, instead of having to be disclosed nearly twelve months after the formation of the Company. as one of the reasons of the reasons of the fallure of the property to realise the hopes of its tounders.
of course we know that to a large extent blame is laid upon Mr. Callahan; but all the same. it ousht to be polnted out that for some time advices from British Columbla about the Galena have been distinctly alarming; and as this was one of the chlef proyierties of the Syndicate, was quite sufficient to account-for the heavy. fall in the shares. While we do not for one moment impugn the bona fides of the directors of the Vancouver Syndicate, we sincerely regret in the $\mathrm{s} \boldsymbol{\mathrm { n }}$ terests of the Province . that they should have been connected with:such a tróst. - Very little was sald about the other propertles and :options of the
 We dre afrald, of a character to inspire much confidenceiin the breaits of the holders: of either Vancouver Eyndicates or Galenas, or Indicate any.
possibllity of an early recovery in the market prices of these lasues from the depths of dopidestion ints which they have been plunkza bsizhe serles of unfortunate events which were punctuat ed hy the admissions at Thursday's mectinf by the Clinirnan."
The "Review" now speaks in a very difierent and wiser strain from what It did that a short time since, eoneernIng the Galema Mine and its explolters. It has evidently learnt part of the truth at last about $n$ flotation that has done infinite discredit to 13 . $C$. mine conupans promotion. A few more such ventures and the development of our Province:s mecious metal mining by lbritish capltal. will be set hack for years. The "Review" can. therefore. do grod service to B. C., by exposing such fromoters and attempted mromoters in I.ondon.

## GOLD PLACERS ANDD LODES.

"Where there are macers there are lodes." is a statement often made with the assurance of "where there is smoke there Is fire." We hear it frequentis with reference to the depesits of the Yukon. In this case it is almost entirely a matter of surmise, because there has not been any general cxploration for lodes there, attention having been concentrated upon the caslly worked placers, and prospecting in the hills being difficult, for various reasons. There may be morkable velns of gold quarts abov:? the placers and there mny not. There are vague reports as to the existence of some, but it does not follow necessarlly. elther in the Iukon or elsewtere. that where there are placers there are workable ledes.
A placer jeposit of gold or tin is a s:atural concentrator of mineral that existed in solid rock. The erosion of vind and water acting through immeasurable time has worn down the carth's surface in many places to a marvelous extent. In this kind of disintegration stable minerals like gold and cassiterite, which are of much sreater specific gravity that their orisinal matrix, were concentrated in Water courses. Just as they are now concentrated by men in sluicing. But nature has concentrated mil..uns of tons of mineral whers man has to concentrate comparatively few.
The discovery of such a natural concentration, an alluvial denosit, does not. however, imply that its source will be found. or if found, workable, because the original lode may have bcen croded entirely, and therefore no lenger in existence: the placer gold or in mas have come from 2 dissemiriation in a great mass of rock which it would never nay is minc. or from ir.numerable veinlets which were never centollabile: or the suriferous dehris may have been carried far from its eriginal source is elacier action. so that no connection between placer and lode can lice establisiced. It is not to be inferred from these suggestions. honever, that there are not cases where macers have led directly to mother loiles. Numerous insiances can be citell where they have done so, and vice versn. The conciusion is simply that no seneral rule can be lald down. and the existence of rich placers coes not in itself imply the existence of rich. or even workable veins.
The glacers of Breckenriasc, Colo., were discovered at the time of the Pike's Peak excitement (1859) and have been worked more or less ever since, producing a good many millions of gold. Their origin from lodes
near by can be traced wh reasonaible certaints: and some of these lodes have been worked prontably; but the preduction of the indes has, not yet been a tithe of that of the piacers. At the head of French gulch, fhich was very rich; there is an immente auriferous dike Intersecting the slate' country roak. The dike itself ls generally icw grade, but in the joint planes of the slate adjacent to it there are veinlets of exccedingly rich ore in whleh the wonderful specimens of wire and srystall ngeold for which Breckenrlage is famous, are found. Both the dike and the velnicts in the slate have been worked. but so-far neither of them profitably: There was a simllar experience at Leadville, where the mines which were discovered at the head of Callfornia guleh never yiclded what the wealth of the gulch lootom was thougit to indicate. In these instances nature in long eras effected probiably a rich coneentration of gold from an immence amount of very low grade material.-Ex.

## THE WONDERFUL.

It is reported that the Wonderful mine, near Sandon, has been leased to two miners, who will pay the Company 25 per cent. of the net returns of ore shipped.

Speaking about the mine, a Sandon mining man said last Saturday: "Work on the Wonderful has been suspended, with the exception that two of the miners formerly employed by the Company are working the ground sluices under a lease, paying a royalty of 25 per cent. on all the ore taken cut. They have made a shipment of about 15 tons that is sald to carry the same value as the average of the output whlle the mine was in active operation: that is, about $1: 6$ ounces of silver and $i 0$ per cent. lead, or an approximate value of $\$ 125$ per ton.
"The Wonderful property has always been considered a phenomenon in silver mining, the pay ore having been taken from a blanket vein lying practically on the surface, by ground slulcing and hydraullc mork, and the property is known throughout the Slucan as the only silver placer mine In the world. While the pay ore has been taken from the surface, every effort has been made to locate the main vein, which mining men firmiy belleve to exist at a greater or less depth. Much money has been spent in oponing tunnels in the vain attempt to nind the lead."

## TIE MIINING STOCK MARKET.

The "Spokesman-Review." in its weekly summary of the Spokane mininn stock market, says: "The- local market for mining stucks has been lacking in startling features during the nast week. About the usual amount of business was done, and as in grevious mecks, the inquiry was large, but the holders of stocks that were in demand refused to sell at any reductien from the highest quotations, and

## THE ACME W ALIET

Patented United States, Canady, England.
 IT IS: 1. A mero fraction the enst and weifhit of ohe styles. Hadically simple
 Incut husiness and professional men. t. $A$

IzFillT for landsomelcathes simple fidxots,
 Name in sold letrots, 15c, extra. Govds do-
Hierdind.S. Without dars.

# CLINTON HOTEL, CLINTON, - - B.C. 

Board and Lodging
By the
DAY, WEEK OR MONTH.

Dest Wincs, Splrits. and Cigars. Good
stabling. Fcadquarters for tho Car boo, Lillooet and liof Creek innes of stages. Hunt-

Ingand fishingin
the vicinlty
MARSHALL \& SMITH, Props.

## We Buy For Cash

Or. Work on liond any Gnod Mining Proposition.

## Send Us

Specimens of Your Ore With Descrip: tion Price, Ele. Wo Mave the Cash for Dereloping any Prouising Prow perty.

## CHAS. MARTIN \& CO.,

Hining Share Brokers and Mine Incolporator Seattle, Wash., U.S.A.

##  тме сав.

Trains Run on Pacifc Standard Time.

the result is few transfers in proportion to the actual demand.
"The report of the closing of the Noble Five mine had a depressing effect on the market, and the diffeulties in the Wonderful Compan:y also had a tendency to weaken conflence. On the other hand, Evening Star, Poorn:an, Rambler-Carlboo and Deer Park showed marked activity, owing to favorable reports from the propertles."

In reviewing the market for the week, the Rossland "Miner" says:
"A marked feature of the mirrket has been the inquiry for iarge blocks of treasury stock, running frora 100,000 to 200,000 shares. These inquirles were f:om London and Eastern Canada syndicates. The parties making the inquiries ask for representation on the directorate, and in explanation of this say that they wish to be sure that the morey which they advance goes into the development of the properties of the companies which they invest in. instead of into the pockets of promoters."

ANOTHER LE ROI DIVIDEND.
It is stated that, notwithstanding the heavy expenditure in connection with the smelter at Northport, the Le Roi Company-will declare its regular divi dend of $\$ 50,000$ this month.

ASHCROFT, B.C.

## A. . . WAITBRS

PROPRIETOR.
-Headquarters for
Commercial


Travellers ..̣. and Miners

RATES REASONABLE.
(1) Mi M M


## ABOUT NELSON.

Erom Our Own Correspondent:
EXCHEQUER MINING CO., LD., LY.
J: C. Drewry, the Secretary of the above Co., is about to place a force of men to work on the "Exchequer." owned by this Co. The property has never looked better than at present and the three ledges on the same are tc be proved immediately. The shareholders will watch with interest this well known gold claim. Silver has also been found upon it and a thorough prospect of the ground will be made.

JUEIUS CAESAR.
Work is here again proceeding and will be pushed ahead as raplaly as possible. Latest assays give $\$ 45$ in gold alone. It adjoins the "Mascot" and "Red Rock" and extension of the well known "Princess." owned by F. G. Neelands, and A: Gerard. of Nelson.

## TOAD MOUNTAIN.

Enquiries for Toad Mountain property have lately been more abundant than heretofore, and English capital is directing its attention to even undeveloned claims, in the vicinity of the famous "Silver King."
STEMWIK:DER AND BLACK CEIEF
These are situate on Toad Mrountain and adjoining "Goldendale." Assessment work is fust completed on both. There is a fine showing of copper (peacack). Assays are now beins made. The claims are owned by $A$ Alacdonald, of Winnipeg: R. Mr. Mracconali barrister, of Nelson, and R. T. Lennie. Development work will at once proceed.
GREAT TVESTERN AND GREAT EASTERN GROUP.
These are owned ws II. H. Keely and others. There have lately been brought down from them several specimens of quartz, showing free gold in considerable quantitles. The ledge is Widening and from the present amount of work done, indicates a likellhood that the property will prove valuable. The claims are on Toid Mountain.
H. C. Ludorf. . . . .
M. De Keyser Verbiest. . . . .

# De Keyser's 

Placer

## Amalgamator

Manufacturing Company

OFFICE: : $; 417$ Cordova Street,

Vancouver, B. C.

0
OUR MACHINEES ARE
LIGHT, COMPACT, OF
GREAT CAPACHTY,
AND SPECIALLY AD
APTED TO THE
WORKING OF TAIL
INGS OF HYDRAULIC
MINE.S GENERALLY

Full Particulars sent on

## Application.

## GRAND FORKS POSSIBILITIES.

It is reported, though the statement as yet lacks authortatlice confirmation, that an English company proposes to erect two moderate sized smelters of 100 tons cach at Grand Forks and Mldway respectively: Probably the report is premature, under existag conditions.

## PILOT BAY AND AINSTVORTH.

It is stated that there is at possibility that the P!lot ibay smelter may uitimately add refining to the scope of its operations. Meanwhile simelting will there recommence, so soon as some 4,000 tons of ore become arallable. $A s$ to the mines aljout Ainsworth, Mr. (i. 13. Wright, an old settier. reports as follows, ats quotel in the Rossland - mecord":

The Blue Ilell is doing well. No. 1. . Which has a concentrator of its own, is getting in shape to concentrate its cre.
"The Tariff, owned 'y the Pilot Day smelter, is getting into shape. It contains lead ore and rurs 70 jer cent lead and about 50 or 60 ounces in silver per ton.
"The Highland, nwued by Mr. Stevenson, of Philadelphia. is showing if a good vody of ore. Several thousind tons of ore, afte: being extracted jis its own concentrator. which is on the eve of starting. will be shipped. The wire tramway from the Fighland til its concentrator has just been completed and works smoothly: It is said that Mr. Stevenson has contracted for the output of the Black Diamond. The cre will have to be brought by a wagon road to the concentrator. Hitherto the ores of the Black Dlamond fave been shipped to the Everett or Tacoma smelters. Large bodies of concentrating ore are showing up in this mine.
"The recent strike on the Albion has cxcled much attention in Ainsworth. It has a vein seven lcet thlek and of a high srade concentrating ore. It is sald a wire trammay is to be erected $t 0$ get the ore to the lake, but for the present $a$ newly constructed rafon read will be utlised, by which the ore can be taken to Mr. Stevenson's concentrating norks or clse shipned from Tille Point whare. All these mines are within a radius of three miles of Ainsworth.
"There are rumors of the Mamic and ling Solomon zroup putting in machincry on an extensive scale. The Jeft. Davis. it is also reported. will senn lie put in good shatue for work.
"The Skyline has been ieased to Frank Clapp on the condition that he continues the present shaft soo seet menre."

## Mings \& Mining Staeks



 Somines bisted fir sale unless eublorsed loy same rembtalie mbnne curiacre.
Gunncelons injifnetjal ciaise of Canada Entelied

FHANIE S.TAGGAuT. RInCmbic S\&. Vancourer. B.C.

Cible addrese "Amhirnaime" Marcing \&


# Thos. Dum \& Con Ltit 

Direct Importers of

## ENGLISE, GERMAN \& AMERICAN HARDWARE TINWARE AND CRANTEWARE

Special attention paid to Miners' and Contractors' Supplies, and we are prepared to quote prices that will interest you. If in either of these businesses let us figure with you. We can save you money. Orders by mail solicited.

## 8, 10 \& 12 CORDOVA STREET, VAYCOUVER, B.C.

## DOERING, MARSTRAND \& CD.

(LIMMITPBD)


Aleander lidigh
EXPORT

## KEGS AND FOTMIHS PORTER

## POST OFFIEE, MOUNT PLEASANT, YANCOUYER, B.C.

TMELEPFIONE 249
Frue Alifirity to all Partr of of til lify

