

partial rearrangement of material occurs, and additional supplies of gold are brought in by the wearing away of the banks."

More particularly referring to that portion of the river that the Kanaka Bar Gold Dredging Company intends to dredge, Dr. Dawson, after referring to the fineness of the gold up to Yale: "From a point on the river, about 16 miles above Yale to Cisco Flat, a short way below Lytton, miles above Yale, rich deposits of 'heavy' gold a distance of 25 miles, rich deposits of the 3 miles were worked." In this 25 miles, are included the 3 miles leased by the Company, and, as in the case of Hill's Bar, referred to by Dr. Dawson, as having produced \$2,000,000 worth of gold in less than 1-2 square mile, the Company's 3 miles commence at the foot of a very rapid portion of the Fraser, where the river first frees itself from the canyon, and expands to a greater width with a slacker current over the Kanaka Bar, inducing the belief that for centuries gold has been washing through this gigantic ground sluice, the quantities on the Bar, now the Company's leasehold. Those interested the Company are sanguine of complete success, which it is to be hoped they may achieve by their somewhat novel, yet apparently thoroughly practical method of river gold mining."

The question of sampling works for Kaslo is practically settled and the Boston and Montana Mining and Smelting Company has deposited through its agent, C. H. Bartlett, \$1,500 with the Kaslo Townsite Company as a guarantee for the completion of the works within four months. The capacity of the plant will be 100 tons daily and all the machinery will be of the latest and most improved pattern. The plans call for a three story building to be built in a substantial manner. The ore will be delivered to a Blake crusher on the third floor and go from there to a Gates crusher on the second floor, after which it is quartered and then ground down and parted until the quantity is reduced to proper quantity for assaying.

According to the Outlook the Columbia mine on Mineral Hill in the Okanogan country is one of the most promising looking properties in that section and it appears as if the owners intended to do some systematic and extensive development on the property. Since the return of E. P. Wheeler from Bridgeport, Conn., where the major portion of the stock is held, he has been busy. A wagon road is being graded from the old shaft house to the new workings, about 200 feet further up the hill, where Mr. Wheeler took out and shipped four tons of ore to Omaha which milled 146 ounces in silver, 22 per cent. lead, 15 per cent. copper and \$8 in gold to the ton, which would at this time mean a total value per ton of \$180. So far, three veins have been found on the property, and being within a space of fifty feet it will be surprising if they do not run together at no great depth and thus form one great ore body. Two of these veins are eighteen inches and one a foot wide, all ore of high grade. As indicative of the confidence which the owners have of the quality of their property they are buying up as many of the adjoining claims as they can, having secured a two-thirds interest in the Buck Horn, all of the Franklin Boy, and a quarter in the Eureka claim, which last named property is owned by Nelson Clark of Spokane. Two Bridgeport (Conn.) capitalists, Messrs. Horace Pigg and Dr. May, have purchased 50,000 shares of the company's capital stock from J. L. Spath and with Mr. Rodgers, capital stock from the other large stockholders, these gentlemen will visit the property this season to determine upon the nature and extent of development to be done. The stock is now all held by wealthy men who will thoroughly test the ground and when convinced of the extent and value of the ore bodies will push the work vigorously day and night, erect a concentrator and put up substantial buildings for the accommodation of the large force of men to be put to work. With men of the capital and enterprise of those composing the Bridgeport Mining and Milling Company the Okanogan is sure to be an active district this season and we trust that many rich ore bodies will be exposed in addition to those already uncovered.

(From the Nelson Tribune.)

Ainsworth keeps forging ahead, and to-day it is one of the most active camps in the district in development work. A very significant fact about the camp is that railway men are becoming active in pushing its claims to the front and making investments in it. Railway men, above all others, know a good thing when they see it. J. V. Carroll, of the Baltimore & Ohio railway, was here about ten days ago, and went over it very carefully, examining many prospects, and as a result he has bonded two claims for a mining company of which he is the president, and made arrangements with Messrs. Strobeck & Hardy to build a wagon road from the end of the present Cedar Creek road to his claims (about 3000 feet) for \$1000. W. R. Busenback, general traffic manager of the Chicago & Great Western railway has purchased an interest in the Spokane and Trinket, and is expected daily in the camp to meet John A. Wolgamo, the chief owner of these two claims. They will proceed at once to sink the present shaft in the Spokane fifty feet, and when that is completed they will put in a boiler and engine and the necessary machinery for further sinking. They will also do some tunnelling.

Manager Johnson of the Schaffer company is knocking out six feet a day in the big tunnel, and is running night and day. So strong has his faith become in the value of the camp that he has bonded several claims and has gone to Seattle to induce his friends to buy and develop them.

The Highland has the call at present on everything in the camp, and to the average denizen of Ainsworth it is his pride to speak of it. Less than a month ago it was spoken of as a fair average prospect, but Messrs. Stevenson & Mikel have in that time worked a complete transformation. They have run two tunnels; one on the lower and larger ledge, the other on the upper and slightly smaller ledge. Besides this tunnel work they have sunk three shafts on three different veins running from these ledges and cutting the formation. They have 150 tons of ore on the dump ready for shipment as soon as the wagon road to the Cedar Creek bridge is completed. In the lower tunnel, they struck a large body of high-grade ore at thirty feet from the mouth. The ledge in the tunnel is eight feet wide; the vein is about five feet with a solid ore body of nearly three feet in width, and will assay 150 ounces silver to the ton. This has been done with an expenditure of less than \$1500, and a prospect has been thus raised to the dignity of a mine. This experiment has shown what can easily be done with many other prospects in the camp when gumption and grit characterize the men in the enterprise.

CANADIAN COMPANIES.

The Kanaka Bar Gold Dredging Company, Ltd., with a capital of \$50,000 in shares of \$10.00 is seeking charter of incorporation under the laws of British Columbia, with the object of purchasing and acquiring the rights, concessions and privileges owned by Thos. J. Beatty, C. S. Bailey, W. H. Gallagher, and H. G. Neelands, known as the Kanaka Bar Driving and Dredging Company, by virtue of an indenture dated 31st Jan., 1890, and made between Frederick Hussey, as Gold Commissioner, and the said parties as licensees; also to carry on the business of miners, submarine or otherwise, and to win, get, mine and work ores, minerals, metallic substances and precious metals of all kinds. Directors; Robert A. Anderson, W. H. Goodwin and Charles S. Bailey, all of Vancouver, B.C. The Head Office of the company will be at Vancouver, B.C.

The Prince Albert Flat Hydraulic Mining Company, Ltd., is also seeking charter under the laws of British Columbia. Authorized capital, \$200,000, in shares of \$1. Head Office, Vancouver, B.C. Directors, George D. Scott, W. J. McGunigan and Albert H. McNeill of Vancouver, B.C. Formed to take over and acquire mining leases of lands or claims in the Province of British Columbia, and to acquire all the rights and interest of all parties interested in such lands; to carry on the business of hydraulic processes of mining, &c.

Quesnelle Forks Canal and Hydraulic Mining Company, Ltd., is the name of another new British Columbia Company formed to take over and operate certain water rights, and for bringing a ditch or canal to the bench lands in the neighborhood of the North and South Forks of the Quesnelle River, Cariboo District, in the Province of British Columbia; also to acquire mining leases of the company is authorized to carry on, or any business or transaction capable of being conducted so as to directly or indirectly to benefit this Company, and to take or otherwise acquire and hold shares or stock in or securities of, and to subsidize or otherwise assist any such company, and to sell, hold, re-issue, with or without guarantee, or otherwise deal with such shares or securities, &c. Capital, \$300,000, in shares of \$100. Directors, J. Loewan, W. P. Sayward, C. N. Gowan, Wm. Wilson and Frank S. Barnard. Head Office, Victoria, B.C.

Bridge River Gold Mining Company, Ltd., has been formed in British Columbia, with a capital of \$25,000, in shares of \$100, to carry on the business of smelters, refiners, founders, assayers, dealers in bullion, metals and products of smelting of every nature and description; to carry on the business of buyers and sellers of and dealers in all kinds of ores, minerals, gold dust, mineral substances and compounds, coal, timber, logs, lumber produce and merchandise of every description, negotiable paper, securities for money, and to do all kinds of commercial business, except banking and insurance; to carry on the business of miners of every description, and to procure by purchase or otherwise, mine and work, mining locations, mines, ores, minerals, gold dust and all other metallic substances and compounds of all kinds, &c. Directors, George E. Bower, John Leatherdale, W. G. Allen, J. A. Russell and Finlay R. M. Russell, all of Vancouver. Head Office, Vancouver, B.C.

The Bothwell and London Crude Oil Company, Ltd., has applied for charter in Ontario for the purpose of purchasing, acquiring by lease or otherwise lands in the County of Kent and boring, digging and constructing petroleum and oil wells and pumping thereof, and the storing, tanking, refining and dealing in petroleum oil and oil wells, etc. Capital, \$20,000, in shares of \$10. Directors, W. T. Strong, J. D. Wilson, H. R. Abbott, P. W. D. Broderick and G. A. McGillivray. Head Office, Bothwell, Ont.

Kootenai Hydraulic Placer Mining Company.—This company has 15 or 20 miles of claims, extending some distance back from the banks of the Pend Oreille River. The ditch has been completed, and the water will be turned on the gravel very shortly. The flume is 18 miles long, and is said to have cost \$75,000.

North American Mining Company.—The annual meeting was held in Montreal, May 15th, and resulted in the election of G. N. Ducharme, F. Bayard, A. Montreuil, A. Renaud, A. Yale, A. Bayard and O. Henault as directors. At a subsequent meeting of the directors G. N. Ducharme was elected president and A. Bayard vice-president.

The Boston and Nova Scotia Coal Company.—At a meeting of this new organization held this month in Halifax the following officers were elected:—President, Hon. John Chandler, Boston; Vice-President, John McKeen, Mabou, C.B.; Treasurer, W. J. Fraser, Mabou, C.B.; Secretary, A. C. Ross, North Sydney, C.B.; Directors, David S. Baker, John C. Cobb and R. P. Fraser. The several properties at Broad Cove, Cape Breton which have been under offer to the company were taken over and their development was decided upon.

New Vancouver Coal Mining and Land Company, Ltd.—In their report for the half-year ended December last the directors of the New Vancouver Coal Mining and Land Company, Limited, state that the net output for the half-year was 195,318 tons, and the sales were 197,537 tons. "There was a slight improvement in prices as compared with the former half-year, but the market has, on the whole, continued dull. At the present time our agents report the outlook as a little more encouraging. A reference to the accounts will show that a net profit of £3,097 5s. 10d. was made during the half-year, but, as considerable amounts have in the course of the half-year been expended on capital account, the actual financial position has not improved; this fact, the prospective requirements of the company in respect of bunkers, and the payment for electric haulage in the East Field mine, preclude the payment of a dividend for the half-year." It is proposed in future to hold only annual meetings, although half-yearly accounts will be sent to the shareholders.

History of Tin.*

TRANSLATED FROM THE WORK OF E. REYER BY BRENTON SYMONS, M. INST., C.E.

In ancient Hindu tin was called *Naga*, in Persia *Aonya*, in Hebrew *Anak*, and in Ethiopian *Naak*. The similarity of these diverse appellations proves that this metal proceeded from the same centre of production, presumably, the inexhaustible stream works of the East Indies. There can be little hesitation in believing that here originated the name by which it was afterwards known throughout Asia and the east of Africa. Besides these very old names, from a thousand years before Christ to the early centuries which followed his advent, the term *Kassiteros* was habitually used in the countries which bordered the Mediterranean Sea; Homer knew it by this name, as did also the Romans. Where tin first received this designation is yet unknown, but it is far from improbable that the Phoenicians, who during this period controlled the world's commerce, extended its use afar; they were merchants or pirates, according to circumstances, and exchanged the treasures of Europe for those of Asia. From time to time they made voyages to Spain and England in search of the metal, and it thus appears likely that it was the Phoenicians themselves who introduced the term *Kassiteros* to the Indies. However this may be, it is certain that in the last centuries preceding Christ, this name was found in the Hindu writings corrupted to *Kastira*, whilst anteriorly it was always the native term *Naga* that was employed.

The tin from the Indies was, without question, the most important for commerce in olden times, and the quantity of this metal absorbed by the civilized states of Asia in the preparation of bronze must have been very considerable. China supplied herself partly from the same source, but also from the mines which she possessed in the provinces bordering on the Indies. The Chinese bronze industry flourished between 1800 and 1500 B.C. and between 1100 and 900 B.C.; that of the Indies was not more ancient. Money, vases, bells, mirrors, and other objects of art were manufactured in such large quantities, and the employment of tin for plating kitchen utensils was so general, that one may reasonably conclude that the production of that metal was colossal. Probably at this time Europe consumed only English and Spanish tin, and as the uses for it were very limited, the industry was in an almost barbarous state.

It is to be regretted that no statistics with respect to the production of tin in the Indies at those remote periods are available, and with respect to Europe the following paragraphs contain about all the information which has reached modern times. As has been already remarked, the Phoenicians, who possessed the commerce of Europe, obtained tin from Spain and England. Their principal entrepot was the town of Cadiz in Spain, which, founded about 1000 B.C., had rapidly acquired a great importance.

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