

rectangular form, "Section 16 sub-section (a) of the same act declares that "the holder of a mineral claim shall be entitled to all minerals which may lie within his claim but he shall not be entitled to mine outside the boundary lines of his claim continued vertically downwards, and sub-section (b) provides that the "Act shall not prejudice the rights of claim owners nor claim holders whose claims have been located under former acts." This act was amended by "The Mineral Act amendment Act 1897" but without altering the words just quoted.

Other acts affecting vein miners are:

Employer's liability Act, 1891.

Employer's liability amendemnt act, 1892.

Inspection of metalliferous mines Act 1897.

This act needs amendment before it can accomplish the purpose for which it was passed.

An Act to assess, levy and collect taxes on property and income.

Section 9 of this act provides that "There shall be assessed, levied and collected, from every person owning, managing, leasing or working a mine, and paid to Her Majesty, her heirs and successors, the sums following, that is to say:

"One per cent. of the assessed value of all ore or mineral bearing substances raised, gotten, or gained from any lands in the province, the assessed value to be based on the market price of the ore or mineral bearing substances at the mine, as determined in case of dispute by smelter, reduction or refinery works or other satisfactory returns, as the case may be; provided that no ore or mineral bearing substances shall be taxed which are not sold or removed from the mining premises."

7. TRANSPORTATION.

As already pointed out the southern portion of B. C. is intersected by numerous lakes and rivers, which give access to much of its interior, but no one, unfamiliar with the country, can form even a vague idea of the difficulties facing the prospector and miner until these water-ways had been supplemented by railways. The first shipment of Slocan ore was from the Whitewater mines. It had to be "packed," on horse back, through the forest, a distance of seventeen miles, to Kaslo, at a cost of about \$40 per ton. Then by boat and rail, to United States smelters, at a further cost of about \$20 per ton. Ore was packed in a similar way from the Idaho and Mountain Chief mines, at a cost of \$45 per ton, to Kaslo and from other mines at somewhat similar rates. It will readily be seen that only high grade ore, like that of the Slocan, could possibly bear such costs for carriage alone.

The difficulties of transportation have, more than anything else, hindered the development of British Columbian mines. In fact, so far as can be now seen, that is the only reason why British Columbia was not, years ago, what it is to-day. These difficulties are, however, being gradually reduced by the introduction of railways. The lines already made, on the mainland, and the dates they were opened for traffic may be gathered from the table below. A study of this table in conjunction with a map of British Colum-

bia will explain why the now known mineral wealth of British Columbia lay so long unnoticed :

	Opened.	Length. Miles in B. C.
Transcontinental Line (C.P.R.)....	1886	502
Columbia and Kootenay.....	1890	28.5
Nelson and Fort Sheppard.....	1892	59.4
Shuswap and Okanagan.....	1892	51
Nakusp & Slocan—to Three Forks.	1894	32.9
Three Forks to Sandon.....	1895	4
Kaslo and Slocan.....	1895	31.8
Revelstoke to Arrowhead.....	1896	28
Columbia and Western.....	1896	21
Red Mountain.....	1987	6
Robson and Trail.....	1897	10.97
Slocan Crossing to Slocan City....	1897	26
Railways open in May, 1898....		806.6

The Crow's Nest Pass railway (210 miles long), in British Columbia, which passes over extensive coal fields, is in course of construction and expected to be completed by the autumn of this year. The cheaper coal and coke which will be available by the British Columbia smelters on the completion of this railway must bring about considerable reduction in the cost of smelting and presumably the miner will receive some consideration on that account.

A railway through the Boundary district is also in contemplation and may be commenced very soon. The construction of both these lines will open up to the miner districts that have already been prospected and are known to be rich in minerals, but the lack of transportation facilities has prevented the development of the deposits found, as many of them are smelting ores.

Most of the mines are connected with river, rail or lake by means of rawhide trails, wagon roads, aerial or other tramways. Rawhiding has been extensively practised in the Slocan, where the mines have mostly been opened up by men of small capital, and who could not, therefore, afford to stock the ore worked, until their mines were so far developed that a more efficient means of transportation could be introduced with safety. In rawhiding the ore is first sacked, then wrapped in raw cow-hides and drawn by horses over the snow. It can only be conducted in winter, when snow is on the ground, so that the output by it is limited, and, therefore, as soon as circumstances permit, the system is replaced by wagon and sleigh, rope or other haulage. But it is a convenient system for small outputs, as very little need be spent in making the trail.

Haulage by sleigh and waggon although permitting of more continuous work than rawhiding, is liable to interruption, every spring when the snow is melting. The shipment of ore, from the mine, may be stopped at such times, for four or five weeks. In order, therefore, to secure uninterrupted deliveries to the smelter, at that season, a stock of ore must be kept at the lower end of the road.

Rail or rope haulage is the most satisfactory, either being capable of continuous working and of large deliveries, at a much less rate per ton than rawhiding or haulage by wagon or sleigh. But their first cost is greater and therefore larger bodies of ore must be blocked out before these more costly works