purpose of acquiring the mining property of the Britannia Syndicate. Much was heard several years ago of the Britannia group, situate on Howe Sound, but for some time past the property has not been working. Negotiations have been proceeding, however, for the transfer of the mine to a company strong enough financially to adequately equip and thoroughly develop it, and these have now been brought to a successful conclusion.

It is stated that the Howe Sound Company is capitalized at \$2,000,000 in 4,000 shares of a par value of \$500 each. The company has been incorporated under the laws of the State of Maine, U. S. A. Its directors consists of Hon. Edgar Dewdney, and Messrs. George H. Robinson, Frank M. Leonard, C. H. McMeekin, D. G. Marshall, H. C. Bellinger and J. W. Lee. The officers are: President, Hon. Edgar Dewdney; First Vice-President, Mr. C. H. McMeekin; Second Vice-President and Local Manager, Mr. Frank M. Leonard; Managing Director, Mr. George H. Robinson, and Secretary-Treasurer, Mr. J. W. Lee.

The company starts with a cash capital, for development and equipment purposes, of \$250,000, which sum has been placed to its credit by Messrs Geo. H. Robinson and Henry Stern, who receive as consideration therefor, stock to the par value of \$500,000. Of the remaining shares, 2,000 have been allotted to the holders of the 400 shares in the Britannia Syndicate, this being at the rate of \$2,500 worth of stock in the new company for each share in the old.

No unnecessary delay in placing the Britannia on a shipping basis is to take place. A contract has been awarded for the erection of a wharf at Howe Sound, and arrangements are being made for the early construction of an aerial tramway, three miles and a half in length, to connect the mine with the shipping wharf. It is announced that a concentrating plant is to be eventually installed. The intention is to, as soon as practicable, bring the mine up to a daily output capacity of at least 500 tons. Until other arrangements shall be made for the reduction of the ore it will be shipped to the Northwestern Smelting & Refining Company's smelter at Crofton.

## NOTES ON SOME SPECIAL FEATURES OF COAL MINING IN THE CROW'S NEST.\*

## (By James McEvoy, Fernie, B. C.)

**T** O ONE familiar with the methods of bituminous coal mining in an Eastern field, the successful management of a colliery in the West is not always an easy task. This is especially the case in the Rocky Mountain coal basins, where he finds himself face to face with conditions requiring considerable modification of his Eastern methods, if not an entirely different system of their own. A knowledge of the causes giving rise to the new conditions, helps him to meet them with intelligence, and to foresee and provide against any new difficulties which may arise.

The geological history of the eastern and western coals, when compared, shows similarity if the two factors, "time" and "force" be left out of consid-eration. The eastern coals are practically all of Carboniferous age. A possible exception to this is in Virginia and Kentucky, where some of the coals may reach as high as the Triassic. Since their deposition they have gradually, at an infinitesimally slow rate of progress, been developed through the various stages from the original peat bed up through the different varieties of lignite to their present bituminous form. It is beyond the knowledge of man to ascertain the length of time which elapsed during this development. There was, generally speaking, little disturbance of the measures, and the beds are found to-day in altitudes more or less closely approximating their original horizontal position.

The Western coals are chiefly of Cretaceous formation and consequently are four geological ages younger than the Eastern ones. They have gone through all the same stages as the Eastern coals, but their development has been accomplished in one-half the time. (It may be stated here parenthetically that it still remains, in our modern times, a characteristic of the West to do things in one-half the time.)

After the deposit of the peat beds all those that are preserved to-day in the iorm of coal were covered by succeeding layers of clay, sand or gravels, which are now seen in the form of shale,, sandstone and conglomerates overlying the coal. The accumulation of a great thickness of these superincumbent strata brought an intense pressure to bear upon the peat beds at the bottom and they were compressed to abcut one-twelfth of their original thickness. The continuation of this pressure and the consequent heat developed, gradually drove off the excess of moisture and more or less of the volatile constituents. Any movement of the strata resulting from the shrinkage of the earth's crust, naturally increased the pressure and heat and hastened the alteration.

It has been due to greater activity in these earth movements that the Western coals have been altered to their present form in so much shorter time.

The Rocky Mountain region in most parts was the scene of tremendous movements, and great pressure is evidenced by the crushng, thrusting, folding, faulting and uplifting measures.

The, comparatively speaking, newer rocks, such as the Cretaceous, sometimes suffered equally with the older ones of the region, and some large areas which, under quieter conditions, would have produced valuable coal fields, were crushed and broken and eventually swept away by the denudation of succeeding ages. In other parts the movements were less violent, and where the pressure and heat were sufficient to produce the required degree of alteration of the coal without crushing the main portions of the basins, some of the highest grade bituminous coals were found in good workable form.

The greater the degree of alteration, the more moisture and volatile matter were driven off, and the higher the percentage of fixed carbon remained. Near the axis of the Rocky Mountains the conditions were most favourable for the development of good

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