

Mr. Richardson, an Inspector of coal mines in England, says of this coal :—
 “The composition of this coal is typical of the coal found in Wyoming and Colorado Territories, and is a true coal of the bituminous, with less water and ash than many such varieties found in the cretaceous, superior to some of the Vancouver Island and New Zealand lignites. It is more lustrous and of a jet-like color and hardness ; specific gravity 1.379. This Canadian coal is a fuel which ranks as one of the best found in the cretaceous rocks. One land section, or 640 acres of this coal seam, will contain six millions five hundred thousand (6,500,000) tons of coal. The two seams will together contain about eleven million tons of coal.”

I had the coal from the larger or main seam tested in both stationary and locomotive engines with very satisfactory results.

Mr. J. P. Murray, engineer of locomotive No. 78, after using the coal for two days, stated in his report that the coal was equal to the best steam coal imported into this country, and Mr. Dailey, Mechanical Supt. at Medicine Hat, gave a report equally favorable. While the character of the coal in the different coal seams appears to be much the same, this seam is the largest and will be the most profitable seam to work in this district. The cheapest method to open and equip a mine here would be by constructing an incline from the coal seam up to Prairie Level and haul the loaded coal tubs up the incline by a stationary engine to Prairie Level, where it can be dumped into coal cars and by them conveyed to the C. P. R. at Medicine Hat, a distance of about five and one-half (5½) miles. This method would require the construction of about five and one-half miles of railway over rolling prairie, with down-grades for the loaded cars, and a not very objectionable up-grade for the empty ones returning to the pit. There are no engineering difficulties in the way, neither will there be any expensive bridging. The water ways would only be for the snow melting in spring.

To ship coal by the Saskatchewan River would require the construction of a number of barges and a steam tug boat, which method would give double handling to the coal—*i.e.*, loading the barges and then loading the coal cars from the barges, which would break it up very much, and only give five or six months' shipment, with an idle mine for the balance of the year.

I am, sir, your obedient servant,

JOHN P. LAWSON, M. E.

COAL MINE, Medicine Hat, Nov. 7th, 1883.

P. S.—Opening the mine by a shaft would prove the neatest working arrangement, but it would take a much longer time to develop the mine and be much more expensive. By the first proposed method, after the levels or headings were extended far enough south, a shaft could be sunk to one of them, and hoist the coal through it and save a long haul underground. Then the slope or incline could be used for a year or two until the shaft was ready. Of course the sinking of the shaft and further development of the mine would be as the market warranted the outlay, governed by the market.

J. P. L.