

teresting treasures of the musee. Lesquereaux, it might be noted here, was led to the conception of his vegetable theory for coal by prior investigations into the origin of peat. After close and diligent labor he discovered the affinity between peat and the fibre of existing trees, and established a knowledge of the changes which had taken place. Since then chemistry and the microscope have additional proofs and convincing facts of the source of the black diamonds. All kinds of acids and unctuous substances are still found in the coal that prevail to a greater or lesser degree in wood, and which have been retained in its composition despite the lapse of countless ages. But the penetrating lenz of the microscope have revealed the greater truths. By means of this it is actually possible to trace the woody fibre and even to distinguish the air cells as clearly as in a piece of wood taken from a tree to-day. This condition may not be always prevalent, but it can at times be found and proves conclusively the vegetable theory. Yet it is strange that in the face of this other theorists will enthusiastically advocate the extraordinary proposition that coal is a natural composition, and has oozed out of original matter like gneist, or granite, or lava. The suggestion that it would have ignited if brought into contact with great heat, would probably be airily discounted on the ground of a lack of air. However, so far as theory goes, the vegetable theory is the one that accounts for coal.

Granite Creek.

Robert Stevenson, who has spent the summer in Granite Creek constructing flumes, digging ditches, and fitting up the hydraulic plant for the Stevenson Gold and Platinum Hydraulic Mining Co., Ltd., has gone to Montreal to attend the annual meeting of the company, of which he is president. Mr. Stevenson had the good news to tell of the brightest possible prospects for the company in which his chief interest lies. They had got the work so far advanced that washing would begin in March, and practically as soon as water was running in the streams. There were many obstacles to be overcome, but the ditch was dug and the flume constructed in very difficult places, all without accident, though at some places the flumes were so high that not all the workmen would go on them to work. They will have about 1,000 inches of water, enough for two monitors, and they will be working in pay gravel from the start. Mr. Stevenson also put in a saw mill, which turns out from 8,000 to 10,000 feet per day, though capable of much more. Work went slow early in the season, but the men were untried, and Mr. Stevenson has always found it best not to rush green hands. Toward the end of the season, when all were picked hands, work went ahead with surprising rapidity. He brought in three nuggets found near the property.

The Golden Gate Co., also on Granite Creek, who hold some very valuable ground, expect to do considerable work on their property next spring. R. A. Lambert, one of the principal owners, says that their ground has been thoroughly tested, and will soon rank amongst the best of the claims which have made Granite Creek famous.

The Horsefly Country.

W. N. Bissett, who has been for the past two seasons foreman of the Horsefly Hydraulic Mine on Horsefly, is known as a thorough and practical hydraulic miner of wide experience, having worked in many parts of California. He says that, in his judgment, a better country than Cariboo for hydraulic mining had never been found, the only drawback being the trouble of get-

ting water on the many benches on account of the level character of the country.

The output from the Horsefly this season, being over \$50,000, Mr. Bissett considers very satisfactory. In his judgment \$40,000 will be the cost of working the claim next season, and he thinks stockholders will draw dividends to the amount of \$100,000. The cement in the course now being worked in the mine has disappeared, and the opinion of good judges is that it was only on the rim, and that where the cut now has been worked back an old channel was formerly, either of the Horsefly or some other stream.

Mr. Bissett says for three feet above bed rock no pan of gravel can be taken out without at least 25 cents being found therein, and \$2.00, \$4.00 and as high as \$8.00 to the pan is not uncommon. The last run was by all odds the most satisfactory, 204 hours piping yielding \$7,417, or nearly \$1,000 per day of 24 hours. The first six weeks of the past season were principally devoted to getting ready for work, as a bedrock tailrace of large dimensions had to be cut out of bedrock. Everything is now complete and work will be pushed next season.

Many inquiries have been made about the cement in the Horsefly carrying gold. Mr. Bissett says that as you get nearer to the bedrock in the cement it becomes richer in gold, the same as gravel, and that the top cement carries but a few cents to the cubic yard. A test was made by him of quite a large quantity from all through the cement bank. Not far from bedrock the cement gave returns of about \$4.50 per cubic yard, but on the whole he does not think the cement is rich enough to make it a milling proposition, nor is it, in his judgment, necessary, as apparently there will be little more trouble from this cause.

The gold differs in quality and looks from the gold taken out five miles above, in the Ward mines, which is worth about 60 cents more per ounce. From this and other causes, Mr. Bissett does not think the two properties are on the same gold run, and is of the opinion that systematic boring would find near these properties other valuable mines. He speaks very highly of the value of the Ward mines and foresees a bright future for them.

The Ward company have their freight well on its way and it will soon be moved in from the 150-Mile House. The Horsefly country will be an interesting place to visit next season.

Dredging.

Dredging for gold is now a method of mining that is receiving considerable attention in British Columbia, and wherever operated, produces, generally, very satisfactory results. Though this method of extracting gold from the beds of rivers has been in use in New Zealand for many years, it is little over a year since the method was introduced here, yet it is rapidly being adopted and coming into general use, as may be seen by the following instances.

The gold dredger of the Finch Mining Company is now in full swing at Mormon Bar, six miles up the river, and authentic reports say that the company is doing very well and that the enterprise is in every way a success.

The large dredger of the Fraser River Company is now at work making the preliminary tests preparatory to going higher up the river. The success which has attended the smaller scow at Mormon Bar presages a larger share of it for the Fraser River Mining Company's vessel, as the machinery is more powerful and there are increased facilities for extracting and manipulating the gold.